PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-001

RESOLUTION REAPPOINTING WILL DEBOARD, MIDDAGH GOODWIN AND CARLOS YAMZON TO THE CITY OF MODESTO ENTERTAINMENT COMMISSION EACH WITH A TERM EXPIRATION OF DECEMBER 31, 2023

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Entertainment Commission is a seven-member advisory commission on matters pertaining to entertainment-related permits for the City of Modesto, and

WHEREAS, on May 24, 2016, by Resolution No. 2016-210, Council appointed Will DeBoard, Middagh Goodwin, and Carlos Yamzon to serve on the Entertainment Commission, and

WHEREAS, Will DeBoard, Middagh Goodwin, and Carlos Yamzon have each served one (1) term on the Entertainment Commission which expired on December 31, 2019, and

WHEREAS, Will DeBoard has served on the Commission in an At-Large Citizen position, Middagh Goodwin has served as a Member of an Economic or Tourism Organization, and Carlos Yamzon has served as a Non-Profit/Special Event Holder, and

WHEREAS, Will DeBoard, Middagh Goodwin, and Carlos Yamzon would like to be considered for reappointment, and are eligible to serve a second term which would expire on December 31, 2023.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby reappoints Will DeBoard in an At-Large position, Middagh Goodwin as a Member of an Economic or Tourism Organization, and Carlos Yamzon as a Non-

Profit/Special Event Holder to the Entertainment Commission to serve a second term ending on December 31, 2023.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Kenoyer, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-002

PRINT

RESOLUTION APPROVING THE APPOINTMENT OF ROSA ESCUTIA-BRAATON AS THE PLANNING COMMISSION REPRESENTATIVE TO THE CITIZENS HOUSING AND COMMUNITY DEVELOPMENT COMMITTEE (CH&CDC) WITH A TERM EXPIRATION OF DECEMBER 31, 2020

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, on November 4, 2019, the Planning Commission recommended Rosa Escutia-Braaton as its representative to the Citizens Housing and Community Development Committee.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Modesto that Rosa Escutia-Braaton is hereby appointed as the 2020 Planning Commission representative to the Citizens Housing and Community Development Committee, with a term expiration of December 31, 2020.

BE IT FURTHER RESOLVED, that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Citizens Housing and Community Development, and the Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for. ADAM U. LINDGREN, ~~City~~ Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-003

PRINT

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 ANNUAL OPERATING AND CAPITAL IMPROVEMENT FUND BUDGETS

WHEREAS, a financial analysis has been completed and it has been determined that a budget adjustment is required to the Annual and Capital Improvement Budgets of the City of Modesto for Fiscal Year 2019-20.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Fiscal Year 2019-20 Annual Operating and Capital Improvement budget as shown in **Exhibit A**, which is **attached** hereto and incorporated by reference herein.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ADAM U. LINDGREN, City Attorney

EXHIBIT A

FISCAL YEAR 2019-20

POLICE DEPARTMENT

- A budget adjustment is necessary in the amount of $72,500 to increase the Organized Crime Drug Enforcement Task Force (OCDETF) project's revenue and overtime budget per the memorandum from the U.S. Department of Justice. (Fund 1342 Project 101133)

- A budget adjustment is necessary in the amount of $183,405 to recognize Supplemental Law Enforcement Services Fund (SLESF) revenue received and appropriate eligible offsetting expenses in a like amount in the SLESF project. (Fund 1342 Project 101059)

UTILITIES

- A budget adjustment is necessary in the amount of $382,859 to increase the expense budget in the "SR132 Relocation – Water Mains" project. Actual bids received were higher than the amounts originally budgeted. The requested budget adjustment is required to fully fund the construction, contingency, engineering supporting during construction, construction by city forces, and construction administration. (Water CIP Fund 4180 Project 100923)

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-004

RESOLUTION APPROVING THE PLANS AND SPECIFICATIONS FOR THE DRY CREEK TRAIL MAINTENANCE AND ORVILLE WRIGHT ELEMENTARY TRAFFIC FLOW AND SAFETY IMPROVEMENTS PROJECT, ACCEPTING THE BID, AND AWARDING A CONTRACT TO MCFADDEN CONSTRUCTION, INC., OF STOCKTON, CALIFORNIA, IN THE AMOUNT OF $863,152 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, plans and specifications have been prepared for the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project, and City staff recommends approval by the City Council, and

WHEREAS, the bids received for the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project were publicly opened at 11:00 a.m. on November 19, 2019, and later tabulated by the Director of Community and Economic Development for the consideration of Council, and

WHEREAS, the Director of Community and Economic Development has recommended that the bid of $863,151.60 received from McFadden Construction, Inc., of Stockton, California be accepted as the lowest responsible and responsive bid and the contract be awarded to McFadden Construction, Inc., and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow the formal bid procedures, and

WHEREAS, an award of $863,151.60 and agreement for construction for Community and Economic Development Department to use McFadden Construction, Inc., of Stockton, California, conforms to the Modesto Municipal Code because the City

complied with the formal bid procedures and McFadden Construction, Inc., of Stockton, California, was the lowest responsive bidder.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the plans and specifications for the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project, accepts the bid of McFadden Construction, Inc., of Stockton, California, in the amount of $863,151.60 and awards McFadden Construction, Inc. the contract for the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-005

PRINT

RESOLUTION AUTHORIZING THE DIRECTOR OF UTILITIES TO APPROVE CHANGE ORDERS UP TO THE CUMULATIVE AMOUNT OF $112,210 (13% OF THE ORIGINAL CONTRACT PRICE) FOR THE DRY CREEK TRAIL MAINTENANCE AND ORVILLE WRIGHT ELEMENTARY TRAFFIC FLOW AND SAFETY IMPROVEMENTS PROJECT

WHEREAS, the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project bids were publicly opened on November 19, 2019, and McFadden Construction, Inc., of Stockton, California was the apparent low bidder with the amount of $863,152, and

WHEREAS, the Modesto City Council has approved a resolution approving the plans and specifications for the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project, accepting the bid, and awarding a contract to McFadden Construction, Inc., of Stockton, California, in the amount of $863,152 and authorizing the City Manager, or his designee to execute the agreement, and

WHEREAS, the City's "Change Order Approval Policy" enacted by Council Resolution No. 94-443 on July 19, 1994, and updated by Resolution No. 2019-326 on July 9, 2019, established a contract change order budget of 10% for construction contracts less than $1,000,000, and

WHEREAS, given the nature of ADA improvements and complexity of culvert installation, additional work may be needed to address unexpected conditions that require changes in project scope that may exceed the Director's Authority of 10% ($86,315) of the contract amount of $863,152, and

WHERAS, the contingency amount for the Dry Creek Trail Maintenance and Orville Wright Elementary Traffic Flow and Safety Improvements project is estimated to be $112,210 (13% of the original contract price).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to approve change orders up to the cumulative amount of $112,210 (13% of the original contract price).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-006

RESOLUTION RESCINDING RESOLUTION 2019-455 TITLED APPROVING A STATE OF CALIFORNIA SENATE BILL 2 PLANNING GRANT APPLICATION IN THE AMOUNT OF $625,000 FOR THE PURPOSE OF FUNDING VARIOUS HOUSING-RELATED PROJECTS AND AUTHORIZING THE CITY MANAGER OR DESIGNEE TO FILE THE GRANT APPLICATION, AND ADOPTING A NEW RESOLUTION WITH CERTAIN SPECIFIC CHANGES REQUESTED BY THE STATE OF CALIFORNIA

WHEREAS, the issues and problems associated with the on-going housing crises in the San Joaquin Valley and across the State and Nation are serious, well-documented and pervasive, and

WHEREAS, the State of California, Department of Housing and Community Development (Department) has issued a Notice of Funding Availability (NOFA) dated March 28, 2019, for its Planning Grants Program (PGP), and

WHEREAS, the Department is authorized to provide up to $123 Million under the Senate Bill 2 PGP from the Building Homes and Jobs Trust Fund for assistance to cities and counties for related projects, and

WHEREAS, the City of Modesto desires to submit a project application for the PGP to accelerate the production of housing and will submit a 2019 PGP grant application as described in the NOFA and PGP Guidelines provided by the Department, and

WHEREAS, on October 1, 2019, Council adopted Resolution No. 2019-455 approving the filing of a Senate Bill 2 Planning Grant Program application in the amount of $625,000, and

WHEREAS, in an email dated December 11, 2019, the State of California requested that the City of Modesto adopt a revised Resolution to add and delete certain specific language.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that Resolution No. 2019-455 is hereby rescinded.

BE IT FURTHER RESOLVED by the Council of the City of Modesto that it hereby approves the City of Modesto's application for funding, in the amount of $625,000, from the State of California Senate Bill 2 PGP.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute all necessary grant documents, agreements, MOUs and other documentation needed to carry out the business of the State of California Senate Bill 2 PGP on behalf of the City of Modesto.

BE IT FURTHER RESOLVED that the City of Modesto shall be subject to the terms and conditions as specified in the Standard Agreement, the Senate Bill 2 PGP Guidelines, and any applicable PGP guidelines published by the Department. Funds are to be used for allowable expenditures as specifically identified in the Standard Agreement. The application in full is incorporated as part of the Standard Agreement. Any and all activities funded, information provided, and timelines represented in the application will be enforceable through the executed Standard Agreement. The City Council hereby agrees to use the funds for eligible uses in the manner presented in the application as approved by the Department and in accordance with the PGP NOFA, PGP Guidelines and PGP Application.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, ~~City~~ Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-007

PRINT

RESOLUTION APPROVING ANNEXATION MAP #2 TO CITY OF MODESTO COMMUNITY FACILIITES DISTRICT NO. 2016-1 (KIERNAN BUSINESS PARK EAST #2), AND AUTHORIZING THE LEVY OF THE SPECIAL TAX ON THE PROPERTY LOCATED WITHIN THE ANNEXATION MAP

WHEREAS, reference is made to (a) the Resolution of Formation, Resolution No. 2016-20 (the "Resolution of Formation"), adopted by this City Council (this "City Council") on January 26, 2016 approving the formation of the City of Modesto Community Facilities District No. 2016-1 (Kiernan Business Park East #2) ("CFD No. 2016-1") pursuant to the Mello-Roos Community Facilities Act of 1982 (Sections 53311 and following, California Government Code; hereafter in this resolution, the "Mello-Roos Act"), and (b) the Amended Boundary Map for CFD No. 2016-1 (the "Boundary Map"), recorded on August 11, 2017, in Book 5 of Maps of Assessment and Community Facilities Districts, at Page 65, official records of the County Recorder of the County of Stanislaus (the "County Recorder"), for the identification of (1) the boundary of CFD No. 2016-1, and (2) the area designated as future annexation area (the "Future Annexation Area") as provided by the Mello-Roos Act, and

WHEREAS, the properties identified as Assessor's Parcel No. 078-015-020 is situated within the Future Annexation Area (collectively, the "Subject Property"); and

WHEREAS, in accordance with the provisions of Sections 53339 through 53339.9, inclusive, of the Mello-Roos Act (the "Annexation Provisions"), pertaining to annexation of property to a community facilities district, Reliance Gas Systems, have submitted executed forms entitled "Request and Unanimous Approval for Annexation and Landowner-Voter Ballot" (together, the "Unanimous Approval Forms"), each

requesting the annexation of the parcel owned by said landowner to CFD No. 2016-01 and voting in favor of authorizing the levy of the special tax on the Subject Property, and

WHEREAS**,** a map entitled "Boundary of Proposed Annexation #2 to the City of Modesto Community Facilities District No. 2016-1, City of Modesto, County of Stanislaus, State of California" ("Annexation Map No. 2"), showing the boundary of the Subject Property, has been filed with the City Clerk of the City (the "City Clerk") and a copy thereof presented to Council at the January 14, 2020 meeting, and

WHEREAS, pursuant to Section 53339.8 of the Mello-Roos Act ("Section 53339.8"), the Unanimous Approval Forms request that the City execute and record a notice of special tax lien pertaining to the Subject Property (the "Notice") in the official records of the County Recorder, and

WHEREAS**,** this City Council wishes by this resolution to approve and direct the recordation of Annexation Map No.2; and to direct, as soon as practicable following the recordation of Annexation Map No. 2, the preparation, execution and recordation of the Notice, with provisions to cross-reference the recorded Annexation Map No. 2.

NOW, THEREFORE, BE IT RESOLVED THAT the City Council of the City of Modesto hereby finds, determines and resolves as follows:

1. The foregoing recitals are true and correct, and this City Council hereby expressly so finds and determines.

2. This City Council hereby approves Annexation Map No. 2 and authorizes and directs the City Clerk to cause the execution and recordation thereof in the official records of the County Recorder in accordance with the provisions of Section 3113 of the California Streets and Highways Code.

3. This City Council hereby levies the Special Tax on the property located within Annexation Map No. 2 and directs the City Clerk, following the recordation of Annexation Map No. 2, to cause the preparation, execution and recordation of the Notice in the official records of the County Recorder in accordance with the provisions of Section 53339.8 and Streets and Highways Code section 3114.5(b). Upon recordation of the Notice, the Subject Property shall be subject to the levy of the special tax of CFD No. 2016-1 in accordance with the rate and method of apportionment of special tax for said CFD No. 2016-1, as approved by the Resolution of Formation and **attached** thereto as **Exhibit B** thereof.

4. This resolution shall take effect immediately upon its adoption.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You, Grewal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-008

RESOLUTION APPROVING AN AGREEMENT WITH AVENU INSIGNTS AND ANALYTICS, LLC/MUNISERVICES FOR TAX AUDITS, ANALYSIS AND REPORTING SERVICES FOR A TWO-YEAR AGREEMENT WITH THREE ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $120,000, AND A TOTAL AMOUNT NOT TO EXCEED $600,000 OVER FIVE YEARS; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, City employees have utilized Avenu Insights and Analytics, LLC/MuniServices (MuniServices) for tax audits, analysis and reporting services approved under Resolution 2004-529, and

WHEREAS, tax audit, analysis and reporting services have been critical in providing the City with vital information related to sales and use tax, utility users tax (UUT), business license tax, and transient occupancy tax (TOT), and

WHEREAS, information received from services provided in the past by MuniServices from audit reports and tax analysis has assisted in revenue recovery as well as revenue projections for four of the City's major General Fund revenue sources, and

WHEREAS, the City of Modesto issued its Request for Proposal (No. 1819-56) for tax audits, analysis and reporting services on October 1, 2019, and

WHEREAS, an RFP Evaluation Committee, comprised of five staff members rated the proposals, and

WHEREAS, based upon the final scores, the RFP Evaluation Committee recommended awarding the agreement to Avenu Insights and Analytics,LLC/MuniServices for a two-year agreement with three one-year extension options, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures and RFP No. 18-19-56 conforms with this MMC.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of proposal and agreement with Avenu Insights and Analytics, LLC/MuniServices for tax audits, analysis and reporting services for a two-year agreement with three one-year extension options, for an annual cost not to exceed $120,000 and a total amount not to exceed $600,000 over five years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, ~~City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-009

RESOLUTION APPROVING AN AGREEMENT FOR FIRE EXTINGUISHER INSPECTION AND MAINTENANCE SERVICE TO NOR CAL FIRE INC., RIPON, CA, FOR A TWO YEAR AGREEMENT WITH THREE ONE-YEAR EXTENSION OPTIONS, FOR AN ESTIMATED ANNUAL COST NOT TO EXCEED $17,500 AND A TOTAL COMBINED FIVE YEAR COST TO NOT EXCEED $87,500 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, it is more efficient to combine the maintenance of all city-owned fire extinguishers, in buildings as well as vehicles, into one service agreement; and

WHEREAS, one agreement will allow City staff to obtain the best pricing through economies of scale and will also enable staff to more effectively coordinate maintenance, repair and replacement of fire extinguishers throughout the City; and

WHEREAS, current Agreement 84252 with Assured Fire & Safety Equipment expires August 18, 2020 and funds have been exhausted months before that expiration date; and

WHEREAS, on April 2, 2019 the Purchasing Division issued Request for Bid (RFB) 1819-19 for Fire Extinguisher Inspection and Maintenance Service for Public Works; prospective bidders were notified online of the bid opportunity and 11 vendors download the RFB; and

WHEREAS, on April 2, 2019 bids were formally opened in the City Clerk's Office and four vendors responded, two of which were local vendors; and

WHEREAS, Modesto Municipal Code Section 8.3-203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures; and

WHEREAS, the award of RFB 1819-19 for Fire Extinguisher Inspection and Maintenance Services conforms to the Modesto Municipal code because the City complied with the formal bid procedures and Nor Cal Fire Inc. was the lowest responsive and responsible bidder.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of bid and agreement for Fire Extinguisher Inspection and Maintenance Services to Nor Cal Fire Inc., Ripon CA for a two-year agreement with three one-year extension options, for an annual estimated cost not to exceed $17,500 and a total amount not to exceed $87,500 over five years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for. ADAM U. LINDGREN, City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-010

PRINT

RESOLUTION APPROVING A PURCHASE ORDER FOR MIRACLE PLAY SYSTEMS OF ALAMO, CA, BY UTILIZING THE COMPETITIVE BID PROCESS WITH SOURCEWELL, FOR RECREATION AND PLAYGROUND EQUIPMENT ACCESSORIES AND SUPPLIES AT EAST LA LOMA PARK, FOR AN AMOUNT NOT TO EXCEED $80,897; AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO ISSUE THE PURCHASE ORDER

WHEREAS, in 2016 the East La Loma Park playground equipment was removed because it was deemed unsafe by the Parks Operations Division due to the condition and age, and

WHEREAS, in 2017, the La Loma Neighborhood Association (LLNA) approached the City to discuss their desire to assist in the replacement of the playground equipment at East La Loma Park, and

WHEREAS, the LLNA, working as a member of Modesto Neighborhoods, Inc. (MNI) organized the community to design and fund the playground project through fundraising efforts and the City's Park Partner's program, and

WHEREAS, on October 1, 2019, by Resolution 2019-448, The City Council approved a Memorandum of Understanding with the La Loma Neighborhood Association and Modesto Neighborhoods, Inc. to proceed with the design and construction of the East La Loma Park Playground Project, and

WHEREAS, the Parks Planning and Development Division has developed a scope of work for the playground as well as a full project budget in coordination with the LLNA and community members, and

WHEREAS, the Finance Department's Purchasing Division suggested "piggyback" on an existing competitively bid contract through Sourcewell, previously

known as NJPA, contract #030117 – RECREATION AND PLAYGROUND EQUIPMENT, ACCESSORIES AND SUPPLIES. By accessing the terms of the Sourcewell contract, this creates a cost savings of staff time within the PRND, Purchasing Division and the City Clerk's Office due to the limited number of competitors to respond to a Request for Bid (RFB), and

WHEREAS, Sourcewell's bid review committee and board established that Miracle Play Systems of Alamo, CA, formerly known as PlayPower, Inc, was the most competitive bidder. Miracle Play Systems, Inc was awarded contract #030117-LTS effective April 14, 2017 through April 14, 2021, with the option to extend for 1 additional year, and

WHEREAS, through this Sourcewell contract, Miracle Play Systems, Inc has provided a quote for the East La Loma Park Playground renovation project in the amount of $117,896.35, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid, exceptions to the formal bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in his or her discretion, determines that a process other than the formal bid procedure set for in Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality." In addition, MMC 8-3.202(d) encourages the Purchasing Manager to join with the State of California and other units of government in cooperative purchasing plans when the best cost savings interest of the City would be served. By "accessing the terms"

of the Sourcewell Contract #030117, the purchase of this equipment will conform to MMC Section 8-3.204(d), and

WHEREAS, The City will split the cost of the playground purchase with LLNA as follows:

City of Modesto Expense	$ 80,896.35
La Loma Neighborhood Association Expense	$ 37,000.00
Total Playground Equipment Purchase Cost	$117,896.35

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves a purchase order for Miracle Play Systems of Alamo, CA, by utilizing the competitive bid process with SourceWell, for Recreation and Playground Equipment Accessories and Supplies at EAST La Loma Park, for an amount not to exceed $80,897.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is authorized to issue the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-011

RESOLUTION APPROVING THE SUBMISSION OF THE CITY'S LOCAL TRANSPORTATION FUNDS FISCAL YEAR 2019-20 CLAIM FOR NON-MOTORIZED PURPOSES (BIKE LANES AND PEDESTRIAN PATHWAYS) IN THE AMOUNT OF $184,975 TO THE STANISLAUS COUNCIL OF GOVERNMENTS (STANCOG)

WHEREAS, the Stanislaus Council of Governments (StanCOG) has informed the City that Local Transportation Funds (LTF) funds have been apportioned by StanCOG for allocation to the City, and

WHEREAS, this Claim for Non-motorized Purposes is the formal request by the City to StanCOG to release its apportionment of LTF funds for non-motorized purposes during the current fiscal year, and

WHEREAS, LTF funds provide the required local match for Federal funds received for the purpose of non-motorized projects (bicycle and pedestrian pathways), and

WHEREAS, two percent (2%) of all LTF funds available to StanCOG are designated to be used for bicycle and pedestrian projects, and

WHEREAS, the City has prepared its LTF Claim for Fiscal Year 2019-20 pursuant to Articles 4 and 8 of Chapter 4 of Part 11, Division 10 of the California Public Utilities Code, and

WHEREAS, Council action authorizing submission of the claim is required by the rules and regulations governing the Transportation Development Act Funds, including StanCOG's approved Transit Cost Sharing Procedures, before any LTF funding can be released to the City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the submission of the City's Local Transportation Funds Fiscal Year 2019-20 Claim for Non-motorized Purposes (bike lanes and pedestrian pathways) in the amount of $184,975 to the Stanislaus Council of Governments (STANCOG).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-012

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET TO FUND PROJECT #100813 – VIRGINIA CORRIDOR PHASE VII IN AN AMOUNT NOT TO EXCEED $184,975 IN REVENUE, AND TO BUDGET EXPENDITURES AS OUTLINED IN ATTACHMENT A TO FUND THE PROJECT, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, the Stanislaus Council of Governments (StanCOG) has informed the City that Local Transportation Funds (LTF) funds have been apportioned by StanCOG for allocation to the City, and

WHEREAS, this Claim for Non-motorized Purposes is the formal request by the City to StanCOG to release its apportionment of LTF funds for non-motorized purposes during the current fiscal year, and

WHEREAS, LTF funds provide the required local match for Federal funds received for the purpose of non-motorized projects (bicycle and pedestrian pathways), and

WHEREAS, two percent (2%) of all LTF funds available to StanCOG are designated to be used for bicycle and pedestrian projects, and

WHEREAS, the City has prepared its LTF Claim for Fiscal Year 2019-20 pursuant to Articles 4 and 8 of Chapter 4 of Part 11, Division 10 of the California Public Utilities Code, and

WHEREAS, Council action authorizing submission of the claim is required by the rules and regulations governing the Transportation Development Act Funds, including StanCOG's approved Transit Cost Sharing Procedures, before any LTF funding can be released to the City, and

WHEREAS, $184,975 is available to be budgeted into the Fiscal Year 2019/20 Capital Improvement Program Budget, and

WHEREAS, staff identified one project to receive funding this fiscal year: #100813 – Virginia Corridor Phase VII (See **Attachment A**).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby amends the Fiscal Year 2019-20 Capital Improvement Program Budget to fund project #100813 – Virginia Corridor Phase VII in an amount not to exceed $184,975 in revenue, and to budget expenditures as outlined in **Attachment A** to fund the project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for. ADAM U. LINDGREN, ~~City~~ Attorney

Exhibit A

Budget Adjustment for LTF Non-Motorized Funds to Capital Project 100813
(Virginia Corridor Phase VII)

Fund 3140 – Capital Grants CIP Projects
Capital Project 100813 -Virginia Corridor Phase VII

Expense:

Task	Starting Amount	Increase/ (Decrease)	Ending Total
Engineering/Design/Administration	$750,000	$0	750,000
Construction	$3,375,281	$77,033	$3,452,314
Construction Administration	$274,821	$53,971	$328,792
Contingency	$274,821	$53,971	$328,792
Total	**$4,674,923**	**$184,975**	**$4,859,898**

Revenue:

To:

Account		Starting Amount	Increase/ (Decrease)	Ending Total
3140-39999-42110-100813	(Department of Transportation)	$442,650	$ 0	$442,650
3140-39999-42201-100813	(Natural Resources Agency)	$3,193,401	$ 184,975	$3,378,376
3140-39999-61520-100813	(Transfer In from LTF-Non-Motorized Fund)	$1,038,872	$ 0	$1,038,872
	Total	**$4,674,923**	**$ 184,975**	**$4,859,898**

Total Revenue/Expense Adjustments $184,975

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-013

RESOLUTION APPROVING A MEMORANDUM OF UNDERSTANDING WITH THE WEST MODESTO COMMUNITY COLLABORATIVE AND STANISLAUS COUNTY FOR THE MAINTENANCE OF THE HELEN WHITE MEMORIAL TRAIL, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE MOU

WHEREAS, the West Modesto/King Kennedy Neighborhood Collaborative, currently known as the West Modesto Community Collaborative, ("Collaborative") and the City of Modesto Parks and Recreation Department began the process of creating and developing a safe walking trail between Maze Boulevard and California Avenue named the Helen White Memorial Trail ("Trail); and

WHEREAS, by Resolution No. 2011-409, the City entered into a License Agreement with the Modesto Irrigation District (MID) to permit the development of the Trail through their easement; and

WHEREAS, in November 2012, by Resolution No. 2012-467, Council approved an Agreement with the Collaborative to use $50,000 in Community Development Block Grant (CDBG) funds for the development of the Trail; and

WHEREAS, in October 2013, the City entered into a Memorandum of Understanding (MOU) with the Collaborative to develop an agricultural well for the Trail for supply irrigation water for the trail's landscaping; and

WHEREAS, in November 2015, by Resolution No. 2015-415, Council approved a Neighborhood Environmental Action Agreement (NEAT) with the Collaborative for the Trail; however, the agreement was never signed by the Collaborative; and

WHEREAS, later the County received complaints regarding the maintenance of the Trail and, since the property lies in County jurisdiction, the County began providing landscape services; and

WHEREAS, the City of Modesto, the Collaborative and the County have been maintaining the Trail; and

WHEREAS, the parties have agreed to enter into a Memorandum of Understanding for maintenance of the Helen White Trail listing the roles and fiscal responsibilities of each party:

1. Stanislaus County – Landscaping Services
2. Collaborative – Monthly Cleanups
3. City – Tools, lighting, waste and debris collection for monthly cleanups.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Memorandum of Understanding with the West Modesto Community Collaborative and Stanislaus County for the maintenance of the Helen White Trail and the terms and conditions contained therein.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the Memorandum of Understanding, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for. ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-014

RESOLUTION APPROVING A 5-YEAR COMMERCIAL LEASE AGREEMENT WITH WILLIAM BRENT BURNSIDE, DBA BURNSIDE MANAGEMENT TEAM FOR THE USE OF APPROXIMATELY 50 PARKING SPACES FOR AN ANNUAL ESTIMATED COST OF $42,000, $3,500 MONTHLY, AND A TOTAL AGREEMENT NOT TO EXCEED $210,000; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE LEASE AGREEMENT

WHEREAS, the City of Modesto's Police Department ("MPD") needs additional parking and the City Council has previously approved lease agreements to meet MPD's parking needs; and

WHEREAS, this lease agreement will allow MPD to use 50 parking spaces in the lot owned by William Brent Burnside, DBA Burnside Management Team that is located on the corner of 11th and F Streets; and

WHEREAS, this lease agreement will provide much needed parking for MPD-owned vehicles and MPD employee-owned vehicles; and

WHEREAS, this lease agreement is for a 5-year term, and if approved by Council, will commence February 1, 2020; and

WHEREAS, William Brent Burnside, DBA Burnside Management Team is agreeable to leasing the parking lot, in exchange for payment of monthly rent in the amount of Three Thousand Five Hundred Dollars ($3,500).

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Modesto hereby approves a Lease Agreement with William Brent Burnside, DBA Burnside Management Team for use of 50 spaces in its parking lot for Three Thousand Five Hundred Dollars ($3,500) a month for a 5-year term.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the necessary documents in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-015

RESOLUTION APPROVING THE COMPETITIVE BID PROCESS FROM THE COMMONWEALTH OF VIRGINIA, WITH GILLIG LLC, LIVERMORE, CA, FOR THE PURCHASE OF THREE BUSES, FOR A COST NOT TO EXCEED $1,585,251, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE TO ISSUE THE PURCHASE ORDER

WHEREAS, the City owns 61 fixed route Modesto Area Express (MAX) buses which provide fixed route service to the community, and

WHEREAS, on September 25, 2019 by Resolution 2018-413, Council approved the Transit Asset Management (TAM) plan for the City which authorized the bus replacement schedule according to a specific set of criteria, and

WHEREAS, three buses are ready for replacement, and

WHEREAS, Federal Transit Administration (FTA) recipients are allowed to acquire contract options through assignment by another FTA recipient, and

WHEREAS, the contract entered into by the Commonwealth of Virginia complies with all FTA requirements, and provides a completive price for the buses, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid. However, exceptions to the formal bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in his or her discretion, determines that a process other than the formal bid procedure set for in Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality." In addition, MMC 8-3.202(h) permits the Purchasing Manager to utilize the 'piggybacking' from a competitive bid process with the Commonwealth of Virginia when the best cost savings interest of the City would be served. Here, this exemption is

satisfied because the agreement with the Commonwealth of Virginia provides a better price for a large number of buses than the City could obtain by its own procurement. In addition, the time savings provided to staff enables other high priority projects to be completed faster.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the purchase of three buses, by utilizing the competitive bid process with the Commonwealth of Virginia, with Gillig LLC, Livermore, CA, for a cost not to exceed $1,585,251.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, is authorized to issue the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for. ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-016

RESOLUTION AMENDING FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT BUDGET FOR FUND 4560 – BUS FIXED ROUTE – BUS PURCHASES IN THE AMOUNT OF $1,585,251 TO FUND THE PURCHASE OF THREE MODESTO AREA EXPRESS BUSES, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE CHANGES

WHEREAS, certain budgetary transactions are necessary in the amount of $1,585,251 in order to fund the purchase three Modesto Area Express (MAX) buses, and

WHEREAS, the total cost for three buses is estimated at $1,585,251, and

WHEREAS, on June 28, 2016 by Resolution No. 2016-275 Council approved a Federal Transit Administration (FTA) grant in the amount of $1,100,000 and,

WHEREAS, Local Transportation Funds (LTF) in the amount of $485,251 will be used to fund the purchase of the three buses.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget as shown in **Exhibit A, attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

Attachment A

Fund 4560 - Bus Fixed Route – Bus Purchases		**Adjustment**
Revenues		
Intergov – State- LTF	increase	$ 485,251
Intergov- Federal – Federal Transit Administration	Increase	$1,100,000
Expenditures		
Vehicles > $5,000	Increase	$1,585,251

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-017

RESOLUTION APPROVING THE SUBMISSION OF A GRANT APPLICATION FOR THE TRANSIT AND INTERCITY RAIL CAPITAL PROGRAM (TIRCP) IN THE AMOUNT OF $1,000,000 TO PURCHASE ONE ZERO EMISSION TRANSIT BUS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL NECESSARY GRANT DOCUMENTS ON BEHALF OF THE CITY OF MODESTO

WHEREAS, on October 18,2019, the California State Transportation Agency (CalSTA) announced the availability of $450-500 million for Fiscal Year (FY) 2020-21 through 2024-25 in the Transit and Intercity Rail Capital Program (TIRCP) to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, and bus and ferry transit systems, to significantly reduce emissions of greenhouse gases, vehicle miles traveled, and congestion for the purchase or lease of low or no emission vehicles as well as related equipment or facilities, and

WHEREAS, funding is awarded to projects on a competitive basis, from proposals submitted to CalSTA in response to the call for projects, and

WHEREAS, Modesto plans to apply for the purchase of one zero emission transit bus at approximately $1,000,000, and

WHEREAS, local matching funds will not be needed for this purchase because it is not required.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the submission of a grant application for the Transit and Intercity Rail Capital Program in the amount of $1,000,000 for a zero emission transit bus.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is authorized to execute all necessary grant documents on behalf of the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-018

RESOLUTION AUTHORIZING SUBMITTAL OF APPLICATION(S), AMENDING THE ANNUAL BUDGETS FOR ALL RECYCLE PAYMENT PROGRAMS TO THE CALIFORNIA DEPARTMENT OF RESOURCES, RECYCLING AND RECOVERY (CALRECYCLE), AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL RELATED DOCUMENTS, AND RESCINDING COUNCIL RESOLUTION NO. 2015-69

WHEREAS, pursuant to Public Resources Code sections 48000 et seq., 14581, and 42023.1(g), the Department of Resources Recycling and Recovery (CalRecycle) has established various payment programs to make payments to qualifying jurisdictions, and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the administration of the payment programs, and

WHEREAS, CalRecycle's procedures for administering payment programs require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of the payment program such as approval of applications and acceptance of awards, and

WHEREAS, the City benefits from CalRecycle payment programs by receiving funding for advertising, beverage container collection programs, litter clean-up, recycling education and personnel related to recycling under the conditions of the payment program, and

WHEREAS, due to the benefits that the City derives from the CalRecycle City/County Payment Program approval of applications, accepting awards and amending the annual budgets for all City/County Payment Programs to CalRecycle shall be on an ongoing basis until Council rescinds said authorization.

NOW, THEREFORE, BE IT RESOLVED the Council of the City of Modesto authorizes the submittal of application(s) to CalRecycle for any and all payment programs offered for which the City qualifies, acceptance of the awards, and amendment of the annual budgets for all City/County Payment Programs to CalRecycle.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized as Signature Authority to execute all documents necessary to implement and secure payment(s) from CalRecycle.

BE IT FURTHER RESOLVED that this authorization is effective until rescinded by the Council of the City of Modesto.

BE IT FURTHER RESOLVED that Resolution No. 2015-69 is hereby rescinded.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-019

RESOLUTION APPROVING GRANT APPLICATIONS TO THE CALIFORNIA DEPARTMENT OF RESOUCES, RECYCLING AND RECOVERY (CALRECYCLE) FOR ALL WASTE TIRE AMNESTY GRANTS, ACCEPTING GRANT AWARDS, AMENDING THE ANNUAL BUDGET, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL GRANT RELATED DOCUMENTS AND AUTHORIZATIONS AND RESCINDING CITY COUNCIL RESOLUTION NO. 2015-70

WHEREAS, pursuant to Public Resources Code sections 48000 et seq., 14581, and 42023.1(g), the Department of Resources Recycling and Recovery (CalRecycle) has established various Grant Programs (grants) in furtherance of the State of California's (State) efforts to reduce, recycle and reuse solid waste generated in the State thereby preserving landfill capacity and protecting public health and safety and the environment, and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the application, awarding, and management of the grants, and

WHEREAS, CalRecycle's procedures for administering grant programs require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of the grant program such as approval of applications and acceptance of awards, and

WHEREAS, the City benefits from CalRecycle Waste Tire Amnesty grant programs by receiving funding for advertising, professional services and personnel related to recycling under the conditions of the Waste Tire Amnesty grant, and

WHEREAS, due to the benefits that the City derives from the CalRecycle Waste Tire Amnesty grant approval of applications, accepting awards and amending the annual

budgets for all Waste Tire Amnesty grants to CalRecycle shall be on an ongoing basis until Council rescinds said authorization.

NOW, THEREFORE, BE IT RESOLVED the Council of the City of Modesto authorizes the submittal of application(s) to CalRecycle for any and all Waste Tire Amnesty grants offered for which the City qualifies, acceptance of the awards, and amendment of the annual budgets for all Waste Tire Amnesty grants to CalRecycle.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized as Signature Authority to execute all documents necessary to implement and secure payment.

BE IT FURTHER RESOLVED that this authorization is effective until rescinded by the Council of the City of Modesto.

BE IT FURTHER RESOLVED that Resolution No. 2015-70 is hereby rescinded.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ~~ADAM U. LINDGREN, City Attorney~~

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-020

RESOLUTION APPROVING GRANT APPLICATIONS TO THE CALIFORNIA DEPARTMENT OF RESOUCES, RECYCLING AND RECOVERY (CALRECYCLE) FOR ALL WASTE TIRE CLEANUP GRANTS, ACCEPTING GRANT AWARDS, AMENDING BUDGET, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL GRANT RELATED DOCUMENTS AND AUTHORIZATIONS AND RESCINDING COUNCIL RESOLUTION NO. 2015-71

WHEREAS, pursuant to Public Resources Code sections 48000 et seq., 14581, and 42023.1(g), the Department of Resources Recycling and Recovery (CalRecycle) has established various Grant Programs (grants) in furtherance of the State of California's (State) efforts to reduce, recycle and reuse solid waste generated in the State thereby preserving landfill capacity and protecting public health and safety and the environment, and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the application, awarding, and management of the grants, and

WHEREAS, CalRecycle's procedures for administering grant programs require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of the grant program such as approval of applications and acceptance of awards, and

WHEREAS, the City benefits from CalRecycle Waste Tire Cleanup grant programs by receiving funding for professional services and personnel related to recycling under the conditions of the Waste Tire Cleanup grant, and

WHEREAS, due to the benefits that the City derives from the CalRecycle Waste Tire Cleanup grant approval of applications, accepting awards and amending the annual

budgets for all Waste Tire Cleanup grants to CalRecycle shall be on an ongoing basis until Council rescinds said authorization.

NOW, THEREFORE, BE IT RESOLVED the Council of the City of Modesto authorizes the submittal of application(s) to CalRecycle for any and all Waste Tire Cleanup grants offered for which the City qualifies, acceptance of the awards, and amendment of the annual budgets for all Waste Tire Cleanup grants to CalRecycle.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized as Signature Authority to execute all documents necessary to implement and secure payment.

BE IT FURTHER RESOLVED that this authorization is effective until rescinded by the Council of the City of Modesto.

BE IT FURTHER RESOLVED that Resolution No. 2015-71 is hereby rescinded.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-021

RESOLUTION APPROVING THE FIRST AMENDMENT INCREASING THE AGREEMENT AMOUNT WITH MACHADO & SONS CONSTRUCTION, TURLOCK, CA, FOR "AS-NEEDED" CONCRETE SERVICES AT MULTIPLE LOCATIONS THROUGHOUT THE CITY BY $150,000 FROM $525,659 TO A NEW TOTAL AMOUNT OF $675,659, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, on June 11, 2019, by Resolution 2019-265, Council approved the award of bid and agreement for as-needed concrete services at multiple locations throughout the City to Machado & Sons Construction for a five year agreement, for a total cost not to exceed $525,659, and

WHEREAS, the original agreement was for on-call concrete services for bus stop locations for the Transit Division and for miscellaneous areas for the High Voltage Street Light Conversion Project for the Traffic Division, and

WHEREAS, on September 9, 2019, the Traffic Division received a quote for concrete services on the Colorado Circuit for the High Voltage Upgrades Project and the unit cost of the quote received by Machado & Sons exceeded the unit cost amount set forth in the agreement, and

WHEREAS, Machado and Sons explained that the unit prices were based on repairing bus stops that typically require a larger square foot (SF) in repair work than our high voltage circuit repairs and the high voltage repair work is also spread over about 20 different locations per circuit in ¼ mile radius, and

WHEREAS, staff received a revised proposal, in which the unit costs seemed in line with time, material, and prevailing wage rates, and

WHEREAS, after completing nearly four circuits to date, staff is projecting an additional need of $40,000 more per year to complete the work needed, and

WHEREAS, the additional need is a combination of low original estimations, increased unit cost to the work, and increased scope of work to City crews, and

WHEREAS, the amendment will increase the contract for a one year term while the Traffic Department goes out to bid to cover the work over the next three years, and

WHEREAS, Parks, Recreation and Neighborhoods Department also have expressed a need for various sidewalk replacement or American Disabilities Act (ADA) ramp issues in which they would need an on-call contractor, and

WHEREAS, Parks estimates a need of $50,000 on the maintenance operations side for a one year term and an additional $20,000 the following three years.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the First Amendment increasing the agreement amount with Machado & Sons Construction, Turlock, CA, for “as-needed” concrete services at multiple locations throughout the City by $150,000 from $525,659 to a new total amount of $675,659.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the First Amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-022

RESOLUTION APPROVING THE FIRST AMENDMENT WITH ITERIS, SANTA ANA, CA, TO EXTEND THE CONTRACT COMPLETION DATE TO MARCH 31, 2020 FOR THE TRAFFIC SIGNAL SYNCHRONIZATION OUTSIDE THE DOWNTOWN PROJECT; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, on February 26, 2019, by Resolution 2019-87, Council approved an agreement with Iteris, Santa Ana, CA, for the Traffic Signal Synchronization Outside the Downtown project in the amount of $389,384 for the identified scope of services, plus $38,938 for additional services (if needed), for an agreement total not to exceed $428,322, and

WHEREAS, the original contract stated that the contract shall end on January 1, 2020, and

WHEREAS, due to delays from Caltrans, Iteris has not yet received all their timing information for their signals, and

WHEREAS, there are many Caltrans signals outside the downtown area that coordinate with the City signals because of proximity and/or volume, and

WHEREAS, the consultant has requested to extend their contract until March 31, 2020 to complete all the synchronization to include Caltrans signals.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the First Amendment with Iteris, Santa Ana, CA, to extend the contract completion date to March 31, 2020 for the Traffic Signal Synchronization Outside the Downtown project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the First Amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
For: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-023

RESOLUTION APPROVING THE FIRST AMENDMENT TO THE CURRENT AGREEMENT WITH KRAZAN AND ASSOCIATES, INC., FOR ON-CALL SPECIAL INSPECTION AND MATERIAL TESTING SERVICES, IN THE AMOUNT OF $60,000, FOR A TOTAL AMOUNT NOT TO EXCEED $134,500, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, City staff finds it necessary to utilize the services of a special inspection and materials testing firm during the course of administering the construction on public improvement projects, and

WHEREAS, the special inspection and materials testing services are required to help achieve compliance with the specification requirements of various projects, and

WHEREAS, April 10, 2018, by Resolution 2018-150, the City approved an Agreement with Krazan & Associates, Inc., to perform On-call Special Inspection and Material Testing Services on various City of Modesto Capital Improvement Projects in an amount not to exceed $74,500, and

WHEREAS, in this last year, the increased amount of construction projects experienced in 2018 has been sustained, and

WHEREAS, Caltrans has required standby and night-work on projects occurring within its right of way. The standby and night-work within Caltrans' right of way has increased special inspection and material testing costs, and

WHEREAS, Measure L funded projects, that require special inspection and material testing, are being bid and will soon start construction.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a First Amendment to the current agreement with Krazan &

Associates, Inc., for On-call Special Inspection and Material Testing Services for various Capital Improvement Program projects, in the amount of $60,000 for a total amount not to exceed $134,500.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for, ADAM U. ~~LINDGREN, City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-024

RESOLUTION APPROVING THE FIRST AMENDMENT TO THE CURRENT AGREEMENT WITH CONSTRUCTION TESTING SERVICES, INC., FOR ON-CALL SPECIAL INSPECTION AND MATERIAL TESTING SERVICES, IN THE AMOUNT OF $60,000, FOR A TOTAL AMOUNT NOT TO EXCEED $134,500, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, City staff finds it necessary to utilize the services of a special inspection and materials testing firm during the course of administering the construction on public improvement projects, and

WHEREAS, the special inspection and materials testing services are required to help achieve compliance with the specification requirements of various projects, and

WHEREAS, April 10, 2018, by Resolution 2018-151, the City approved an Agreement with Construction Testing Services, Inc., to perform On-call Special Inspection and Material Testing Services on various City of Modesto Capital Improvement Projects in an amount not to exceed $74,500, and

WHEREAS, in this last year, the increased amount of construction projects experienced in 2018 has been sustained, and

WHEREAS, Caltrans has required standby and night-work on projects occurring within its right of way. The standby and night-work within Caltrans' right of way has increased special inspection and material testing costs, and

WHEREAS, Measure L funded projects, that require special inspection and material testing, are being bid and will soon start construction.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a First Amendment to the current agreement with Construction

Testing Services, Inc., for On-call Special Inspection and Material Testing Services for various Capital Improvement Program projects, in the amount of $60,000 for a total amount not to exceed $134,500.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-025

RESOLUTION DIRECTING STAFF TO CLOSE THE MODESTO MUNICIPAL GOLF COURSE, WORK WITH THE FIRST TEE TO TRANSITION THE PROGRAM TO DRYDEN, AND PREPARE THE PROPERTY FOR SALE

WHEREAS, the City determined that a current assessment of the City's golf courses was need to explore options with regard to the golf course system, and

WHEREAS, the City retained Pro Forma Advisors, LLC (Consultant) to provide input regarding the outlook for the golf courses, revenue enhancement potential, operating efficiency opportunities, capital improvement needs, and other factors affecting the golf course operations going forward, and

WHEREAS, in early 2019, Consultant completed the "Modesto Municipal Golf system Operations Review" (Assessment), and

WHEREAS, the Assessment concluded that there has been a long term erosion of operating performance of the City's golf system which continues to erode; there are substantial capital improvement needs at each course; and the General Fund subsidy will remain at its current level ($750,000), or higher over the next several years, and

WHEREAS, the Assessment recommended the Dryden Park Golf Course be designated for closure; the Dryden Park Golf Course property be incorporated into the Tuolumne River Regional Park System, and The First Tee of the Central Valley assume full management and operation of the Muni golf course, and

WHEREAS, after the completion of the Assessment, the City received interest in repurposing the Muni property, and requested the Consultant to consider an additional scenario to close Muni and move The First Tee Program to Dryden Park Golf Course be analyzed, and

WHEREAS, in October 2019, Consultant submitted an addendum to the Assessment, (Amended Assessment), and recommended closing Muni for redevelopment non-golf use; maintaining Dryden Park as a 18-hole course and reevaluating reducing Dryden to a 9-hole course pending operating performance and the prospect of incorporating deed restricted property into the Tuolumne River Regional Park system is assessed, and

WHEREAS, on October 28, 2019, the Finance Committee reviewed the assessments and other golf updates and directed staff to take the matter to the full Council for consideration, and

WHEREAS, staff recommends closing the Muni golf course, working with The First Tee to transition the program to Dryden, and preparing the property for sale, and

WHEREAS, the closure of the Muni golf course shall be completed as soon as administratively possible, but no later than the expiration of The First Tee's contract.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes staff to close the Muni golf course, work with The First Tee to transition the program to Dryden, and prepare the property for sale.

BE IT FURTHER RESOLVED that the closure of the Muni golf course shall be completed as soon as administratively possible, but no later than the expiration of The First Tee's contract.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-026

RESOLUTION AWARDING A $500,000 LOAN AND A $500,000 GRANT IN COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS (CDBG) TO THE CENTER FOR HUMAN SERVICES (CHS) FOR ACQUISITION OF PROPERTY LOCATED AT 2000 W. BRIGGSMORE AVENUE THAT WILL BE USED TO HOUSE A YOUTH NAVIGATION CENTER AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ANY DOCUMENTS AND/OR AGREEMENTS WITH SUCH CHANGES AS DETERMINED BY THE CITY ATTORNEY

WHEREAS, as a U.S. Department of Housing and Urban Development (HUD) entitlement community, the City is required to develop an Annual Action Plan that describes proposed activities funded with Community Development Block Grant (CDBG), Home Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funds, and

WHEREAS, from time to time, the City receives project proposals to address the needs of low and moderate income persons, and

WHEREAS, in 2018, City staff received a proposal by Center for Human Services (CHS) for acquisition of property located at 2000 W Briggsmore Ave, Modesto CA, to house a Youth Navigation Center – a one stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness, and

WHEREAS currently, there is no coordinated system of care for youth experiencing crisis, housing instability, and/or homelessness in Stanislaus County and no dedicated shelter beds for 18-24 year olds. Services are fragmented or nonexistent, and

WHEREAS, the proposed Youth Navigation Center will create a space where existing services can be relocated and new services developed, creating a clear pathway for youth/young adults, and

WHEREAS, Center for Human Services currently owns half of the building, it is seeking to acquire and will leverage the administrative and behavioral health programs already operating in this facility to support the young people accessing the Youth Navigation Center to be operated on the other half of the building, and

WHEREAS, the property to be acquired consists of three parcels with Assessor Parcel Numbers (APNs): 060-36-028, 060-36-029, and 060-36-30, and

WHEREAS, on November 14, 2019 the Citizens Housing and Community Development Committee reviewed, approved and forwarded the project proposal and funding recommendation to the City Council for review and approval, and

WHEREAS, the allocation of CDBG funds will take effect via the execution of two separate CDBG agreements; one for a CDBG entitlement funds grant in the amount of $500,000 and a second CDBG Revolving Loan Funds (RLF) loan agreement and promissory note in the amount of $500,000. The RLF loan will be a thirty (30) year loan at zero percent (0%) interest with monthly payments of $1,388.89 per month beginning on the first day of the month following the issuance of certificate of occupancy, and

WHEREAS, the loan will evidenced by a promissory note and secured by a deed of trust; and

WHEREAS, a regulatory agreement will be recorded on the property being acquired by the Center for Human Services to ensure that it is used as youth navigation center for at least 30 years.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto awards a $500,000 loan and a $500,000 grant in Community Development Block Grant funds (CDBG) to the Center for Human Services (CHS) for acquisition of property located at 2000 W. Briggsmore Ave, Modesto CA that will be used to house a Youth Navigation Center.

BE IT FURTHER RESOLVED; that the City Manager or his designee, is hereby authorized to execute the agreement in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-027

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 MULTI-YEAR PROJECT BUDGET TO ESTABLISH A NON-CAPITAL PROJECT (101219) TO BE FUNDED WITH COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS IN THE AMOUNT OF $500,000 GRANT AND $500,000 LOAN TO CENTER FOR HUMAN SERVICES FOR ACQUISITION OF PROPERTY AT 2000 W BRIGGSMORE AVENUE, TO BE USED AS A YOUTH NAVIGATION CENTER, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO TAKE THE NECESSARY STEPS TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, as a U.S. Department of Housing and Urban Development (HUD) entitlement community, the City is required to develop an Annual Action Plan that describes proposed activities funded with Community Development Block Grant (CDBG), Home Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funds, and

WHEREAS, from time to time, the City receives project proposals to address the needs of low and moderate income persons, and

WHEREAS, in 2018, City staff received a proposal by Center for Human Services (CHS) for acquisition of property located at 2000 W Briggsmore Ave, Modesto CA, to house a Youth Navigation Center – a one stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness, and

WHEREAS, on May 14, 2019, by Resolution No. 2019-240, Council approved the City of Modesto Program Year 2019-20 Annual Action Plan, and

WHEREAS, on November 14, 2019 the Citizens Housing and Community Development Committee reviewed, approved and forwarded the project proposal and funding recommendation to the City Council for review and approval, and

WHEREAS, a non-capital project, to be executed in two separate Community Development Block Grant (CDBG) agreements will be established in the amount of $500,000 Community Development Block Grant entitlement funds (Direct Grant) plus 10% for activity delivery costs and the amount of $500,000 Community Development Block Grant Revolving Loan Funds (RLF) loan agreement and promissory note with a thirty (30) year loan at zero percent (0%) interest with monthly payments of $1,388.89 per month beginning on the first day of the month following the issuance of certificate of occupancy, for a total project budget of $1,050,000.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approved a new project to be created in the amount of $1,050,000.

BE IT FURTHER RESOLVED; that the City Manager or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of January, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, ~~City Attorney~~

EXHIBIT A

Youth Navigation Center

Expenses

Project / Account	Task	Expenditure Type	IDIS Activity	Budget	Adjustment	Revised Budget	Funding Source	PY	Description
101219	1331 Appr Unit C	Acquisition/Direct Grants	1331	$ -	$ 500,000.00	$ 500,000.00	CDBG EN/PI	19	Youth Access Center
101219	1331 AD Appr Unit C	Activity Delivery/Svcs City Forces	1331	$ 25,000.00	$ 15,000.00	$ 40,000.00	CDBG EN	19	Youth Access Center
101219	1331 AD Appr Unit C	Activity Delivery/Prof Services	1331	$ -	$ 10,000.00	$ 10,000.00	CDBG EN	19	Youth Access Center
101219	1337 Appr Unit C	Acquisition/Direct Loan	1337	$ -	$ 500,000.00	$ 500,000.00	CDBG RLF	19	Youth Access Center
				$ 25,000.00	**$ 1,025,000.00**	**$ 1,050,000.00**			

**$25,000 previously budgeted for initial staff costs associated with project setup*

Revenues

Fund	Cost Center	Account	IDIS Activity	Budget	Adjustment		Description
1130	14020	42030	1331	$ -	$ 550,000.00	$ 550,000.00	Budgeted Reveue for Entitlement Funds & Program Income
				$ -	**$ 550,000.00**	**$ 550,000.00**	

Transfers

Fund	Cost Center	Account	Activity	DR	CR	Description
1130	14998	61155	1331		$ 500,000.00	Budgeted Transfers to fund 1130/CDBG from fund 1155/CDBG RLF
1155	14998	71130		$ (500,000.00)		Budgeted Transfers from fund 1155/CDBG RLF to fund 1130/CDBG
				Total Net Adjustment Transfers		$ -

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-028

RESOLUTION DESIGNATING COUNCILMEMBER KRISTI AH YOU TO SERVE AS VICE MAYOR FOR THE ENSUING YEAR PURSUANT TO SECTION 603 OF THE CHARTER OF THE CITY OF MODESTO

BE IT RESOLVED by the Council of the City of Modesto that Councilmember KRISTI AH YOU is hereby designated to serve as Vice Mayor for the ensuing year pursuant to Section 603 of the Charter of the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
ADAM U. LINDGREN, City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-028

RESOLUTION DESIGNATING COUNCILMEMBER KRISTI AH YOU TO SERVE AS VICE MAYOR FOR THE ENSUING YEAR PURSUANT TO SECTION 603 OF THE CHARTER OF THE CITY OF MODESTO

BE IT RESOLVED by the Council of the City of Modesto that Councilmember KRISTI AH YOU is hereby designated to serve as Vice Mayor for the ensuing year pursuant to Section 603 of the Charter of the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ADAM U. LINDGREN, ~~City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-029

RESOLUTION APPROVING A SECOND RESTATED LEGAL SERVICES AGREEMENT WITH ARATA, SWINGLE, VAN EGMOND & HEITLINGER IN AN AMOUNT NOT TO EXCEED $240,000 TO CONTINUE REPRESENTING THE CITY OF MODESTO IN TORT CASES, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City Attorney's Office is in need of outside counsel services; and

WHEREAS, on June 24, 2014, by Resolution No. 2014-241, Council approved an agreement with Arata, Swingle, Van Egmond & Goodwin, to represent the City in the following types of cases: tort, trip and fall, sidewalk, road and other similar cases; and

WHEREAS, on December 12, 2017, by Resolution No. 2017-500, Council approved a Restated Legal Services Agreement with Arata, Swingle, Van Egmond & Goodwin for the same services, and

WHEREAS, this Second Restated Agreement amends, restates and replaces in its entirety the original Restated Legal Services Agreement, dated December 12, 2017 and all amendments; and

WHEREAS, the City Attorney's office has drafted a Second Restated Legal Services agreement with Arata, Swingle, Van Egmond and Heitlinger for continued representation.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a Second Restated Legal Services Agreement with Arata, Swingle, Van Egmond & Heitlinger, in an amount not to exceed $240,000 to continue representing the City of Modesto in tort matters, as provided in **Exhibit A attached** hereto and incorporated herein, and further authorizes the City Attorney to execute such agreement in a form substantially similar to **Exhibit A.**

BE IT FURTHER RESOLVED, that the City Manager or his designee, are hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Kenoyer, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

SECOND RESTATED LEGAL SERVICES AGREEMENT

This Second Restated Agreement for Legal Services (this "**Second Restated Agreement**") is made and entered into on the 28th day of January, 2020 ("**Effective Date**"), by and between the **CITY OF MODESTO**, a California Municipal Corporation ("**City**"), located at 1010 Tenth Street, Sixth Floor, Modesto, California 95353 and **ARATA, SWINGLE, VAN EGMOND & HEITLINGER**, a Professional Corporation ("**Attorney**"), located at 1207 I Street, Modesto, California 95354. City and Attorney are hereinafter collectively referred to as the "**Parties**," and singularly as a "**Party**."

RECITALS

WHEREAS, this Agreement amends, restates and replaces in its entirety the Restated Legal Services Agreement, dated December 17th, 2017 and all amendments,

WHEREAS, City desires to continue Attorney's services with respect to providing legal advice, representation and assistance to City in defense of tort claims as assigned; and

WHEREAS, Attorney is specially trained, experienced and competent to perform such services; and

WHEREAS, the public interest, economy and general welfare will be served by this Agreement.

NOW, THEREFORE it is hereby agreed as follows:

1. Services.

a. Scope of Work: Subject to the terms and conditions set forth in this Agreement, Attorney shall provide to City the following services ("**Services**"):

Claims including litigation as assigned. Cases will include tort, trip and fall, sidewalk, road and other similar cases.

Prosecution of violations of the Modesto Municipal Code and assistance with community prosecution.

Attorney shall not be compensated for services outside the scope of work identified under this Section unless prior to the commencement of such services: (i) Attorney notifies City and City agrees that such services are outside the scope of work under this Section; (ii) Attorney estimates the additional compensation required for these additional services; and (iii) City, after notice, approves in writing a Supplemental Agreement specifying the additional services and amount

of compensation therefor.

Specific tasks including specific claims under the scope of work of this Agreement performed by Attorney will be assigned by City with written notice to Attorney. Within ten (10) days of receiving notice by City of a new task, Attorney shall provide City a budget for the requested task. Attorney must receive written approval by City of the proposed budget prior to commencement of task. Total compensation for all tasks under this Agreement shall not exceed the total compensation under Section 2 of this Agreement.

b. **Term:** This Agreement shall become effective on the Effective Date, and shall continue in effect until both Parties have fully performed their respective obligations under this Agreement unless sooner terminated as provided in Section 7.

c. **Partner in Charge:** The partner in charge of the defense of City in assigned tort claims will be George Arata and Bradley Swingle. Attorney will utilize experienced associate attorneys and paralegals under supervision of the partner in charge. The partner in charge will be the contact person for City and will make himself/herself reasonable available to respond to questions from the City Attorney or City staff.

2. Fees and Costs.

a. **Hourly Rates:**

George Arata	$175.00/hour
Bradley J. Swingle	$175.00/hour
Colleen F. Van Egmond	$175.00/hour

The total of all fees paid to Attorney for the performance of all services set forth in Section 1 (hereafter the "**Services**"), and for all authorized Reimbursable Expenses (as defined hereafter), shall not exceed the total sum of two hundred forty thousand dollars ($240,000.00)**.**

b. **Reimbursable Expenses.** City shall reimburse Attorney for the actual, reasonable and necessary expense of travel out of the Modesto metropolitan area, approved in advance, at $0.56 per mile. Attorney will not charge City for the cost of telephone calls or photocopying. Litigation costs and expenses for statutory fees, witness fees, reporters' per diem and stenographic transcriptions, jury fees, and the expenses of serving process shall be advanced by Attorney and reimbursed by City. Expert consultants and witnesses may be retained by Attorney on terms acceptable to City, approved in advance by email or letter by the City Representative (as defined hereafter), in which case City shall reimburse

Attorney or pay such consultants or experts directly.

c. Billing:

i. Legal billings shall be submitted to City every thirty (30) days unless otherwise advised.

ii. Each task shall be distinctly and completely identified. In litigation matters, City will not pay invoices that contain block billing. Each billing entry must contain the initials of the individual performing the task, the nature of the task, the date it was performed, and the length of time it took.

iii. Costs under $1,000.00 shall be paid by Attorney and submitted with their normal billing.

iv. City reserves the right to audit all invoices.

v. Payments to Attorney shall be made within a reasonable time after receipt of Attorney's invoice, generally within sixty (60) days of receipt. Attorney shall be responsible for supplying all documentation necessary to verify the monthly billings to the satisfaction of City.

vi. In addition to the provisions stated elsewhere in this Agreement regarding the payment of fees, billing and budgeting, the following guidelines for billing apply:

(1) City expects each individual working on the matter for which Attorney is retained to have the necessary experience to perform the services required to protect or pursue City's interests in the matter in a cost effective manner, consistent with high professional and ethical standards.

(2) City expects Attorney to select the individual most suitable for the task required and the specific needs of the matter, and to use the maximum efficiencies available. Billings for services performed by the inappropriate level of personnel will be reduced by City based on rate adjustments for the appropriate level of personnel.

(3) City will not pay for unnecessary review of texts, codes, rules of court, or other fundamental references. City will pay the hourly rate for specific legal research which is unique to the matter, assuming that Attorney has used maximum efficiencies and that Attorney has not already recently performed research in the same or very similar areas of law.

(4) City acknowledges the benefit of communications between attorneys in the firm. City does, however, expect that intra-office conferences will only be held as needed, and will be kept to a minimum. Intra-office conferences shall be for the purpose of discussing strategy and legal issues which directly further the matter. City will not pay for conferences which are supervisorial, instructional or administrative. Any invoice which lists an intra-office conference that does not meet these guidelines must contain a full explanation and is subject to reduction by City. City will not pay for "team meetings" and City will scrutinize all intra-office conferences for "value added" to the matter by the conference, for the number of individuals attending the conference, the length of the conference, the subjects discussed at the conference and who participated in it, and will, in City's sole discretion, determine if such value has been added.

(5) City will not pay for local telephone calls, incoming facsimiles, postage, time spent on filing, calendaring, indexing pleadings, photocopying, conferences with Clerks of court or court reporters, secretarial proofreading, re-drafting due to substandard work, or opening, organizing or closing files. City will not pay for time billed by summer interns, time for more than one individual to attend a trial, hearing, court appearance, arbitration, mediation, deposition, third party meeting, conference call or similar event, unless otherwise approved by City in advance.

(6) Vague billing which does not contain sufficient information to allow City's reviewer of the invoice to determine the nature of the task, the reason for the task, and the individual performing the task is subject to reduction by City.

(7) City will not reimburse for overtime, word processing, supplies, anything identified on an invoice as "miscellaneous," or any other unidentified charges.

d. Budget:

i. Within ten (10) days of the Effective Date, Attorney shall provide City with a proposed budget for the Services to be rendered pursuant to this Agreement. If Services involve tasks that have not yet been assigned by City, Attorney shall provide City with a proposed budget for all assigned new tasks with ten (10) days of receiving written notice from the City assigning Attorney the new task. Total compensation for all tasks under this Agreement shall not exceed the total compensation under Section 2 of

this Agreement. The budget shall include all projected fees and costs to be incurred by Attorney and necessary for completion of the Services necessary to conclude the representation. The budget shall be a good faith estimate and shall be as complete and detailed as reasonably possible, including such items as discovery and motions for trial, preparation of documents for transactional services, and anticipated research and investigations. The proposed budget shall identify the projected total hours that will be billed to each task, and the individual that are anticipated to be performing the task. Any deviation from the budget in excess of fifteen percent (15%), must be approved in advance by the City Attorney or designee. Notwithstanding the foregoing, Should it become reasonably apparent to Attorney that the actual billings will exceed Attorney's initial estimate of anticipated legal costs and fees, Attorney shall immediately notify City thereof in advance and shall submit a revised written estimate for City's approval.

3. Reporting.

a. Attorney shall provide City with a preliminary status report and evaluation within thirty (30) days of the Effective Date and the assignment of such task which report shall include an evaluation of the total exposure to the City, the liability risk, estimated cost to litigate or settle, and the particular attorneys who will be assigned. In this preliminary report, Attorney shall also make recommendations for discovery and any needed investigation, if any, and provide an estimate of total anticipated legal costs and fees for the handling of this matter. Thereafter, Attorney shall provide a status update to the City Representative, as defined in Section 4, every sixty (60) days on any matter under this Agreement.

b. Attorney shall provide to City representative an electronic version of all agreements, pleadings, motions, and discovery documents filed or propounded by Attorney in a Microsoft Word format compatible with that used by the City Attorney's office.

c. In the event that Attorney's handling of the above-designated matter exceeds a period of twenty-four (24) months, Attorney shall, in addition to providing regular status reports to City, also report directly to the City representative on an annual basis and no later than March 30th of each year, setting forth in detail the status of the matter, and Attorney's plan for further handling of the matter, and the estimated length of time to conclude the matter.

4. **City Representative.** The City Attorney, or the City Attorney's designee, shall be the "City Representative" under this Agreement and shall administer this Agreement for City, including any payments hereunder. All Attorney questions pertaining to this Agreement shall be referred to the City Representative or the Representative's designee.

5. **Insurance Requirements.** During the entire term of this Agreement, Attorney shall maintain the following insurance:

   a. **Minimum Scope of Insurance:** Coverage should be at least as broad as:

      i. Insurance Services Office Form No. CG 0001 (Commercial General Liability);

      ii. Insurance Services Office Form No. CA 0001 (Ed. 1/87) (Automobile Liability, Code "any auto");

      iii. Workers' Compensation as required by the Labor Code of the State of California, and Employers' Liability Insurance:

      iv. Professional Liability (Errors and Omissions) insurance against loss due to error, omission or malpractice.

   b. **Minimum Limits of Insurance:** Attorney shall maintain limits no less than:

      i. **Commercial General Liability:** $1,000,000 combined single limit per occurrence, including endorsements for contractual liabilities, broad form property damage and personal injury.

      ii. **Automobile Liability:** $1,000,000 combined single limit per accident for personal injury and property damage arising from owned, hired and non-owned vehicles.

      iii. **Workers' Compensation and Employers' Liability:** Workers' compensation limits as required by the Labor Code of the State of California and Employers' Liability limits of $1,000,000 per accident.

      iv. **Professional Liability (Errors and Omissions)**: $2,000,000 combined single limit per occurrence.

   c. **Deductibles and Self-Insured Retentions:** Any deductibles or self-insured retentions must be declared to and approved by the City.

   d. **Other Insurance Provisions:** The policies are to contain, or be endorsed to contain, the following provisions:

i. General Liability and Automobile Liability Coverages:

(1) The General Liability and Automobile Liability policies shall be written on an occurrence form and shall name City, its officers, officials, agents, employees and volunteers as additional insureds. Such policy(ies) of insurance shall be endorsed so that Attorney's insurance shall be primary and any insurance or self-insurance maintained by City, its officials, employees or volunteers shall be in excess of Attorney's insurance and shall not contribute with it.

(2) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, its officials, employees or volunteers.

(3) Coverage shall state that Attorney's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

ii. All Coverages:

(1) Each insurance policy required by this Agreement shall be endorsed to state that coverages shall not be canceled except after thirty (30) days prior written notice has been given to City. In addition, Attorney agrees that it shall not reduce its coverage or limits on any such policy except after thirty (30) days prior written notice has been given to City and City approves the reduction in coverage or limits. Attorney further agrees that it shall not increase any deductibles or self-insured retentions on any such policy except after thirty (30) days prior written notice has been given to City and City approves such increase.

(2) In the event claims made forms are used for any Professional Liability coverage, either (i) the policy(ies) shall be endorsed to provide not less than a five (5) year discovery period, or (ii) the coverage shall be maintained for a minimum of five (5) years following the termination of this Agreement and the requirements of this section relating to such coverage shall survive termination or expiration of this Agreement. Attorney shall furnish City with the certificate(s) and applicable endorsements for ALL required insurance prior to City's execution of this Agreement.

e. Acceptability of Insurers: Insurance shall be placed with insurers with a Bests' rating of no less than A:VII. This requirement may, however, be waived in individual cases for Errors and Omissions Coverages only; provided, however,

that in no event shall a carrier with a rating below B:IX be acceptable.

f. **Verification of Coverage:** Attorney shall furnish City with certificates of insurance showing compliance with the above requirements and with original endorsements affecting all coverages required by this Agreement both prior to the execution of this Agreement, and during the pendency of this Agreement at any time upon request by City. The certificates and/or endorsements shall set forth a valid policy number for City, and shall indicate the Issue Date, Effective Date and Expiration Date. The certificates and endorsements for each insurance policy shall be signed by a person authorized by the insurer to bind coverage on its behalf. The certificates and endorsements shall be forwarded to the City Representative.

g. **Payment Withhold:** City shall withhold payments to Attorney if the certificates of insurance and endorsements required in this section are canceled or Attorney otherwise ceases to be insured as required herein.

6. Indemnification.

a. **Indemnity:** Attorney shall fully indemnify and save harmless, City, its officers and employees, including without limitation the City Attorney, and each and every one of them, from and against all actions, damages, costs, liability, claims, losses, judgments, penalties and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "**Liabilities**"), to which any or all of them may be subjected, to the extent such Liabilities are caused by or result from any negligent act or omission or willful misconduct of Attorney, its subcontractors or agents, and their respective officers and employees, in connection with the performance or nonperformance of this Agreement, whether or not the City, its officers or employees reviewed, accepted or approved any service or work product performed or provided by the Attorney, and whether or not such Liabilities are litigated, settled or reduced to judgment.

b. **Obligation to Defend:** Attorney shall, upon City's request, defend at Attorney's sole cost any action, claim, suit, cause of action or portion thereof which asserts or alleges Liabilities to the extent such Liabilities are caused by or result from any negligent act or omission or willful misconduct of Attorney, its sub-attorneys, subcontractors or agents, and their respective officers and employees, in connection with the performance or nonperformance of this Agreement, whether such action, claim, suit, cause of action or portion thereof is well founded or not.

c. **Insurance Policies; Intellectual Property Claims:** The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement

shall not affect or limit any of City's rights under this section, nor shall the limits of such insurance limit the liability of Attorney hereunder. This section shall not apply to any intellectual property claims, actions, lawsuits or other proceedings subject to the provisions of Section 4 (Confidentiality of City Information) above. The provisions of this section shall survive any expiration or termination of this Agreement.

7. Termination.

a. **By City**. City may terminate this Agreement at any time by written notice. After receiving such notice, Attorney will cease providing services. Attorney will cooperate with City in the orderly transfer of all related files and records to your new counsel.

b. **By Attorney**. Attorney may terminate this Agreement at any time with City's consent or for good cause. Attorney may terminate this Agreement for any reason by giving to City Attorney not less than thirty (30) days prior written notice of termination. The notice shall specify the effective date of and reason for the termination. Good cause exists if (a) any statement is not paid within ninety (90) days of its receipt; (b) City fails to meet any other obligation under this Agreement and continues in that failure for 15 days after Attorney sends written notice to City; (c) City has misrepresented or failed to disclose material facts to Attorney, refused to cooperate with Attorney, refused to follow Attorney's advice on a material matter, or otherwise made Attorney's representation unreasonably difficult; or (d) any other circumstance exists in which ethical rules of the legal profession mandate or permit termination, including situations where a conflict of interest arises. If Attorney terminates Services, City agree to execute a substitution of attorneys promptly and otherwise cooperate in effecting that termination.

Termination of this Agreement, whether by City or by Attorney, will not relieve the obligation to pay for services rendered and costs incurred before our services formally ceased.

8. General Provisions.

a. Independent Contractor.

i. It is understood and agreed that Attorney (including Attorney's employees) is an independent contractor and that no relationship of employer-employee exists between the Parties hereto for any purpose whatsoever. Neither Attorney nor Attorney's assigned personnel shall be entitled to any benefits payable to employees of City. City is not required to make any deductions or withholdings from the compensation payable to Attorney under the

provisions of this Agreement, and Attorney shall be issued an IRS Form 1099 for its services hereunder. As an independent contractor, Attorney hereby agrees to indemnify and hold City harmless from any and all claims that may be made against City based upon any contention by any of Attorney's employees or by any third party, including but not limited to any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Agreement or by reason of the nature and/or performance of any Services under this Agreement.

ii. It is further understood and agreed by the Parties hereto that Attorney, in the performance of its obligations hereunder, is subject to the control and direction of City as to the designation of tasks to be performed and the results to be accomplished by the Services agreed to be rendered and performed under this Agreement, but not as to the means, methods, or sequence used by Attorney for accomplishing such results. To the extent that Attorney obtains permission to, and does, use City facilities, space, equipment or support services in the performance of this Agreement, this use shall be at the Attorney's sole discretion based on the Attorney's determination that such use will promote Attorney's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Agreement, the City does not require that Attorney use City facilities, equipment or support services or work in City locations in the performance of this Agreement.

iii. If, in the performance of this Agreement, any third persons are employed by Attorney, such persons shall be entirely and exclusively under the direction, supervision, and control of Attorney. Except as may be specifically provided elsewhere in this Agreement, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by Attorney. It is further understood and agreed that Attorney shall issue W-2 or 1099 Forms for income and employment tax purposes, for all of Attorney's assigned personnel and subcontractors.

b. **Licenses; Permits, Etc.:** Attorney represents and warrants that Attorney has all licenses, permits, City Business Operations Tax Certificate, qualifications, and approvals of whatsoever nature which are legally required for Attorney to practice its profession or provide any services under the Agreement.

_____
Attorney's Initial

Attorney represents and warrants that Attorney shall, at its sole cost and expense,

keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals which are legally required for Attorney to practice its profession or provide such Services. Without limiting the generality of the foregoing, if Attorney is an out-of-state corporation, Attorney warrants and represents that it possesses a valid certificate of qualification to transact business in the State of California issued by the California Secretary of State pursuant to Section 2105 of the California Corporations Code.

c. **Conflicts of Interest.** Attorney represents and warrants that they have made a diligent effort to determine whether there are any actual or potential conflicts of interest that would preclude or interfere with Attorney's performance of this Agreement, and that no such conflict of interest exists. Attorney shall indemnify and hold harmless City from and against any and all liability, loss, expense and obligation arising directly or indirectly out of any breach of the foregoing representation and warranty. Attorney agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of City at all times during the performance of this Agreement.

d. **Confidentiality of City Information.** Attorney understands and agrees that during the course performing the services required by this Agreement, or in contemplation thereof, Attorney may have access to private or confidential information which may be owned or controlled by City and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to City. Attorney agree that all information disclosed by City to Attorney shall be held in confidence and used only in performance of the services required by this Agreement. A violation of this section shall be a material violation of this Agreement and shall justify legal and/or equitable relief.

e. **Publicity.** The City Representative shall serve as the point of contact for press information regarding all matters pertaining to Services performed by Attorney under this Agreement. Attorney will consult with and obtain approval of the City Representative before making any statement to any media outlet (whether radio, print, internet or television) about the Services.

f. **Disqualification of Judges.** At the option of the City Attorney, judges may be disqualified from hearing City litigation, and Attorney shall adhere to such decision of the City Attorney. In the event that Attorney is of the opinion that a judge ought to be disqualified, the City Attorney must be consulted in advance by Attorney, and Attorney must obtain the City Attorney's written consent to such disqualification.

g. **Equal Employment Opportunity.** During the performance of this Agreement, Attorney, for itself, its assignees and successors in interest, agrees as follows:

i. **Compliance With Regulations:** Attorney shall comply with the Executive Order 11246 entitled "Equal Opportunity in Federal Employment", as amended by Executive Order 11375 and 12086, and as supplemented in Department of Labor regulations (41 CFR Chapter 60), hereinafter collectively referred to as the "Regulations."

ii. **Nondiscrimination:** Attorney, with regards to the work performed pursuant to this Agreement, shall not discriminate on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual orientation in selection and retention of subcontractors, including procurement of materials and leases of equipment. Attorney shall not participate either directly or indirectly in discrimination prohibited by the Regulations.

h. **Severability.** If any portion of this Agreement or the application thereof to any person or circumstance shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and shall be enforced to the greatest extent permitted by law.

i. **Waiver.** Neither City acceptance of, or payment for, any Service or Additional Service performed by Attorney, nor any waiver by either Party of any default, breach or condition precedent, shall be construed as a waiver of any provision of this Agreement, nor as a waiver of any other default, breach or condition precedent or any other right hereunder.

j. **Enforcement of Agreement.** This Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Venue of any litigation arising out of or connected with this Agreement shall lie exclusively in the state trial court or Federal District Court located in Stanislaus County in the State of California, and the Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent to service of process issued by such courts.

k. **Attorneys' Fees.** In any action to enforce the terms of this Agreement, the prevailing Party shall recover its reasonable attorneys' fees.

l. **Assignment Prohibited.** The expertise and experience of Attorney are material considerations for this Agreement. City has a strong interest in the qualifications and capability of the persons and entities who will fulfill the obligations imposed on Attorney under this Agreement. In recognition of this interest, Attorney shall not assign any right or obligation pursuant to this Agreement without the written consent of the City. Any attempted or purported assignment without City's written consent shall be void and of no effect.

m. **Notice.** Any notice, demand, request, consent, approval, communication either Party desires or is required to give the other party or any other person shall be in writing and either served personally or sent by prepaid, first-class mail to the address set forth below. Either Party may change its address by notifying the other Party of the change of address in writing. Notice shall be deemed communicated forty-eight (48) hours from the time of mailing if mailed as provided in this section.

To: City of Modesto:
Attention: City Attorney
1010 Tenth Street, 6th Floor
Modesto, CA 95353
Phone: (209) 577-5288
Fax: (209) 544-8260

To: Attorney:
Attention: Bradley J. Swingle
1207 I Street
Modesto, CA 95353
Phone: (209) 522-2211
Fax: (209) 522-2980

9. **Entire Agreement.** This document, including all Exhibits, contains the entire agreement between the Parties and supersedes whatever oral or written understanding they may have had prior to the execution of this Agreement. No alteration to the terms of this Agreement shall be valid unless approved in writing by Attorney, and by City, in accordance with applicable provision of the Modesto City Code.

10. **Authority.** The person signing this Agreement for Attorney hereby represents and warrants that he/she is fully authorized to sign this Agreement on behalf of Attorney and to bind Attorney to the performance of its obligations hereunder.

11. **Exhibits.** All exhibits referred to herein are attached hereto and are by this reference incorporated as if set forth fully herein.

[Signatures on Next Page.]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the dates stated below.

CITY OF MODESTO,
A Municipal Corporation

By:_____

Print name: Joseph P. Lopez

Title: City Manager

APPROVED TO AS FORM:

_____
Adam U. Lindgren, City Attorney

ATTEST:

_____
Stephanie Lopez, City Clerk

[Signatures Continued on Next Page.]

ATTORNEY:
ARATA, SWINGLE, VAN EGMOND & HEITLINGER
a Professional Corporation

_____

_____
Federal I.D. No.

_____
State I.D. No.

_____
City of Modesto Business Op. Tax Cert. No.

TYPE OF BUSINESS ENTITY *(check one)*:

_____ Individual/Sole Proprietor
_____ Partnership
_____ Corporation
_____ Limited Liability Company
_____ Other (*please specify:* _____*)*

_____
Signature of Authorized Person

_____
Title

_____
Additional Signature *(if required)*

_____
Title

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-030

RESOLUTION APPROVING THE PLANS AND SPECIFICATIONS FOR THE TULLY ROAD PAVEMENT REHABILITATION PROJECT, ACCEPTING THE BID, AND AWARDING A CONTRACT TO DSS COMPANY DBA KNIFE RIVER CONSTRUCTION, OF STOCKTON, CALIFORNIA, IN THE AMOUNT OF $1,664,791 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, plans and specifications have been prepared for the Tully Road Pavement Rehabilitation Project, and City staff recommends approval by the City Council, and

WHEREAS, the bids received for the Tully Road Pavement Rehabilitation Project were publicly opened at 11:00 a.m. on December 17, 2019, and later tabulated by the Director of Community and Economic Development for the consideration of Council, and

WHEREAS, the Director of Community and Economic Development has recommended that the bid of $1,664,790.90 received from DSS Company dba Knife River Construction, of Stockton, California be accepted as the lowest responsible and responsive bid and the contract be awarded to DSS Company dba Knife River Construction, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow the formal bid procedures, and

WHEREAS, an award of $1,664,790.90 and agreement for construction for Community and Economic Development Department to use DSS Company dba Knife River Construction, of Stockton, California, conforms to the Modesto Municipal Code

because the City complied with the formal bid procedures and DSS Company dba Knife River Construction, of Stockton, California, was the lowest responsive bidder.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the plans and specifications for the Tully Road Pavement Rehabilitation Project, accepts the bid of DSS Company dba Knife River Construction, of Stockton, California, in the amount of $1,664,790.90 and awards DSS Company dba Knife River Construction the contract for the Tully Road Pavement Rehabilitation Project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for. ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-031

RESOLUTION AUTHORIZING THE DIRECTOR OF UTILITIES TO APPROVE CHANGE ORDERS UP TO THE CUMULATIVE AMOUNT OF $166,479 (10% OF THE ORIGINAL CONTRACT PRICE) FOR THE TULLY ROAD PAVEMENT REHABILITATION PROJECT

WHEREAS, the Tully Road Pavement Rehabilitation Project bids were publicly opened on December 17, 2019, and DSS Company dba Knife River Construction, of Stockton, California was the apparent low bidder with the amount of $1,664,790.90, and

WHEREAS, the contingency cost for the Tully Road Pavement Rehabilitation Project is estimated to be $166,479 (10% of the original contract price), an amount which exceeds the Director's authority for the project as enacted by Council Resolution No. 2019-326 on July 9, 2019.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to approve change orders up to the cumulative amount of $166,479 (10% of the original contract price).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-032

RESOLUTION AUTHORIZING SUBMITTAL OF A HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) GRANT APPLICATION TO SEEK FUNDS FOR THE DEVELOPMENT OF A LOCAL ROADS AND SAFETY PLAN (LRSP) AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL NECESSARY GRANT DOCUMENTS

WHEREAS, Federal regulations require each State to have a strategic Highway Safety Plan (SHSP), which is a state-wide traffic safety plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and all injuries on public roads, and

WHEREAS, the SHSP addresses the 4E's of Traffic Safety: Engineering, Enforcement, Education, Emergency Services, and

WHEREAS, the SHSP is part of a statewide approach to improve traffic safety, whereas a Local Road and Safety Plan (LRSP) provides local road owners, like the City of Modesto, with an opportunity to address unique roadway safety needs while contributing to the success of the SHSP, and

WHEREAS, the process of preparing an LRSP creates a framework to systemically identify and analyze safety problems and recommend safety improvements for local jurisdictions, and

WHEREAS, on October 8, 2019 Caltrans announced a call for LRSP grant applications, and a total of $10 million from the Highway Safety Improvement Program (HSIP) was set aside to assist local agencies in developing a safety plan, and

WHEREAS, agencies like the City of Modesto who have an active Systemic Safety Analysis Report project underway will be considered for funding after January 1, 2020, and

WHEREAS, the grant will allow for 90 percent funding, with a required 10 percent local match.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes submittal of a Highway Safety Improvement Program (HSIP) grant application to seek funds for the development of a Local Roads and Safety Plan (LRSP).

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute all necessary grant documents.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-033

RESOLUTION APPROVING THE FIRST AMENDMENT INCREASING THE AGREEMENT AMOUNT WITH THE CLOUDBURST CONSULTING GROUP INC. FOR CONTINUED CONSULTANT SERVICES RELATED TO THE DEVELOPMENT OF THE CITY'S 2020-2025 CONSOLIDATED PLAN AND ANNUAL ACTION PLAN BY $16,590 FROM $44,304 TO A NEW TOTAL AMOUNT OF $60,894, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, as a U.S. Department of Housing and Urban Development (HUD) entitlement community, the City is required to develop an Annual Action Plan that describes proposed activities funded with Community Development Block Grant (CDBG), Home Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funds, and

WHEREAS, to remain eligible as a HUD entitlement community, the City of Modesto must comply with Consolidated Planning requirements as required by Title 24 – Housing and Urban Development of the Code of Federal Regulations (24 CFR) Part 91 – Consolidated Submissions for Community Planning and Development Programs, and

WHEREAS, the Consolidated Plan, as required by 24 CFR Part 91, requires the City to prepare a five-year Consolidated Plan describing its plan to pursue the goals for the CDBG, HOME, and ESG programs, and

WHEREAS, the City is in its fifth year of the current 2015-2020 Consolidated Plan which is set to expire June 30, 2020, and

WHEREAS, The Community and Economic Development Department staff released an informal request for proposals on April 12, 2019 to six consultation firms that specialize in conducting the Consolidated Plan process, and the proposals period closed May 10, 2019, and

WHEREAS, Staff received 2 bids and the contract was awarded to Cloudburst Consulting Group (Cloudburst), because of their experience, expertise, and familiarity with the needs that are unique to the City of Modesto, and

WHEREAS, on July 1, 2019, the City entered into an agreement for consultant services with the Cloudburst Consulting Group, Inc. (Cloudburst) in the amount of $44,403 for the development of the City's 2020-2025 Consolidated Plan and Annual Action Plan with a contract completion deadline of June 2020, and

WHEREAS, as part of the development of the Consolidated Plan, the City is required to establish a Strategic Plan to address the needs and priorities identified, and

WHEREAS, the City would like to competitively select and establish five-year CDBG and HOME project lists with the resources anticipated to be received during the Consolidated Plan period, and

WHEREAS, conducting an RFP will require the current Cloudburst consultant contract to be amended and with Cloudburst's expertise to conduct the RFP process and establishing competitive project selection criteria needed to establish eligible CDBG and HOME project lists, and

WHEREAS, staff is proposing a First Amendment to the Cloudburst Consulting Group Inc. Agreement, increasing the agreement amount by $16,590 from $44,304 to a new total amount of $60,894 for services related to the development of the RFP and related tasks, and

WHEREAS, on January 9, 2020 the Citizens Housing and Community Development Committee reviewed, approved and forwarded the project proposal and funding recommendation to the City Council for review and approval.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto approving the First Amendment increasing the agreement amount with the Cloudburst Consulting Group Inc. for continued consultant services related to the development of the City's 2020-2025 Consolidated Plan and Annual Action Plan by $16,590 from $44,304 to a new total amount of $60,894.

BE IT FURTHER RESOLVED that the City Manager or his designee, is hereby authorized to execute the agreement in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-034

RESOLUTION APPROVING A WILL SERVE LETTER AND OUTSIDE SERVICE AGREEMENT BETWEEN THE CITY OF MODESTO AND THREE OWNERS, TO CONNECT TO THE CITY OF MODESTO'S EXISTING WATER SYSTEM FOR THE PROPERTY LOCATED AT 1806 LAS VEGAS STREET IN MODESTO (APN 056-024-052) AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE, TO APPROVE THE WILL SERVE LETTER AND EXECUTE THE OUTSIDE SERVICE AGREEMENT

WHEREAS, Arturo Herrera Cortes, a married man as his sole and separate property and Daiel Herrara Cortes, a single man and Dolores Cortes Arreola, a married man as his sole and separate property and Noe Cortes Duarte, a single man, as a tenant in common, own a property located at 1806 Las Vegas Street, and

WHEREAS, the owners are proposing to construct a single family house on the property, and

WHEREAS, the owners have requested water service, and

WHEREAS, on May 22, 2012, the City Council approved Resolution No. 2012-202 that amended City Council Policy 5.001, and

WHEREAS, on June 5, 2012, the City Council approved final adoption of Ordinance No. 3566-C.S. amending City of Modesto Municipal Code Section 11-1.05, and

WHEREAS, both of these amendments included language which required that the City Manager, upon the recommendation of the Director responsible for utility system planning, request City Council approval for all extensions of water services into unincorporated areas, and

WHEREAS, on November 25, 2014, the City Council approved Resolution No. 2014-472 that amended City Council Policy 5.001, and

WHEREAS, on December 9, 2014, the City Council approved adoption of Ordinance No. 3611-C.S. amending City of Modesto Municipal Code Section 11-1.05, and

WHEREAS, both of these amendments included language allowing the City Manager upon the recommendation of the Director responsible for utility system planning, to approve standard agreements of service for extension of water services into certain unincorporated areas that are located within the former Del Este Water Service Area without City Council approval, and

WHEREAS, the property located at 1806 Las Vegas Street is not located within the former Del Este Water Service area and therefore requires City Council approval prior to allowing the new water service connection, and

WHEREAS, it has been determined that a sufficient quantity of potable water is available for normal usage by the proposed development, and

WHEREAS, the water connection fees will be paid and associated permits be obtained prior to beginning any on site construction, and

WHEREAS, the property owners have executed an Outside Service Agreement for Water Service as required to receive water service outside of City limits.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Will Serve Letter and Outside Service Agreement for Water Service for the property located at 1806 Las Vegas Street in Modesto (APN: 056-024-052).

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to approve the Will Serve Letter and execute the Outside Service Agreement for Water Service.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-035

RESOLUTION APPROVING STAFF TO WORK IN PARTNERSHIP WITH EAH HOUSING TO SUBMIT A JOINT APPLICATION FOR AFFORDABLE HOUSING AND SUSTAINABLE COMMUNITIES (AHSC) PROGRAM FUNDS FOR THE CONSTRUCTION OF ARCHWAY COMMONS PHASE II AND RELATED TRANSPORTATION IMPROVEMENTS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ANY DOCUMENTS AND/OR AGREEMENTS WITH SUCH CHANGES AS DETERMINED BY THE CITY ATTORNEY

WHEREAS, Archway Commons is collaboration between the City of Modesto and EAH for 150-unit housing development for low-income families and seniors, and

WHEREAS, Phase I was completed in 2013 and the 76 units were fully leased and occupied immediately after completion, and

WHEREAS, Archway Commons Phase II proposes to acquire the site and develop 74 family affordable housing units; this is the final phase in a 150-unit combined, two phase project, and

WHEREAS, Phase II consists of nine, two-story wood framed buildings consistent with the Phase I design. As proposed, the anticipated Phase II unit mix includes (1) 1-BR/1-BA at 710 square feet, (52) 2-BR/1-BA each at 825 square feet, and (20) 3-BR/2-BA apartments each 1150 square feet, and

WHEREAS, the total project cost for Archway Commons Phase II is approximately $30.7 million including the proposed transportation and infrastructure improvements, and

WHEREAS, the project will require subsidy layering from multiple funding sources including but not limited to future HOME Investment Partnerships Program funds, Low Income Housing Tax Credits, Affordable Housing Program, City and County

Impact Fee Deferral and State of California Affordable Housing and Sustainable Communities (AHSC) Program, and

WHEREAS, the State of California, the Strategic Growth Council (SGC) and the Department of Housing and Community Development (Department) has issued a Notice of Funding Availability (NOFA), under the Affordable Housing and Sustainable Communities (AHSC) Program established under Division 44, Part 1 of the Public Resources Code commencing with Section 75200, and

WHEREAS, there is currently $550 million in funding for the AHSC Program. The AHSC Program furthers the purposes of AB 32 (Chapter 488, Statues of 2006) and SB 375 (Chapter 728, Statutes of 2008), and

WHEREAS, the purpose of the AHSC Program is to reduce greenhouse gas (GHG) emissions through projects implementing land-use, housing, transportation, and agricultural land preservation practices to support infill and compact development, and supporting related and coordinated public policy objectives, and

WHEREAS, the AHSC Program is part of California Climate Investments (CCI), a statewide program funded through the GGRF that puts billions of Cap-and-Trade dollars to work reducing GHG emissions, strengthening the economy, and improving public health and the environment – particularly in disadvantaged communities, and

WHEREAS, AHSC program guidelines require the application be submitted jointly by EAH, the project developer, and the City of Modesto because the City has a financial and real property interest in the proposed project, and

WHEREAS, EAH is requesting the City partner to submit a project application in an amount not to exceed $25million dollars, and

WHEREAS, of the total, up to $15 million dollars of the funding would assist Archway Commons Phase II, approximately 10 million dollars would be used for transportation related improvements tied to the project (e.g. bike lanes, transit bus turnouts, protected sidewalks, and improved connectivity), up to $500,000 in AHSC Program funds to support AHSC funded Transit Subsidy Programs and community outreach related to Active Transportation, and

WHEREAS, the City is eligible to receive project funding of approximately $10 million for proposals that fall within the designated project area, and

WHEREAS, proposals also include a realignment of the Modesto Area Express (MAX) Route 41, which will connect Archway Commons with the transit center to the south as well as MJC West and retail centers, in order increase ridership to area residents by improving accessibility, and

WHEREAS, one annual bus pass for a term of three years provided to each housing unit in the new development. Purchase of annual bus pass is considered an eligible program cost and is reimbursed directly to the city or transit agency. Revenue from the purchase of annual bus passes provided to residents of the new development will offset costs associated with expanded transit service, and

WHEREAS, to further reduce greenhouse gas emissions the AHSC application will also include a proposal to purchase an Altamont Corridor Express (ACE) rail car, and

WHEREAS, additional improvements around the development include: transit stops along 9th, lighted crosswalks with pedestrian islands that provide southbound access from Archway Commons to MAX and the proposed Class I bike path, greening along

bike and pedestrian paths, protected medians and median strip landscaping, and levelling and lighting improvements to area sidewalks, and

WHEREAS, this application will be the City and EAH's second attempt at applying for AHSC funds to the State of California. On November 1, 2018, EAH submitted an application for AHSC's Round 4 of funding, and

WHEREAS, in June 2019, the City received notification from the State of California that the Archway Commons Phase II AHSC application was not funded, and

WHEREAS, since then, EAH and City staff consulted with AHSC staff to strategize on preparing a more competitive application under Round 5 of funding which is being proposed through this item, and

WHEREAS, on December 12, 2019, the Citizens Housing and Community Development Committee (CH&CDC) reviewed, approved and forwarded the approval for staff to work in partnership with EAH to apply for Affordable Housing and Sustainable Communities (AHSC) Program Funds not to exceed $25 million dollars for Archway Commons Phase II.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves staff to work in partnership with EAH to submit a joint application for Affordable Housing and Sustainable Communities (AHSC) Program Funds in the amount not to exceed $25 million dollars for Archway Commons Phase II, transportation improvements and related program costs.

BE IT FURTHER RESOLVED; that the City Manager or his designee is hereby authorized to execute any documents and/or agreements with such changes as determined by the City Attorney related to the AHSC Grant.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES: Councilmembers: Ah You, Kenoyer, Madrigal, Ridenour,

NOES: Councilmembers: Grewal, Mayor Brandvold

ABSENT: Councilmembers: Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-036

RESOLUTION APPROVING AN AGREEMENT WITH DR. ROBERT DONOVAN FOR COMPREHENSIVE MEDICAL OVERSIGHT (DIRECT AND INDIRECT) FOR CLINICAL SERVICES DELIVERED BY MODESTO FIRE DEPARTMENT'S (MFD'S) PERSONNEL, FOR A THREE (3) YEAR AGREEMENT WITH A TWO (2) YEAR EXTENSION OPTION, FOR AN ANNUAL COST NOT TO EXCEED $24,000 AND A TOTAL COST NOT TO EXCEED $120,000, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, Dr. Donovan has provided services to the Modesto Fire Department (MFD), through American Medical Response (AMR) for approximately 15 years at no cost to MFD; and

WHEREAS, AMR has been awarded a new ambulance provider agreement, which now requires MFD to have its own medical director; and

WHEREAS, effective January 1, 2020, MFD will need to pay Dr. Donovan directly for his services; and

WHEREAS, the cost of services is covered by additional revenue generated from an agreement which compensates MFD for its EMS responses; and

WHEREAS, the term of the agreement is for three years, effective January 1, 2020, with a two-year extension option; and

WHEREAS, the total estimated cost for this agreement is $120,000 and will be paid from the General Fund Fire Department budget; and

WHEREAS, the agreement is for professional services and is, therefore, exempt from the bidding requirement, in accordance with Modesto Municipal Code Sec. 8-3.204(a).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Council hereby approves the agreement with Dr. Robert Donovan for comprehensive medical oversight (direct and indirect) for clinical services delivered by Modesto Fire Department's (MFD's) personnel, for a three (3) year agreement with a two (2) year extension option, for an annual cost not to exceed $24,000 and a total cost not to exceed $120,000.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-037

RESOLUTION APPROVING AN AGREEMENT WITH FLOWWEST, LLC OF OAKLAND, CA FOR THE PREPARATION OF CONSTRUCTION DOCUMENTATION (DESIGN) FOR THE TRRP GATEWAY RIVER OVERLOOK IN THE AMOUNT OF $123,460, PLUS $12,346 FOR CONTINGENCY, IF NEEDED, FOR A TOTAL NOT TO EXCEED $135,806 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, in 1972 the City of Modesto, the City of Ceres and Stanislaus County formed a Joint Powers Authority (JPA) commission to build and operate the Tuolumne River Regional Park (TRRP), and

WHEREAS, the JPA purchased land parcels along the Tuolumne River to eventually develop the Tuolumne River Regional Park, and

WHEREAS, the park includes approximately 500 acres, is mostly on the north side of the river, and extends from Mitchell Road and the city airport on the east, to just beyond Carpenter Road on the west, and

WHEREAS, on June 5, 2018, by Resolution 2018-192 and 2018-193 Council accepted $500,000 in grant funds from the California River Parkways Grant Program (Proposition 13) and allocated the funding for the project to the 2017-18 Capital Improvement Program in the amount of $849,960 which included $349,940 in Federal High Priority Demonstration Funds, and

WHEREAS, the conceptual design for the TRRP Gateway River Overlook project includes an approximately 330’ in length and 10’-15’ wide elevated boardwalk, along the Class I multi-use trail system within the Tuolumne River Regional Park’s (TRRP) Gateway Parcel between the 9th Street Bridge and Dry Creek, and

WHEREAS, in accordance with Administrative Directive 3.1, "Selection Procedures for Professional Consultants Who Provide Engineering for Capital Projects," staff initiated a Request for Qualifications and Proposals (RFQ/P) to perform Engineering/Design Services, and

WHEREAS, on May 21, 2019 the City's Parks Planning and Development Division issued a Request for Proposals (RFP) # 1819-65 for Construction Documentation for the TRRP Gateway River Overlook, and

WHEREAS, on June 19, 2019, staff received only one consultant proposal from FlowWest, LLC of Oakland, CA determined to be a qualified consultant, who after contract negotiations provided a proposal in the amount of $123,460 which was 1.2% higher than the City's estimated contract amount, and

WHEREAS, based on the results of the RFQ/RFP, staff recommends the council approve an agreement with FlowWest, LLC of Oakland, CA to complete the Construction Documentation for the TRRP Gateway River Overlook in the amount of $123,460, and

WHEREAS, in addition, staff recommends Council approve a 10% contingency in the amount of $12,346 to allow for change orders due to unforeseen conditions, delays or expenses for an agreement total not to exceed $135,806, and

WHEREAS, this contingency budget does not commit the city to spend the additional funding, but allows the Department Director to approve change orders up to the contingency limit, without further council action, and

WHEREAS, in accordance with Modesto Municipal Code Sec. 8-3.204(a), Exceptions to Formal Bidding Requirements, the agreement is for professional services

and, therefore, exempt from the bidding requirement and the approval of the agreement for construction documentation for the TRRP Gateway River Overlook to FlowWest, LLC conforms to Modesto Municipal Code 8-3.204, subsection (a) as they are providing professional engineering services.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves an agreement with FlowWest, LLC, of Oakland, CA for the preparation of Construction Documentation (Design) for the TRRP Gateway River Overlook in the amount of $123,460, plus $12,346 for contingency, if needed, for a total not to exceed $135,806.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-038

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROGRAM BUDGET FOR PROJECT 101109 – TRRP RIVER OVERLOOK AS OUTLINED IN EXHIBIT A AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, certain budgetary transactions are necessary in order to fully fund the Tuolumne River Regional Park (TRRP) Gateway River Overlook project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget for Project 101109 – TRRP River Overlook must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget for Project 101109 – TRRP River Overlook as shown in **Exhibit A, attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

Attachment A

Budget Adjustment for Capital Project 101109 (TRRP River Overlook)

Fund 6710 – TRRP Special Revenue Fund - CIP:

Expense:	**Current Budget**	**Increase/ (Decrease)**	**Final Budget**
6710-89999-101109 – Eng/Design/Admin	$120,000	$ 65,806	$185,806
6710-89999-101109 – Construction	$627,540	($ 74,095)	$553,445
6710-89999-101109 – Construction Admin	$45,000	$ 10,344	$ 55,344
6710-89999-101109 – Contingency-CIP	$57,400	($ 2,055)	$ 55,345
		Total Expenses:	**$849,940**

Revenue	**Source**	**Current Budget**	**Increase/ (Decrease)**	**Final Budget**
6710-89999-42201-101109	Intergov – State Natural Resources Agency	$500,000	$0	$500,000
6710-89999-42015-101109	Intergov - Federal Highway Admin. (DOT)	$349,900	$0	$349,940
		Total Revenues:		**$849,940**

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-039

RESOLUTION APPROVING THE MODESTO TOURISM MARKETING DISTRICT OWNERS' ASSOCIATION AGREEMENT AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT, AND RESCINDING RESOLUTION NO. 2019-449

WHEREAS, in accordance with Property Business Improvement District Law of 1994, and by Resolution No. 2019-311, Council created the Modesto Tourism Marketing District (MTMD), and

WHEREAS, the Modesto Convention and Visitor's Bureau (CVB) was designated as the Owners' Association, and

WHEREAS, Streets and Highways Code Section 36651 requires the City to contract with the Owners' Association for the provision of MTMD services, and

WHEREAS, the agreement term shall be the last date signed by all Parties and end on June 30, 2024, or if the MTMD is disestablished prior to June 30, 2024, the effective date of the MTMD disestablishment, and

WHEREAS, the CVB will provide marketing and promotional programs intended to increase hotel room night sales at all hotels paying the MTMD assessment as set for in the MTMD Management District Plan, and

WHEREAS, the City shall pass through to the CVB on or before the 15th day of the month following the reporting period in which the MTMD assessment funds are received by the City a total of 99.25% of the MTMD assessment funds collected, and

WHEREAS, the City shall retain the remaining 0.75% for collection and administration costs as detailed in the MTMD Management District Plan, and

WHEREAS, on October 1, 2019, by Resolution No. 2019-449, Council approved the Owners' Association Agreement, and

WHEREAS, due to an administrative error, approval of the Owners' Association Agreement must be reconsidered and Resolution No. 2019-449 rescinded.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Modesto Tourism Marketing District Owners' Association Agreement and rescinds Resolution No. 2019-449.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is authorized to execute the agreement in form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Grewal, Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-040

RESOLUTION APPROVING THE SUBMITTAL OF AN APPLICATION FOR THE 2021 OFFICE OF TRAFFIC SAFETY SELECTIVE TRAFFIC ENFORCEMENT PROGRAM (STEP) GRANT IN THE AMOUNT OF $1,200,000, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE NECESSARY DOCUMENTS

WHEREAS, the City of Modesto Police Department desires to undertake a certain project designated as the Selective Traffic Enforcement Program (STEP) grant from the Office of Traffic Safety (OTS), and

WHEREAS, the Police Department is seeking approval to apply for a grant in the amount of $1,200,000 from OTS, and

WHEREAS, the grant will increase enforcement for speed, DUI, and other special traffic enforcement operations, while also reducing collisions with speed, DUI, and special operations, and

WHEREAS, OTS will pay overtime for officers, training, and equipment to assist in traffic studies and other traffic related enforcement equipment, and

WHEREAS, the term of this grant will be from October 1, 2020, through September 30, 2021,

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the submittal of an application for the 2021 Office of Traffic Safety Selective Traffic Enforcement Program (STEP) Grant in the amount of $1,200,000.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the necessary application documents.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-041

RESOLUTION APPROVING THE SUBMITTAL OF AN APPLICATION FOR THE 2021 OFFICE OF TRAFFIC SAFETY PEDESTRIAN AND BICYCLE SAFETY PROGRAM GRANT IN THE AMOUNT OF $200,000 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE NECESSARY DOCUMENTS

WHEREAS, the City of Modesto Police Department desires to undertake a certain project designated as the Pedestrian and Bicycle Safety Program grant from the Office of Traffic Safety (OTS), and

WHEREAS, the Police Department is seeking approval to apply for a grant in the sum of $200,000 from OTS, and

WHEREAS, the grant reduces the number of collisions and also reduce the number of persons injured or killed in the City of Modesto through education and media attention, and

WHEREAS, OTS will pay overtime for Community Service Officers educating citizens and children in classrooms, at bicycle rodeos and community event and fund educational materials for children and adult and pedestrian and bicycle safety equipment, and

WHEREAS, the term of this grant will be from October 1, 2020, through September 30, 2021,

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the submittal of an application for the 2021 Office of Traffic Safety Pedestrian and Bicycle Safety Program Grant in the amount of $200,000.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the necessary application documents.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-042

RESOLUTION APPROVING THE SUBMISSION OF A GRANT APPLICATION FOR THE VOLKSWAGEN MITIGATION TRUST PROGRAM IN THE AMOUNT OF $180,000 TO PURCHASE ONE BATTERY ELECTRIC TRANSIT BUS AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL NECESSARY GRANT DOCUMENTS

WHEREAS, the Volkswagen (VW) Environmental Mitigation Trust (Trust) provides about $423 million for California to mitigate the excess nitrogen oxide (NOX) emissions caused by VW's use of illegal emissions testing devices in certain VW diesel vehicles, and

WHEREAS, the Zero-Emission Transit, School, and Shuttle Bus category has $130 million in funds to replace older, high-polluting transit, school, and shuttle buses with new battery-electric or fuel-cell buses, and

WHEREAS, replacing an older bus with a zero-emission bus eliminates particulate matter and other pollutants that impact children and residents riding the buses, as well as residents throughout California communities, and

WHEREAS, purchasing and deploying battery-electric buses in Modesto will significantly improve the air quality in the city, and

WHEREAS, this project will comply with the California Air Resources Board (CARB) Innovative Clean Transit Regulation, and

WHEREAS, Modesto is applying for $180,000 in the VM Mitigation Trust funds to provide partial funds for the purchase of one battery electric bus.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the submission of a grant application for the Volkswagen Mitigation Trust program in the amount of $180,000 to purchase one battery electric

transit bus, and authorizes the City Manager, or his designee, to execute all necessary grant documents.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-043

RESOLUTION APPROVING THE AWARD OF REQUEST FOR PROPOSAL AND PURCHASE OF THREE COMMUTER MOTOR COACHES TO MOTOR COACH INDUSTRIES, INC., DES PLAINES, IL., FOR A TOTAL AMOUNT NOT TO EXCEED $1,897,506, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO ISSUE THE PURCHASE ORDER

WHEREAS, the City owns 61 fixed route Modesto Area Express (MAX) buses which provide fixed route service to the community, and

WHEREAS, on September 25, 2019 by Resolution 2018-413, Council approved the Transit Asset Management (TAM) plan for the City which authorized the bus replacement schedule according to a specific set of criteria, and

WHEREAS, two buses are ready for replacement and a third will be needed in the near future, and

WHEREAS, on September 4, 2019, the City released Request for Proposal (RFP) 1819-02 for the Purchase of three Commuter Motor Coaches, and

WHEREAS, on October 29, 2019, the City received a single proposal from Motor Coach Industries (MCI), Inc. of Des Plaines, IL, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases which meet or exceed $50,000 for material, equipment or contractual services to be formally proposed. Based on meeting the technical specifications of the RFP, City staff recommends the award of proposal for the purchase of commuter motor coaches to Motor Coach Industries, Inc., Des Plaines, IL. for a total amount of $1,897,506, which conforms to the Modesto Municipal Code, 8-3.203.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the award of Request for Proposal and purchase of three

commuter motor coaches to Motor Coach Industries, Inc., Des Plaines, IL., for a total amount not to exceed $1,897,506.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, is authorized to issue the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ADAM U. LINDGREN, ~~City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-044

RESOLUTION AMENDING FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET FOR FUND 4560 – BUS FIXED ROUTE – BUS PURCHASES IN THE AMOUNT OF $1,229,034 TO FUND THE PURCHASE OF TWO MODESTO AREA EXPRESS BUSES, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE CHANGES

WHEREAS, certain budgetary transactions are necessary in the amount of $1,229,034 in order to fund the purchase two Modesto Area Express (MAX) buses, and

WHEREAS, the total cost for two buses is estimated at $1,229,034, and

WHEREAS, on January 22, 2019 by Resolution No. 2019-17 Council approved a Federal Transit Administration (FTA) grant in the amount of $1,014,188, and

WHEREAS, Local Transportation Funds (LTF) in the amount of $214,846 will be used to fund the purchase of the two buses.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget as shown in **Exhibit A, attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

Exhibit A

		Budget Adjustment
Fund 4560 - Bus Fixed Route - Bus Purchases		
Revenues		
Intergov - FTA	increase	1,014,188
Intertov- State - LTF	increase	214,846
Expenditures		
Vehicles > $5,000	increase	1,229,034

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-045

RESOLUTION ACCEPTING THE GRANT AWARD FROM THE FEDERAL TRANSIT ADMINISTRATION (FTA) FOR CONGESTION MITIGATION & AIR QUALITY PROGRAM FUNDS IN THE AMOUNT OF $1,200,000 TO PURCHASE TWO 40-FOOT CLEAN DIESEL BUSES FOR MODESTO AREA EXPRESS (MAX) AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE AND FILE THE ANNUAL CERTIFICATIONS AND ASSURANCES, AND OTHER NECESSARY DOCUMENTS WITH THE FTA

WHEREAS, the Federal Transit Administration (FTA) has been delegated authority to award federal financial assistance for transportation related projects, and

WHEREAS, Modesto submitted a Congestion Mitigation and Air Quality (CMAQ) program grant application to the Stanislaus Council of Governments (StanCOG) on October 5, 2016 to purchase two 40-foot diesel buses for fixed route transit service, and

WHEREAS, as required by the FTA, Modesto submitted a CMAQ transfer request to the California Department of Transportation (Caltrans) to transfer funds from the Federal Highway Administration (FHWA) to the FTA, and

WHEREAS, on October 2, 2018, by Resolution 2018-429, Council authorized the filing of Federal grant applications with the FTA, and

WHEREAS, the CMAQ program funding is an important part of Modesto's Transit Capital Improvement Plan and Transit Asset Management (TAM) Plan, and

WHEREAS, on September 25, 2018, by Resolution 2018-413, the TAM Plan was approved by Council, and

WHEREAS, this grant award from the FTA for CMAQ Program funds in the amount of $1,200,000 is to purchase two 40-foot clean diesel buses for Modesto Area Express (MAX).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the grant award of $1,200,000 in FTA Section 5307 funds.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute and file the annual certifications and assurances and other documents the FTA requires for awarding a federal assistance grant.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-046

RESOLUTION APPROVING THE UPDATED TRANSIT ASSET MANAGEMENT PLAN AS REQUIRED BY THE FEDERAL TRANSIT ADMINISTRATION, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PLAN

WHEREAS, according to the Federal Transit Administration (FTA), transit asset management is a set of strategic and systemic processes and practices for managing performance, risks, and costs of transit assets across the entirety of their lifecycle in order to deliver service reliably, safely, and cost effectively, and

WHEREAS, the Transit Asset Management (TAM) plan is a business model that prioritizes funding based on the condition of transit assets, and

WHEREAS, in July 2016, the FTA issued a final rule requiring transit agencies to maintain, document and report minimum TAM standards, and

WHEREAS, federal law requires recipients and sub-recipients of federal dollars to develop a TAM plan, which was completed by the City in 2018, and

WHEREAS, the FTA requires an annual update to the TAM plan.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the updated Transit Asset Management Plan.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to implement the plan.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-047

RESOLUTION ACCEPTING THE BUS TURNOUT S.R. 132/MAZE BOULEVARD PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $71,000 TO UNITED PAVEMENT MAINTENANCE OF HUGHSON, CA

WHEREAS, the Bus Turnout State Route (S.R.) 132/Maze Boulevard Project installed a new bus turnout by Franklin Elementary School to relocate an existing stop that was situated near the Modesto Irrigation District (MID) canal, and

WHEREAS, this turnout also provides American Disabilities Act (ADA) upgrades to a heavily used bus stop on Modesto Area Express (MAX) Route 26, as well as a platform for passengers to board and exit the bus, and

WHEREAS, bids were advertised on March 12, 2019, and

WHEREAS, bids were publicly opened on April 9, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and United Pavement Maintenance, Inc. of Hughson, CA, was the apparent lowest responsible and responsive bidder, and

WHEREAS, on May 7, 2019, by Resolution No. 2019-219, Council awarded a contract to United Pavement Maintenance, Inc., Hughson, CA for the construction of the Bus Turnout S.R. 132/Maze Boulevard Project in the amount of $74,000, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of July 1, 2019, and all contract work was completed by August 5, 2019, and

WHEREAS, the total project costs were $107,602 which included all construction, design, and construction administration costs. The total project amount originally

budgeted was $110,720 which included $81,400 for the construction contract and contingency with United Pavement Maintenance, Inc., and

WHEREAS, there was one change order resulting in an overall decrease of $3,000 for change order work, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Bus Turnout S.R. 132/Maze Boulevard Project is hereby accepted as complete from contractor United Pavement Maintenance, Inc., of Hughson, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $71,000, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-048

RESOLUTION ACCEPTING THE BUS TURNOUT IMPROVEMENTS SOUTHBOUND DALE ROAD SOUTH OF VENEMAN AVENUE PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $307,563 TO GEORGE REED, INC. OF MODESTO, CALIFORNIA

WHEREAS, in February 2012, the City applied for Congestion Mitigation and Air Quality (CMAQ) funds to provide a bus stop location on the west side of Dale Road, south of Veneman Avenue, where a bus can stop and not block southbound traffic flow, and

WHEREAS, this project is intended to reconstruct the existing bus stop in a location further to the west thus reducing the amount of congestion on southbound Dale Road, and

WHEREAS, on December 11, 2012, by Resolution No. 2012-509, Council accepted Congestion Mitigation and Air Quality (CMAQ) funds in the amount of $85,000 for Preliminary Engineering, and

WHEREAS, on January 6, 2015, by Resolution No. 2015-08, Council accepted Congestion Mitigation and Air Quality (CMAQ) funds in the amount of $101,810 and by Resolution No. 2015-07 Council amended the Fiscal Year 2014/15 Capital Improvement Program (CIP) budget in the amount of $115,000 for the Right of Way (ROW) and Utility Relocation (UE) phases of this project ($101,810 CMAQ and $13,190 Local), and

WHEREAS, on March 20, 2015, the Stanislaus Council of Governments (StanCOG) notified local agencies, including the City, that additional Regional Surface Transportation Program (RSTP) funds had become available, and

WHEREAS, on December 8, 2015, by Resolution No. 2015-467, Council accepted Regional Surface, and

WHEREAS, Transportation Program (RSTP) funds in the amount of $72,674 and by Resolution No. 2015-466, Council amended the Fiscal Year 2015-2016 Capital Improvement Program (CIP) budget in the amount of $82,090 ($72,674 RSTP and $9,416 Local). $67,090 was added to the ROW phase to allow for the purchase of property and $15,000 was added to the PE phase to account for redesign work required to meet new watering restrictions in commercial areas, and

WHEREAS, on December 8, 2015, during Closed Session, staff received authorization to negotiate the purchase of the property required for the project, and

WHEREAS, on April 26, 2016, by Resolution 2016-169, Council approved a Purchase and Sale Agreement with MS Portfolio, LLC for partial acquisition of a 2,424 square foot portion of real property, located at 3401 Dale Road, in the amount of $86,200, and

WHEREAS, on September 13, 2016, by Resolution No. 2016-348, Council amended the Fiscal Year 2016-2017 Annual Operating and Capital Improvement Budgets by $210,000 for this project (185,913 CMAQ and $24,087 Local) for the Construction phase, and

WHEREAS, on September 5, 2017, by Resolution No. 2017-338, Council amended the Fiscal Year 2017-2018 Annual Operating and Capital Improvement Budget by adding Transportation Development Act (TDA) funds in the amount of $345,000 to cover the increase in project construction costs from the time this project originally

received grant funds for design in 2012 until the time grant funds were available for construction, and

WHEREAS, on June 12, 2018, by Resolution No. 2018-217, Council amended the Fiscal Year 2017-2018 Annual Operating and Capital Improvement Fund Budgets by $75,000 for this project ($75,000 RSTP). $63,704 was added to the Construction phase to align with estimated costs and $11,296 was added to the PE phase, and

WHEREAS, bids were advertised on September 25, 2018, and

WHEREAS, bids were publicly opened on October 23, 2018, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and George Reed, Inc., Modesto, CA was the apparent low bidder, and

WHEREAS, on November 13, 2018, by Resolution No. 2018-500, Council awarded a contract to George Reed, Inc., Modesto, CA for the construction of the Bus Turnout Improvements Southbound Dale Road South of Veneman Avenue Project in the amount of $309,563, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of February 11, 2019 and all contract work was completed by May 10, 2019, and

WHEREAS, the total project costs were $657,193 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $912,090 which included $340,242 for the construction contract and contingency with George Reed, Inc., and

WHEREAS, there were 4 change orders resulting in an overall decrease of $1,748 for change order work, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Bus Turnout Improvements Southbound Dale Road South of Veneman Avenue Project is hereby accepted as complete from contractor George Reed, Inc., of Modesto, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $307,563, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-049

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE DESTRUCTION OF WELLS 2017 PROJECT, ACCEPTING THE BID, AND APPROVING A CONSTRUCTION CONTRACT TO ABUNDANT WATER WELLS INC, LEONA VALLEY, CA, IN THE AMOUNT OF $857,050 PLUS $128,558 FOR CONTINGENCY (IF NEEDED) FOR A TOTAL AMOUNT NOT TO EXCEED $985,608 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the Destruction of Wells 2017 Project supports the City of Modesto's Strategic Plan Initiatives: Provide safe, efficient, and reliable infrastructure through proactive community investment, maintenance and sustainability efforts, and

WHEREAS, City water production wells are taken out of service when they do not meet federal and state water quality standards. Wells No. 2, 14, 17, 18, 22, 37, 53, 100, 204, 278, 299, 306, 307 and 310 were taken out of service due to reported levels of various contaminants, including uranium, nitrates and arsenic, and

WHEREAS, this project will destroy the below-ground well and selectively remove existing facilities to enable future land uses, or future well replacement, and

WHEREAS, specifications have been prepared for the Destruction of Wells 2017 Project, and

WHEREAS, on October 29, 2019 staff received bids from four companies that were responsible and responsive, including a bid from Abundant Water Wells Inc., and

WHEREAS, MMC 8-3.203 states that all purchases, in excess of fifty thousand dollars ($50,000), or when directed by the City Manager for any purchase of fifty thousand dollars ($50,000) or less, shall follow formal bid procedures, and

WHEREAS, and the award of bid for the Destruction of Wells 2017 Project conforms to the Modesto Municipal code based on providing the overall lowest cost, while providing improved service, and

WHEREAS, the Director of Utilities has recommended that the bid of $857,050 received from Abundant Water Wells be accepted as the lowest responsible and responsive bid and the contract be awarded to Abundant Water Wells Inc.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the plans and specifications for Destruction of Water Wells 2017 Project and accepts the bid of $857,050 plus $128,558 for contingency (if needed) for a total amount not to exceed of $985,608 and Awards Abundant Water Wells Inc., of Leona Valley, CA, the contract for the Destruction of Water Wells 2017 Project.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-050

RESOLUTION AUTHORIZING AN INCREASE IN THE DIRECTOR'S AUTHORITY TO ISSUE CHANGE ORDERS FOR THE DESTRUCTION OF WELLS 2017 PROJECT FROM 10% ($85,705) TO 15% ($128,558) OF THE CONSTRUCTION CONTRACT PRICE OF $857,050 WITH ABUNDANT WATER WELLS INC., LEONA VALLEY, CA

WHEREAS, the City's "Change Order Approval Policy", enacted by Council Resolution No. 94-443 on July 19, 1994, and updated by Resolution No. 2019-326 on July 9, 2019, established a contract change order budget of 10% for projects less than $1 Million, and

WHEREAS, given the nature of well destruction, additional work may be needed to address unexpected conditions that require changes in project scope, and

WHEREAS, staff is requesting authorization to increase the contract change order authority to 15% ($128,558) to account for unexpected conditions.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to issue change orders for the Destruction of Wells 2017 Project from 10 percent ($85,705) to 15 percent ($128,558) of the construction contract price of $857,050 with Abundant Water Wells Inc., Leona Valley, CA.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-051

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET IN THE AMOUNT OF $211,440 TO BE TRANSFERRED INTO THE PROJECT FROM WATER RESERVES TO FULLY FUND THE CONSTRUCTION, CONTINGENCY, CONSTRUCTION ADMINISTRATION AND DESIGN SUPPORT DURING CONSTRUCTION FOR THE DESTRUCTION OF WELLS 2017 PROJECT

WHEREAS, certain budgetary transactions are necessary in the amount of $211,440, in order to fund to fully fund the construction, contingency, construction administration and design support during construction for the Destruction of Wells 2017 Project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget in the amount of $211,440 to be transferred into the project from Water Reserves.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-052

RESOLUTION ADOPTING THE 2019 STANISLAUS MULTI-AGENCY REGIONAL STORM WATER RESOURCE PLAN

WHEREAS, on September 25, 2014, Governor Brown approved SB 985, requiring public agencies to develop a Storm Water Resource Plan (SWRP) in order to receive future grants from voter-approved bond funds for storm water runoff capture type projects after January 2014, and

WHEREAS, the intent of SB 985 is to encourage the use of storm water and dry weather runoff as a resource to improve water quality, reduce localized flooding, and increase water supplies, and

WHEREAS, the City of Modesto in collaboration with Stanislaus County, City of Patterson, City of Oakdale and Eastside Water District developed the 2019 Stanislaus Multi-Agency Regional SWRP, to be eligible for the Prop 1 Round 2 Implementation funding cycle in 2020, which will provide a total of $90 million in construction funds throughout the State, and

WHEREAS, in February 2018, by Resolution No. 2018-90, the Council approved the Stanislaus Multi-Agency Regional SWRP Memorandum of Understanding for local match commitments associated with the grant to create the Stanislaus Multi Agency Regional SWRP, and

WHEREAS, Stanislaus County, as the lead agency, was successful in obtaining a Proposition 1 Planning Grant in the amount of $499,840 to develop the SWRP, and

WHEREAS, on April 17, 2018, by Stanislaus County Resolution No. 2018-0163, Stanislaus County approved an Agreement with Woodard and Curran to develop the 2019 SWRP, and

WHEREAS, the SWRP was competed in August of 2019 and a Letter of Concurrence is expected from the SWRCB, and

WHEREAS, adoption of the SWRP positions the City to apply for grants that will fund storm water resource projects.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby adopts the 2019 Stanislaus Multi-Agency Regional Storm Water Resource Plan.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-053

RESOLUTION APPROVING THE SECOND AMENDMENT INCREASING THE AGREEMENT AMOUNT WITH DC FROST ASSOCIATES, WALNUT CREEK, CA, FOR THE PROCURMENT OF UV LAMPS BY $36,159 FROM $213,841 TO $250,000 FOR THE BALANCE OF THE TWO YEARS REMAINING ON THE AGREEMENT, FOR A NEW TOTAL AGREEMENT AMOUNT NOT TO EXCEED $1,141,523 AND AUTHORIZING THE PURCHASING MANAGER OR HER DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, the Wastewater Services Division treats a majority of its wastewater to tertiary levels and the final phase of the tertiary treatment process is the disinfection of the wastewater by UV lamps, and

WHEREAS, there are currently 970 lamps and these lamps have a lifetime of 10,000 hours each, and

WHEREAS, on December 6, 2016, by Resolution No. 2016-483, Council authorized the purchase of UV lamps as a sole source from DC Frost for five years at a total cost of $521,382, and

WHEREAS, on August 8, 2017, by Resolution No. 2017-325, Council authorized an increase of $547,823 over five year period to include parts for the Phase 2 Tertiary Treatment Plant for a total agreement amount of $1,069,205, and

WHEREAS, during the first year of operation of the Trojan UV System, the cost of the UV Lamps was over $100,000 of the estimated expenses, and

WHEREAS, higher costs were due to the startup of the UV system, program adjustments and unforeseen increased run-time hours, and

WHEREAS, during operation of the UV System, staff noticed that the programing triggers the UV system to bring on another channel of lamps on-line, which increases lamp hours, and

WHEREAS, staff also discovered that the dust from the surrounding agriculture areas contributes to increased need for added channels to be placed into service, resulting in additional lamp hours, which were not accounted for in the initial cost estimate for the agreement, and

WHEREAS, during the first lamp change, it was discovered that about 25% of the lamp protection covers broke during the lamp changes, and

WHEREAS, staff contacted the manufacture and found this to be consistent with other systems and is within the acceptable limits of repairs and parts needed; these replacements have added also costs to the operation and maintenance of the system, and

WHEREAS, below is a listing of the annual replacement parts and costs needed for the operation of the Tertiary Treatment Plant.

Annual Replacement Parts and Costs

Description	Quantity	Cost	Annual Costs
UV Bulbs	700	$265	$185,500
Wiper Canisters	208	$60	$12,480
Acticlean	8	$162	$1,296
Ballasts	32	$740	$23,680
Quartz Sleeves	20	$100	$2,000
UVI Sensor	2	$1,944	$3,888
Wiper Cylinder	2	$5,146	$10,292
Misc Parts			$10,864
			$250,000

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the second amendment to the purchasing agreement for the procurement of UV lamps and the sole source agreement with DC Frost Associates, Walnut Creek, CA, to increase the annual costs from $213,841 to $250,000 for the balance of the two years remaining on the agreement; for a new total agreement amount not to exceed $1,141,523.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, is hereby authorized to execute the amendment.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
For: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-054

RESOLUTION CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF MODESTO WASTEWATER MASTER PLAN (SCH # 2016062033) IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; ALONG WITH MAKING CERTAIN FINDINGS REGARDING SIGNIFICANT IMPACTS, FINDINGS SUPPORTING REJECTION OF ALTERNATIVES, ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM; ALL IN CONNECTION WITH APPROVAL OF THE PROJECT CONTEMPLATED BY THE FINAL ENVIRONMENTAL IMPACT REPORT

WHEREAS, the City's Utilities Department ("City") on February 28, 2017, published a Notice of Preparation for the City of Modesto Wastewater Master Plan (Project), which identified potentially significant environmental impacts attributable to the improvements included in the proposed project, on which the City determined that an Environmental Impact Report ("EIR") was required, and

WHEREAS, the City published and distributed a Draft EIR dated June 2019 for the City of Modesto Wastewater Master Plan (SCH # 2016062033) for public comment on June 12, 2019, in accordance with Section 15168 of the California Environmental Quality Act ("CEQA Guidelines"), and

WHEREAS, the Draft EIR was available for public comment for a period of 45 days as required by Section 21091 of CEQA, the close of the public comment period being July 27, 2019, and

WHEREAS, during the 45-day public comment period the City received five letters commenting on the Draft EIR, and

WHEREAS, the City prepared written responses to all written comments received on the Draft EIR, said responses being contained in a Final EIR for the City of Modesto

Wastewater Master Plan prepared pursuant to Section 15089 of the CEQA Guidelines, and

WHEREAS, the Final EIR was prepared October 2019, and consists of the Draft EIR, a list of commenters, copies of written comments received, and responses to those comments that raise environmental issues, revisions to the text of the Draft EIR, as required by Section 15132 of the CEQA Guidelines, and

WHEREAS, CEQA requires that, in connection with the approval of a project for which an EIR has been prepared which identifies one or more significant environmental effects the lead agency make certain findings regarding those effects, and

WHEREAS, the City Council has received and considered the Final EIR that analyzed the potential environmental effects of the proposed Project.

NOW, THEREFORE BE IT RESOLVED by the City Council that it hereby has reviewed and analyzed the Final EIR and other information in the record, and has taken such other actions as are necessary and appropriate to make the following findings in respect to the Final EIR, and makes said findings:

1. That the Final EIR has been completed in compliance with CEQA; that the City Council has reviewed and analyzed the Final EIR and other information in the record and has considered the information contained therein, including the written and oral comments received at the public hearings on the Final EIR and the Project, prior to acting upon or approving the Project; and that the Final EIR represents the independent judgment of the City of Modesto; and

2. That the Findings and recommendations set forth in **Exhibit A**, and incorporated herein by reference, are made by the City Council as the City's findings under the California Environmental Quality Act ("CEQA") (Pub. Resources Code § 21000 *et seq.*) and the CEQA Guidelines (Cal. Code Regs., title 14 § 15000 *et seq.*) relating to the Project. The Findings provide the written analysis and conclusions of the City Council regarding the Project's environmental impacts and mitigation measures to the Project; and

3. That pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15093, the City Council of Modesto adopts and makes the following statement of overriding considerations regarding the remaining unavoidable impacts of the Project and the anticipated economic, social and other benefits of the Project.

a. Significant Unavoidable Impacts

With respect to the foregoing findings, as set forth in **Exhibit A**, and in recognition of those facts which are included in the record, the City has determined the following:

i. that the Project will contribute to significant and unavoidable impacts to Agricultural Resources, Air Quality, Greenhouse Gas Emissions, and Noise.

ii. that the Project will contribute to significant and unavoidable cumulative impacts to Air Quality, Agriculture, Green House Gas Emissions, and Noise as described in **Exhibit B**.

These impacts cannot be avoided or substantially reduced by feasible changes or alterations to the Project, other than the changes or alterations already adopted.

b. Overriding Considerations

The City Council specifically adopts and makes this Statement of Overriding Considerations that this Project includes all feasible measures that would eliminate or substantially lessen the significant impacts of the Project on the environment, and that the remaining significant, unavoidable impacts of the Project are acceptable in light of the environmental, economic, social, and other considerations set forth herein because the benefits of the Project outweigh the significant and adverse impacts of the Project. The City Council finds that each of the overriding considerations set forth below, and each of the overriding considerations set forth in **Exhibit B**, constitutes a separate and independent ground for finding that the benefits of the Project outweigh its significant adverse environmental impacts and sets forth an overriding consideration warranting approval of the Project. These matters are supported by evidence in the record.

c. Benefits of the Proposed Project

The City Council has considered the Final EIR, the public record of proceedings on the proposed Project and other written materials presented to the City as well as oral and written testimony at all public hearings related to the Project, and does hereby determine that implementation of the Project as

specifically provided in the Project documents would result in the substantial public benefits set forth below and in **Exhibit B**. The Proposed Program will:

i. Update and revise the City's 2007 Wastewater Master Plan;

ii. Identify improvements to the City's sewer collection system and upgrades to the primary treatment (Sutter Plant) and secondary and tertiary treatment facilities (Jennings Plant);

iii. Accommodate the wastewater collection service needs of the population and land uses described in the City's Urban Area General Plan and community plans of service areas outlying the City's urban area or sphere of influence (SOI), and account for SOI boundary adjustments, zoning revisions and updated growth projections and sewer demand information through 2057; and

iv. Accommodate wastewater treatment needs for those same customers through 2035.

The City Council has weighed the benefits of the proposed Project against its unavoidable environmental risks and adverse environmental effects identified in the Final EIR and hereby determines that those benefits outweigh the risks and adverse environmental effects and, therefore, further determines that these risks and adverse environmental effects are acceptable.

4. That the City Council finds that the Final EIR describes a range of reasonable alternatives to the project. However, none of the alternatives to the Project that were determined to be potentially feasible in the EIR will avoid or substantially lessen the significant and unavoidable impacts of the project to a level of insignificance. Further, specific economic, legal, social, technological, or other considerations make infeasible the alternatives identified in the EIR which would reduce these impacts to a level of insignificance. The City Council finds and determines that these significant and unavoidable adverse impacts are acceptable and that the Project may be approved despite these impacts for the reasons specified in the Statement of Overriding Considerations. The City Council further finds that there are no additional feasible alternatives that the City Council could adopt at this time that would reduce the impacts summarized in **Exhibit B** to a less-than-significant level.

5. The City Council does hereby designate the Director of Utilities Department of the City of Modesto, at his office at 1010 Tenth Street, Modesto, California 95354, as the custodian of documents and the record of proceedings on which the decision is based; and

6. The City Council does hereby make the foregoing findings with respect to the significant effects on the environment of such Project, as identified in the Final EIR, with the stipulations that all information in these findings is intended as a summary of the full administrative record supporting the Final EIR, which full

administrative record should be consulted for the full details supporting these findings.

7. In compliance with the California Environmental Quality Act (CEQA Guidelines Section 15097), if the City Council has made findings required under paragraph (1) of subdivision (a) of Section 15091, where mitigation measures are required to avoid, substantially lessen, or reduce to a less-than-significant level the environmental effects of certain elements of the Project, as identified in the EIR, the lead agency must adopt a Mitigation Monitoring and Reporting Program to ensure that the Project mitigation measures identified in the EIR are implemented and the party responsible for their implementation is identified.

BE IT FURTHER RESOLVED, by the City Council that it hereby certifies the Final Environmental Impact Report for the City of Modesto Wastewater Master Plan (SCH # 2016062033), **attached** as **Exhibit C1, C2 and C3;** adopts the associated Mitigation Monitoring and Reporting Program, **attached** as **Exhibit D;** approves the Proposed Project; and directs staff to file a Notice of Determination.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

EXHIBIT "A"

STATEMENT OF FINDINGS OF SIGNIFICANT IMPACTS

STATEMENT OF FINDINGS OF SIGNIFICANT IMPACTS AND REJECTION OF ALTERNATIVES

Pursuant to Public Resources Code Section 21081 and Section 15091 of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations 15000, et seq.), the City of Modesto cannot approve a project for which an Environmental Impact Report (EIR) has been certified which identifies significant effects on the environment unless it adopts findings with respect to each significant effect. Prior to approving the project, the City of Modesto (City) must also find that there are specific considerations that make infeasible the project alternatives identified in the EIR.

In Section A below, the City will make the one or more of the following finding for each of the significant effects identified in the EIR, pursuant to Section 15091 of the State CEQA Guidelines:

1. Changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.
2. Such changes or alterations are within the responsibility of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures identified in the EIR.

In Section B below, the City will make the following finding regarding each of the alternatives identified in the EIR:

> Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the program EIR.

SECTION A. FINDINGS REGARDING SIGNIFICANT IMPACTS

AESTHETICS

Impact AES-3: Degradation of Visual Character or Quality of Site and Surroundings During Construction

Finding:

Construction of proposed collection system and Sutter Plant components, and outfall pipelines would be visible to various receptors near the construction work areas. For the various collection system components, nearby residents, patrons at nearby businesses, motorists, and recreationists using public roads would have temporary views of construction activities including heavy equipment operation, materials stockpiling, earth movement associated with trenching and grading, and pipeline and other associated materials. Views of these operations may be perceived as a degradation of the City's visual character. While such activities would be temporary and effects on the area's visual character would cease after construction is complete for a given Capital Improvement Project (CIP), disturbance could be significant for individual projects particularly if construction extends for over a year in a given area. Therefore, this impact would be significant.

The River Trunk Realignment Project (evaluated at a project level of detail) includes construction of gravity pipelines, force mains, and two new pump stations. Project construction would be temporarily visible to adjacent residents, motorists, patrons at nearby businesses, golfers at Dryden Golf Course and Modesto Municipal Golf Course, and recreationists using the sports fields at Modesto High School. These viewer groups would have views of trenching and excavation, staging and stockpiling of construction materials and equipment, pipeline installation, and other construction activities associated with the new pump stations over the construction duration (approximately 30 months). While such activities would be temporary and effects on the area's visual character would cease after construction is complete, given the project's overall duration of approximately 30 months, visual disturbance at Dryden Golf Course and along public roads could be substantial. This impact is considered significant.

Implementation of Mitigation Measures AES-1 (Locate Staging Areas Away from Public Areas and Install Screening) would reduce this impact to a less-than-significant level.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure AES-1: Locate Staging Areas Away from Public Areas and Install Screening. *Applies to Collection System Components, Sutter Plant Components, Outfall Pipelines, and River Trunk Realignment Project*

For components located in residential areas and near public parks, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. With the exception of designated staging areas for the River Trunk Realignment Project,

to the extent practicable, staging areas for Program components shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials.

AGRICULTURAL RESOURCES

Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use

Finding:

While the majority of proposed sewer pipelines would be constructed within existing roadways, some pipeline components would extend beyond roadways and onto land that is designated Farmland. Ground disturbing activities associated with pipeline components would be temporary and agricultural lands would be restored to pre-construction conditions following project completion. Upgrades or replacement of existing lift station components would occur on urban and built-up land area or other types of non-agricultural use lands. Under current conditions, construction of some new stations would take place either adjacent to or on land that is designated as Farmland. Given that these lift stations would serve future growth areas, the locations of these facilities are preliminary and may change. In addition, lift stations would be constructed in existing or planned development areas and likely located along roadways. However, due to proximity of Farmland and because the exact location of these lift stations has not yet been determined, it is conservatively assumed that these CIPs could result in the permanent conversion of up to 1 acre of Farmland. This impact would be significant.

Considering the Stanislaus Local Area Formation Commission's (LAFCO's) Agricultural Preservation Policy (2015) and pursuant to Policy 2.15 in the Stanislaus County General Plan, the County policy requires that agricultural land converted to residential use be replaced at a 1:1 ratio with agricultural land of equal quality in Stanislaus County. However, since the Proposed Program is not a residential project, these policies do not apply to the Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing agricultural easements, the City has determined that this program is infeasible for the following reasons: (1) Stanislaus County policy is to mitigate the loss of and preserve Prime Farmland through the County's Farmland Mitigation Program, which is designed to address loss of farmland resulting from impacts of residential development, and the County policy is not to burden and increase the cost of new and improved public infrastructure that is needed by the community; and (2) the purchase of an agricultural conservation easement over other off-site agricultural land would not ultimately avoid or reduce the impact of converting Prime Farmland to non-agricultural uses caused by the Proposed Program because there still would be a net reduction in the total amount of Prime Farmland and therefore the easement over other land would not reduce the impact to a level of insignificance. No other feasible mitigation measures, such as restoration of Prime Farmland that has been previously converted or participation in another agricultural conservation easement program, have been identified to further reduce this impact. Therefore, this impact would be significant and unavoidable.

The majority of the components associated with the Jennings Plant would occur on urban/built-up land, while the Phase 3-5 biological nutrient removal (BNR)/Tertiary, primary treatment and solids handling facilities would be built on Semi-Agricultural and Rural Commercial Land. Construction of new Sludge Cake Drying Beds (Component Nos. JP-4.3 and JP-5.5) would occur

on Farmland located to the east of the Jennings Plant and future dewatering facility. Construction of sludge drying beds and their associated facilities would result in permanent conversion of approximately 18.6 acres of Farmland, which is considered a significant impact. As described above for collection system components, the County's Farmland Mitigation Program is infeasible because it was intended to provide a mechanism for residential development projects to mitigate impacts associated with loss of Prime Farmland, and the cost of purchasing an agricultural easement over other off-site agricultural land would not ultimately avoid or reduce impacts due to converting Prime Farmland to non-agricultural land. For these reasons, this impact would be significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Considering all of the Wastewater Master Plan (WWMP) components as a whole, while construction-related impacts of several components would be temporary, some WWMP components (e.g., lift stations and Jennings Plant facilities) would result in permanent conversion of Farmland. As described above, the Stanislaus County's Farmland Mitigation Program is infeasible because it was intended to provide a mechanism for residential projects (not public infrastructures projects) to mitigate impacts associated with loss of Prime Farmland. No further feasible mitigation has been identified that could further reduce the Proposed Program's impacts related to permanent conversion of Farmland. Restoration and/or recovery of Farmland from existing urban uses to offset the loss of Farmland could mitigate the loss caused by the Proposed Program. However, such a measure would be unreasonably costly and inefficient and would, therefore, be infeasible. Therefore, the Proposed Program's overall impact would be significant and unavoidable.

AIR QUALITY

Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan

Finding:

The San Joaquin Valley Air Pollution Control District (SJVAPCD) established mass emission thresholds of significance for criteria pollutant emissions to be consistent with levels required to be consistent with the SJVAPCD air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the applicable air quality plans provided there are no individual measures listed in the air quality plans that the project would conflict or obstruct.

The Proposed Program, including the River Trunk Realignment Project, would follow all federal, state, and local regulations and policies related to sources of air pollutants, including applicable general plan policies. In addition, construction of the Proposed Program would follow local air district regulations for fugitive dust, volatile organic compounds (VOCs), and nitrogen oxide (NO_X) emissions. The River Trunk Realignment Project's construction and operations would not result in NO_X emissions that exceed the 10 tons per year emission threshold. Thus, the River Trunk Realignment Project would not contribute to any conflicts with applicable air quality plans. Construction of various program-level CIPs may result in NO_X emissions that exceed the 10 tons per year emission threshold and could result in other criteria pollutant emissions that exceed SJVAPCD's thresholds; therefore, such components could obstruct implementation of applicable air quality plans, which would be a significant impact. It is also unknown at this time

if the amount of operational emissions would exceed any significance threshold. This impact would be significant. Mitigation measures that would address construction emissions and operational emissions are discussed under Impact AQ-2. It is assumed that emissions from permitted sources would be addressed under the applicable permit process and any excess emissions would purchase offsets as required to obtain permits; however, this would not address construction or operational emissions which do not require permits.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Mitigation measures that would address construction emissions and operational emissions are discussed under Impact AQ-2. It is assumed that emissions from permitted sources would be addressed under the applicable permit process and any excess emissions would purchase offsets as required to obtain permits; however, this would not address construction or operational emissions which do not require permits.

For the reasons described above, the overall Proposed Program and the various CIPs could generate emissions greater than that accounted for in the applicable air quality plans. Therefore, the Proposed Program could obstruct or conflict with applicable air quality plans and would have a significant and unavoidable impact.

Impact AQ-2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation

Finding:

The SJVAPCD considers emissions of particulate matter of aerodynamic radius of 10 micrometers or less (PM10) to be the greatest pollutant of concern when assessing construction-related air quality impacts. The SJVAPCD has determined that compliance with its Regulation VIII and the implementation of all feasible control measures specified in its *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI; San Joaquin Valley Air Pollution Control District 2015), constitute sufficient mitigation to reduce construction-related PM10 emissions to less-than-significant levels and to minimize adverse air quality effects. Construction activities for individual program-level components would generate emissions of criteria air pollutants via the use of heavy equipment, worker vehicle trips, and material hauling truck trips.

Operation of the program-level components would include the operation, inspection, and maintenance of new pump stations, lift stations and wastewater treatment plant facilities. These activities would result in the direct emission of criteria air pollutants through employee vehicle trips and infrequent use of backup generators primarily during emergencies or power outages, and emissions of VOCs and combustion products associated with wastewater treatment operations. The operation and maintenance of other program-level facilities would not require a substantial change in employees compared to existing conditions. Emissions from the operation of emergency generator and other wastewater treatment plant sources would not be substantial since any new or modified emergency generators and wastewater treatment plant sources would go through the SJVAPCD permit process to ensure that project emissions are below the appropriate significance threshold for permitted sources and offsets provided if required.

Similar to the program-level components, construction of the River Trunk Realignment Project would result in construction-related emissions of fugitive dust and/or criteria air pollutants. Based on comparison to the significance thresholds, all pollutants, would be well below the construction emission thresholds. As explained above, SJVAPCD has determined that those projects with mass emissions less than the thresholds of significance would not create additional violations of criteria pollutant emissions standards (SJVAPCD 2015, SJVAPCD 2017). The River Trunk Realignment Project's criteria air pollutant emissions during operation were estimated assuming that the proposed pumps would be operating continuously year-round, which is a conservative assumption. The River Trunk Realignment Project's operational emissions would be below CEQA significance thresholds.

All construction projects must abide by Regulation VIII. Consequently, the air quality analysis assumes that the City and its contractors will comply with Regulation VIII and such compliance will be sufficient to eliminate any potentially significant air quality effects generated by construction activities. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to a less-than-significant level. In addition, Mitigation Measure AQ-3 would reduce emissions from operational exhaust, and SJVAPCD also recommends measures to reduce exhaust pollutant emissions from heavy construction equipment. Adherence to these mitigation measure and requirements would reduce pollutant emissions below significance thresholds and would ensure that impacts would be less than significant.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the Proposed Program's overall impacts would be less than significant with mitigation.

<u>Mitigation Measure AQ-1: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM10</u>

The following controls are required to be implemented by the City or its contractor at all construction sites.

- All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant.

- All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of water during work or by presoaking.

- When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.

- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant.

- Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

- Any site with 150 or more vehicle trips per day will prevent carryout and trackout.

Mitigation Measure AQ-2: Implement Enhanced Control Measures for Construction Emissions of PM10

The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM10 impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements).

1. Limit traffic speeds on unpaved roads to 15 miles per hour (mph).

2. Install sandbags or other erosion-control measures to prevent silt runoff.

The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason.

1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.

2. Install wind breaks at windward sides of construction areas.

3. Suspend excavation and grading activity when winds exceed 20 mph.

4. Limit the area subject to excavation, grading, and other construction activity at any one time.

5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.

Mitigation Measure AQ-3: Implement Control Measures for Operation Emissions of PM10 and for Ozone Precursors (Reactive Organic Gases [ROG] and NO_X)

In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This

measure will be implemented at all new or modified wastewater system sites when required to mitigate significant PM10 and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.

Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard

Finding:

No single CIP would be sufficient in size, by itself, to cause nonattainment of the regional air quality standards. The River Trunk Realignment Project would result in emissions of ozone precursors (ROG, NO_X), and particulate matter (particulate matter of aerodynamic radius of 2.5 micrometers or less [PM2.5], PM10) below the significance thresholds for project-level impacts established by SJVAPCD (2015, 2017). With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, none of the program-level components or the River Trunk Realignment Project would result in mass emissions above the significance threshold. However, these measures would not completely avoid emissions; therefore, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Program-level components and the River Trunk Realignment Project would be located in an area that is in non-attainment for federal and state ozone and PM2.5 standards and state standards for PM10. Thus, the combined emissions of past, present, and probable future projects would have a significant cumulative impact on air quality in the project area. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, none of the program-level components or the River Trunk Realignment Project would result in mass emissions above the significance threshold. However, because these measures would not completely avoid emissions, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain significant and unavoidable.

Impact AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations

Finding:

During construction activities for the proposed components, construction emissions have the potential to affect sensitive receptors located at and near program-level component sites and River Trunk Realignment Project work areas. These sensitive receptors include single-family residential units and schools around proposed improvement sites. Therefore, nuisances associated with fugitive dust and construction activity emissions would affect adjacent residences. During operational activities, stationary emission sources would also emit pollutants. This would be a significant impact. Implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 (described above for Impact AQ-2) would reduce the impact on sensitive receptors from fugitive dust and other pollutants to a less-than-significant level.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 (described above for Impact AQ-2), the impact on sensitive receptors from fugitive dust and other pollutants would be less than significant with mitigation.

BIOLOGICAL RESOURCES

Impact BIO-1: Impacts on Special-Status Plants

Finding:

No special-status plants are likely to occur at the Sutter or Jennings Plant. Collection system components wholly within developed areas (such as paved streets) are not anticipated to have impacts on special-status plants. Special-status plants may occur in the vicinity of these Program components in habitats such as grassland, wetlands, vernal pools, and valley and foothill riparian. Impacts to special-status plants could include removal of individuals, and indirect effects from sedimentation or changes to hydrology. Indirect effects from erosion or sedimentation from Program components' construction could impact special-status plants in the vicinity of vernal pools, riparian areas, wetland areas, or grasslands. These indirect impacts could change the local hydrology which could alter the habitat for special status plants, and reduce habitat suitability to these plants. Program components constructed in grasslands could impact special-status species which grow in grasslands, if they are present in the construction footprint. Impacts to special-status plants during construction of certain Program components would be minimized by using trenchless pipeline construction for crossings of the Tuolumne River and Dry Creek, where wetland and riparian habitat is located. The only collection system components that would cross wetland or riparian habitat are sewer rehabilitation components A-1 (Rose Celeste/Santa Rosa) and A-2 (Sutter Trunk). A frac-out[1] during trenchless pipeline construction could result in impacts to special-status plants such as removal of individuals or reduction in special-status plant habitat quality.

The footprint of the River Trunk Realignment Project supports grassland habitat that is suitable for crownscale (*Atriplex coronata* var. *coronate)*, big tarplant (*Blepharizonia plumose)*, round-leaved filaree (*California macrophylla)*, and Parry's rough tarplant (*Centromadia parryi* ssp. *Rudis)*. Wetland and riparian areas associated with Dry Creek support habitat suitable for Delta button-celery (*Eryngium racemosum*). Impacts to these special-status plant species could include removal of individuals, and indirect effects from sedimentation or changes to hydrology. These impacts would be significant.

Many potential water quality impacts associated with the Proposed Program's construction activities would be minimized or avoided through compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which

[1] "Frac-out" is the inadvertent return and release to the environment of drilling lubricant during HDD. This is a potential concern when HDD is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD procedure uses bentonite slurry, which is a fine clay material that is used as a drilling lubricant. Bentonite is non-toxic and is commonly used farming practices, but benthic invertebrates, aquatic plants, and fish and their eggs can be smothered by the fine particles if bentonite is discharged to waterways (Sacramento Municipal Utility District 2003).

requires preparation and implementation of a stormwater pollution prevention plan (SWPPP). For Program components whose construction would disturb less than one acre, the City of Modesto's Standard Specifications require that all projects less than one acre develop a Local SWPPP or Erosion Control Plan and implement stormwater best management practices (BMPs) during construction. Implementation of BMPs to prevent erosion and potential discharge of sediment from construction sites, would avoid indirect impacts to plants from erosion or sedimentation during Program activities.

Several mitigation measures are proposed to avoid, reduce, or compensate for impacts to special-status plants. Implementation of Mitigation Measure HYD/WQ-1 would reduce impacts on special-status plants from a frac-out. Mitigation Measure BIO-1 would minimize the area of disturbance to habitat for special-status plants. Where disturbance within special-status plant habitat cannot be avoided, Mitigation Measure BIO-2 would identify the extent to which special-status plants are present and could be adversely affected by the project. For special-status plants found to be present, Mitigation Measure BIO-3 would require monitoring to confirm avoidance of identified special-status plant populations, and compensatory mitigation should special-status plants be adversely affected. Implementation of these measures would reduce this impact to less than significant with mitigation.

Considering the WWMP components as a whole, while no special-status plants are likely to be present at the Sutter or Jennings Plants, some special-status plants may occur in the vicinity of other Proposed Program components particularly in grassland, wetlands, vernal pools, and valley and foothill riparian habitats. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and HYD/WQ-1 would minimize adverse effects on special-status species. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels:

Mitigation Measure BIO-1: Perform Focused Surveys for Special-status Plant Species.
Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species.

Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site as determined by the botanist. If special-status plants may be directly or indirectly affected, then Mitigation Measure BIO-2 shall be implemented.

Mitigation Measure BIO-2: Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species.
Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

If special-status plants are detected, the City shall implement the following measures to avoid, minimize, and compensate for impacts on special-status plant species:

- The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally-sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally-sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally-sensitive area.

- If avoidance is not feasible, the Program proponent will consult with either California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS), or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival.

- The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the Rare Plant Plan. If success criteria are not met at that time, then mitigation activities and monitoring will continue until success criteria are met.

- As part of the Rare Plant Plan, the program proponent, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation, maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not

be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.

Impact BIO-2: Impacts on Vernal Pool Branchiopods and Western Spadefoot

Finding:

Vernal pool branchiopods with the potential to occur in the study area include vernal pool fairy shrimp and vernal pool tadpole shrimp (*Lepidurus packardi*). These species could potentially occur within vernal pools located in the study area. Western spadefoot (*Spea hammondii*) also has the potential to occur in the study area and uses vernal pools as breeding habitat. Proposed Program components that are not located in grasslands and pastures are not anticipated to have impacts on vernal pool habitat or inhabitants. If construction of Program components occurs in the microwatershed of vernal pools, such activity could result in sedimentation and alteration of hydrology and drainage patterns, which could impact habitat for vernal pool branchiopods and breeding habitat for western spadefoot.

Many water quality impacts associated with Proposed Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. Compliance with this permit and implementation of a SWPPP would reduce the potential for sediments and contaminants to enter pools or depressions where vernal pool branchiopods may occur and western spadefoot may breed, but construction impacts of individual Program components could nevertheless be significant. Implementation of Mitigation Measures BIO-3 and BIO-4 would minimize potential adverse effects to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels:

<u>Mitigation Measure BIO-3: Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat</u>
Applies to all Program-level components located in grasslands or pastures

Prior to implementation of proposed CIPs in areas that could contain habitat for vernal pool branchiopods, the City shall retain a qualified biologist to conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City shall avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.

Mitigation Measure BIO-4: Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat.
Applies to all Program-level components located in grasslands or pastures.

If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures:

- After construction, restore surface topography and drainage to pre-construction conditions; and

- Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.

Impact BIO-3: Impacts on Valley Elderberry Longhorn Beetle

Finding:

Valley elderberry longhorn beetle (VELB) is a federally-threated species, which is dependent on its host plant, elderberry. Elderberry shrubs may occur in riparian areas and along canals, or occasionally in non-riparian areas. Impacts of Proposed Program components located where elderberry shrubs are growing could include removal of elderberry shrubs, or ground disturbance within the rooting zone of these shrubs. If these shrubs were occupied by VELB, shrub removal or mortality could result in adverse effects on VELB. This would be considered a significant impact. Trimming of elderberry shrubs could result in injury or death of eggs, larva, or adults depending on the timing and extent of the trimming, a significant impact. No adverse impacts to the VELB would occur if trimming does not remove stems/branches that are ≥1 inch in diameter and is conducted between November and February (USFWS 2017).

During the reconnaissance survey for the River Trunk Realignment Project, a blue elderberry shrub was observed near the exit pit for trenchless pipeline construction on the west side of Dry Creek. VELB exit holes were not observed on this shrub. Ground disturbance for this pit would be approximately 10 feet from the dripline of this shrub. Individual elderberry shrubs also have the potential to occur in riparian habitat along Dry Creek, but impacts to these shrubs and VELB would be avoided by the use of trenchless pipeline construction techniques.

Several blue elderberry shrubs were observed along the Tuolumne River in the vicinity of the Shackelford Pump Station. Ground disturbance for construction of the pump station would be approximately 40 feet from the dripline of these shrubs.

Based on the above, the Proposed Program could affect elderberry shrubs which provide habitat for VELB. If the shrubs are occupied and affected during construction, adverse effects on this federally-listed species could occur. Implementation of Mitigation Measures BIO-5 through BIO-7 would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels:

Mitigation Measure BIO-5: Avoid Impacts on VELB Habitat
Applies to all Program-level Components and River Trunk Realignment Project

The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed components that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017). This shall include the following avoidance measures:

- If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal.

- The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities.

- No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level.

- A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.

- A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and should be discussed with USFWS.

- As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March – July).

- If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter.

- Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method.

- Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry.

- Erosion control shall be implemented and the affected area shall be re-vegetated with appropriate native plants.

If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.

Mitigation Measure BIO-6: Implement VELB Compensatory Mitigation, if Necessary.
Applies to all Program-level Components and River Trunk Realignment Project

The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per Mitigation Measure BIO-7.

Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS.

Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used.

Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.

Mitigation Measure BIO-7: Transplant Elderberry Shrubs if Avoidance Is Not Feasible.
Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to Mitigation Measure BIO-6, the shrub shall be transplanted.

Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that

is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed:

- A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.

- Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, global positioning system (GPS) location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the California Natural Diversity Database (CNDDB).

- Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves.

- Transplanting shall follow the most current version of the American National Standards Institute (ANSI) A300 (Part 6) guidelines for transplanting (www.tcia.org).

Impact BIO-4: Impacts on Special-status Fishes

Finding:

Habitat in the study area for special-status fish species is limited to the Tuolumne River and Dry Creek. Special-status fish that are known to occur in the Tuolumne River include Chinook salmon (Central Valley fall- and late fall-run evolutionarily significant unit [ESU]), Central Valley steelhead, Sacramento splittail, and hardhead. These species may also be present in Dry Creek. Adult steelhead and Chinook salmon migrate through the Tuolumne River to reach spawning habitat upstream. Juvenile salmonids pass through the study area on their way out to the Pacific Ocean. Sacramento splittail may be present in this portion of the Tuolumne River in wet years. Hardhead are also known be present.

Construction of proposed components at the Sutter and Jennings Plants would not occur in suitable habitat for special-status fishes. However, impacts to water quality due to construction of components near the Tuolumne River and the San Joaquin River could adversely affect special-status fishes. Construction of proposed components would include grading, excavation, trenching, or other construction-related activities that could loosen soils and increase the risk of erosion or sediment transport. Increases in sedimentation and turbidity have been shown to adversely affect fish physiology, behavior, and habitat. The effects of turbidity on fish include gill trauma, avoidance of habitat, changes in forage ability, increased predation risk, and reduced territoriality. The deposition of excessive fine sediment on the stream bottom could eliminate habitat for aquatic insects (a food source for fish); reduce density, biomass, numbers, and diversity of aquatic insects and aquatic vegetation; and reduce the quality of spawning habitat for fish. Potential impacts to special-status fish from water quality include reduction in habitat quality, injury, or mortality. These impacts would be considered significant.

Water quality impacts of Program activities would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements for Program components with a disturbance footprint greater than one acre. The City of Modesto's Standard Specifications require that all projects less than one acre develop a Local SWPPP or Erosion Control Plan and implement stormwater BMPs during

construction. Implementing these requirements would prevent substantial stormwater- and erosion-related water quality impacts.

Construction-related impacts to special-status fish and their habitat would be minimized by using trenchless construction techniques for the new pipelines crossing the Tuolumne River and Dry Creek, as well as rehabilitation of an existing pipelines crossing the Tuolumne River and another crossing Dry Creek (Components A-1 and A-2). Impacts to special-status fish and their habitat may result from a frac-out of drilling fluids. Drilling fluids typically consist of bentonite, which is non-toxic to aquatic life. However, a frac-out may result in a temporary increase in turbidity or sedimentation that can adversely affect aquatic organisms by covering spawning and feeding areas, and clogging fish gills. These impacts are considered significant. Mitigation Measure HYD/WQ-1 would be implemented to reduce impacts in the event of a frac-out. With implementation of Mitigation Measure HYD/WQ-1, this impact would be less than significant with mitigation.

Construction activities of program-level components could result in water quality impacts which could adversely affect special-status fish. For example, temporary increases in sediment discharges and increased turbidity, and in the event of an accidental spill, hazardous materials could adversely affect water quality. These impacts would be significant. Such impacts would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit, SWPPP, and Local SWPPP requirements. With implementation of Mitigation Measure HYD/WQ-1, impacts would be less than significant with mitigation.

In conclusion, WWMP components near the Tuolumne River and Dry Creek could adversely affect special-status fish species due to construction-related effects on water quality (e.g., increased sedimentation, turbidity, and hazardous materials in the event of an accidental spill). Implementation of Mitigation Measure HYD/WQ-1 would minimize adverse effects on water quality and reduce adverse effects on special-status fish. Implementation of this mitigation measure would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measure HYD/WQ-1, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Impact BIO-5: Impacts on Western Pond Turtle

Finding:

Potentially suitable habitat for western pond turtle occurs in the Tuolumne River and Dry Creek. Irrigation ditches with emergent vegetation provide marginally suitable habitat because they generally lack basking sites, the banks are very steep, and they are not perennially inundated. Canals do not provide suitable habitat.

Impacts to western pond turtle would be minimized by using trenchless pipeline construction where this species is most likely to occur, in the Tuolumne River and Dry Creek. The only collection system components that would cross the Tuolumne River and Dry Creek are Sewer Rehabilitation Components A-1 and A-2. The majority of collection system components would

occur in urban portions of Modesto where habitat for western pond turtle is not present. Western pond turtle may also occur in upland areas. Construction activities that directly impact western pond turtle or their nests could result in significant impacts to this species.

The River Trunk Realignment Project crosses Dry Creek and the Tuolumne River, where there is suitable habitat for western pond turtle. The Dry Creek crossing would be a trenchless crossing, which would minimize impacts to western pond turtle. The west side of the pipeline connection for the crossing of the Tuolumne River is close to habitat for western pond turtle. Construction activities that directly impact western pond turtle or their nests in the vicinity of the Tuolumne River crossing could result in significant impacts to this species.

Wastewater treatment ponds at the Sutter and Jennings Plants provide potentially suitable habitat for this species (Rosenberg et al. 2009). Activities such as dredging in facultative ponds at the Jennings Plant could impact this species. Irrigation ditches with emergent vegetation provide marginally suitable habitat because they generally lack basking sites, the banks are very steep, and they are not perennially inundated.

Mitigation Measure BIO-8 would avoid impacts to suitable habitat for this species to the extent feasible. Where disturbance of suitable habitat is unavoidable, the mitigation measure would require that impacts be minimized through pre-construction surveys, establishment of buffers, and monitoring. With implementation of this mitigation measure, impacts would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-8: Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle

Applies to all Program-level components adjacent to rivers and creeks and the River Trunk Realignment Project

Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, ponds, and sloughs where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented.

- The project proponent will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating western pond turtles.

- If a western pond turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site (with authorization from CDFW).

- The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat.

- If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).

Impact BIO-6: Impacts on Burrowing Owl

Finding:

Burrowing owls could occur within grasslands, agricultural habitats and canal and railroad right of ways where burrows are present. Collection system components, such as some pipelines and lift stations, are located within agricultural lands. Some collection system components and the third outfall pipeline are located in close proximity to agricultural lands. A rehabilitation pipeline is located within disturbed grassland and some collection system components are located near disturbed grassland habitat. If this species is present in the vicinity of program-level components, construction activities could disturb burrowing owls through noise, visual distraction, or direct impacts to occupied habitat. These impacts would be considered significant. Implementation of Mitigation Measure BIO-9 would reduce impacts to this species. Where disturbance is unavoidable, impacts to burrowing owls would be minimized through establishing buffers around active burrows. If active burrows cannot be avoided, passive relocation techniques may be used. If relocation occurs, then compensation would be provided to offset impacts. With implementation of this mitigation measure, impacts would be less than significant with mitigation.

The River Trunk Realignment Project would be unlikely to have adverse effects on burrowing owl as no evidence of burrowing owl was observed during reconnaissance surveys conducted in June 2017.

In summary, construction activities associated with some program-level components could occur in grassland or agricultural habitats where burrowing owl may be present. If present, implementation of Mitigation Measure BIO-9 would minimize adverse effects on this species. In conclusion, implementation of this mitigation measure would reduce the Proposed Program's overall impact to less than significant with mitigation**.**

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-9: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary
Applies to all Program-level components

Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented.

If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW.

If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.

Impact BIO-8: Impacts on Raptors, Including Special-status Species

Finding:

Numerous raptors are known to nest and forage in habitats in the study area. Non-listed raptors commonly observed in the vicinity of the study area include red-tailed hawk, American kestrel, red-shouldered hawk, and merlin (*Falco columbarius*), among others. Special-status raptors (excluding burrowing owls, golden eagle, and bald eagle) known to occur in the vicinity of the study area include Swainson's hawk, white-tailed kite, and northern harrier. These species have been observed in the study area and are known to nest locally. Riparian trees along the Tuolumne River and Dry Creek provide potential nesting habitat for Swainson's hawk and white-tailed kite; isolated mature trees in adjacent fields may also be used for nesting. These raptors commonly forage in agricultural fields. Northern harriers nest on the ground in open areas, and may nest in agricultural fields. Program components in the vicinity of suitable nesting habitat for Swainson's Hawk and white-tailed kite include the third outfall, several sewer rehabilitation components, treatment plant components, and the River Trunk Realignment Project.

Construction in the vicinity of raptor nest sites could disturb nesting raptors through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., tree removal or ground disturbance). Impacts to Swainson's hawk and white-tailed kite would be minimized by using trenchless construction techniques for crossing of the Tuolumne River and Dry Creek, where nesting is most likely to occur. However, special-status raptors could nest in relatively close proximity to trenchless construction operations and in other portions of the Program area. For the River Trunk Realignment Project, special-status species such as Swainson's hawk and white-tailed kite could nest in riparian habitat adjacent to the entry and exit pits for the trenchless crossing of Dry Creek. Noise from construction equipment could disturb nesting raptors in these areas, if present. Thus, there would be the potential for disturbance of nesting raptors. Impacts that result in nest abandonment, nest failure, or reduced health or vigor of nestlings are considered significant. It should be noted that Horizon biologists have conducted protocol surveys for Swainson's hawk in Stanislaus County since 2012, which have documented nest sites and successful fledging of juveniles from nests located adjacent to busy roads, railroad tracks, residences, industrial sites, commercial businesses, and various agricultural operations. While these surveys and a report by Berchard et al. (2010) have found Swainson's hawk generally tolerant of regular, ongoing human activities, it is possible that construction equipment, worker vehicles and increased human presence during construction of proposed CIPs may cause physiological stress resulting in nest abandonment or behavior modification that may lead to nesting failure or mortality of Swainson's hawk chicks.

In addition, construction of program-level components such as those planned at the Jennings Plant (e.g., new sludge drying beds) could result in the loss of suitable foraging habitat for Swainson's hawk. This impact would be considered significant.

Construction of the River Trunk Realignment Project would result in temporary disturbance of foraging habitat for Swainson's hawk in the grassland to the west of the Dry Creek Crossing. It would also result in permanent loss of approximately 0.3 acre of marginally suitable foraging habitat in the footprint of the Shackelford pump station. This impact would be considered significant.

Implementation of Mitigation Measure BIO-10 (Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species), which would require preconstruction surveys for nesting raptors and establishment of no-disturbance buffers, and Mitigation Measure BIO-11 (Compensate for Loss of Raptor Foraging Habitat), which would require mitigation for the loss of suitable foraging habitat, would reduce this impact to less than significant with mitigation. Implementation of Mitigation Measure BIO-11 for the River Trunk Realignment Project would result in provision of 0.3 to 0.6 acre of Swainson's hawk habitat management lands, the amount depending upon percentage of active management of the lands (see Mitigation Measure BIO-11 for details). Alternatively, 0.3 acre of Swainson's hawk mitigation credit may be purchased from a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the Proposed Program area.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-10: Avoid and Minimize Impacts on Raptors, including Special-status Species

Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests.

If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.

Mitigation Measure BIO-11: Compensate for Loss of Raptor Foraging Habitat.

Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (California Department of Fish and Game [CDFG] 1994), or by purchasing credits at a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the study area, such as the Dutchman Creek Conservation Bank.

The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program-level components are assumed to be within 1 mile of an active Swainson's hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows:

- 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk; or

- 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands.

The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.

Impact BIO-9: Impacts on Special-status Passerine Species and Birds Protected under the MBTA

Finding:

Special-status passerines may nest in the vicinity of the Sutter and Jennings Plants and various birds protected by the Migratory Bird Treaty Act (MBTA) could also occur in the vicinity of proposed components at the Sutter and Jennings Plants. Construction activities could disturb nesting passerines through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Nest failure or removal of a nest are considered significant impacts.

Portions of the proposed outfall pipeline alignments, collection system components, and the River Trunk Realignment Project cross sensitive habitat in the Tuolumne River and Dry Creek where nesting of special-status passerines are most likely to occur. Impacts would be minimized by using trenchless construction techniques for activities crossing these habitats. However, construction activities could still disturb nesting passerines or other birds protected by the MBTA through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Reconnaissance surveys for the River Trunk Realignment Project identified swallow nests, and other birds protected by the MBTA may nest in proximity to the project site. Additionally, nesting birds protected by the MBTA could occur in the vicinity of proposed outfall pipeline alignments and collection system components. Nest failure or removal of a nest are considered significant impacts.

Implementation of Mitigation Measure BIO-12 would minimize impacts to passerines by conducting pre-construction surveys during the nesting season and establishing buffers around active nests. With implementation of this mitigation measure, impacts would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measure, identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-12: Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary
Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required.

If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code

sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.

Impact BIO-11: Impacts on Riparian Habitat and Other Sensitive Natural Communities

Finding:

Portions of the proposed outfall pipeline components, collection system components, and River Trunk Realignment Project would traverse riparian habitat and associated wetlands. Impacts to riparian habitat would be avoided by the use of trenchless construction techniques in riparian habitat. If a frac-out were to occur beneath riparian habitat, direct impacts on this habitat could occur. Additionally, vernal pool habitat may be present in areas where outfall pipelines and collection system components would be constructed in grasslands and pastures. Construction-related impacts on vernal pool habitats could include sedimentation or alteration in drainage patterns. These impacts are considered significant. SWPPP and Local SWPPP requirements would reduce sedimentation. Implementation of Mitigation Measure HYD/WQ-1, which would require preparation of a frac-out Contingency Plan; and Mitigation Measures BIO-3 and BIO-4, which would require avoidance and/minimization of impacts on vernal pools, would reduce this impact to less than significant with mitigation.

Considering the WWMP components as a whole, while proposed construction activities at the Jennings and Sutter Plants would not affect sensitive natural communities, construction of other components would traverse riparian habitat and could result in adverse effects to this natural community in the event of a frac-out. Effects on vernal pool habitat could also occur due to construction of some program-level components. These impacts would be significant. SWPPP and Local SWPPP requirements would reduce adverse effects. Implementation of Mitigation Measures HYD/WQ-1 would minimize adverse effects. In conclusion, implementation of Mitigation Measures BIO-3 and BIO-4 would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measures HYD/WQ-1, BIO-3, and BIO-4, described above and identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Impact BIO-12: Impacts on Federally Protected Wetlands

Finding:

The study area contains wetlands and waters that are likely to be regulated by the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency under Section 404 of the Clean Water Act (CWA). In the study area, the Tuolumne River is considered Traditional Navigable Waters of the U.S., as is the San Joaquin River adjacent to the Jennings Plant. Other wetlands and waters with a "significant nexus" to the Tuolumne or San Joaquin River would also be considered jurisdictional waters of the U.S. Wetlands and waters would be preliminarily

identified prior to construction in these areas. Drainages excavated wholly in uplands and draining only uplands are not likely to be jurisdictional features. Program components located in or adjacent to wetlands and waters could cause significant impacts to wetlands or waters through temporary or permanent fill, and erosion or sedimentation.

Outfall pipelines, Components A-1 and A-2, and the River Trunk Realignment Project would avoid impacts on wetlands and waters through the use of trenchless pipeline construction for crossings of Dry Creek and the Tuolumne River. If a frac-out were to occur beneath wetlands, significant direct impacts could occur. Implementation of Mitigation Measure HYD/WQ-1, which requires preparation of a Frac-out Contingency Plan would reduce impacts to wetlands and waters. For the River Trunk Realignment Project, the pipeline crossing at the Tuolumne River would be accomplished by connecting into existing siphons. Other significant impacts to wetlands and waters could occur through temporary or permanent fill, and erosion or sedimentation. Implementation of SWPPP and Local SWPPP requirements, would reduce erosion and sedimentation impacts. Implementation of Mitigation Measures BIO-13 (Avoid and Minimize Impacts on Federally Protected Wetlands), and BIO-14 (Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State) would reduce this impact to less than significant with mitigation.

Although activities at the Sutter and Jennings Plants would not likely impact wetlands or waters of the U.S., other program-level components could result in such impacts including those that would take place near Dry Creek and the Tuolumne River. Implementation of SWPPP and Local SWPPP requirements, would reduce erosion and sedimentation impacts. Implementation of Mitigation Measures HYD/WQ-1, BIO-13, and BIO-15 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measures HYD/WQ-1 (described above) and the following measures, as identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

<u>Mitigation Measure BIO-13: Avoid and Minimize Impacts on Federally Protected Wetlands</u>
Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands.

If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of Mitigation Measure BIO-14. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters, and for all activities less than one acre of disturbance, a Local SWPPP shall be implemented. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.

Mitigation Measure BIO-14: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State

Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Federal Register S19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.

Impact BIO-13: Impacts on Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites

Finding:

Impacts on breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season (through implementation of Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, and BIO-12). Open-cut pipeline construction would create temporary barriers to wildlife movement in agricultural lands and ruderal habitat and result in a significant impact. Impacts of open-cuts on wildlife movement would be minimized by implementation of Mitigation Measure BIO-15 (Install Temporary Trench Plates over Open Trenches), which requires that trenches be covered at the end of each work day. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season. In addition, impacts to breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season and implementing appropriate measures, such as no-work buffer areas if necessary, to minimize impacts on breeding wildlife (see Mitigation Measures BIO-8, BIO-9, BIO-11, and BIO-12). Neither the River Trunk Realignment Project nor the program-level components would create any permanent barriers to wildlife movement or permanently disrupt breeding sites.

In summary, construction of most WWMP components would occur in developed areas or agricultural lands that do not function as wildlife movement corridors for fish and wildlife but open-cut pipeline construction could temporarily create barriers to wildlife movement. Implementation of Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, BIO-12, and BIO-15 would minimize adverse effects and reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11 (described above) and the following Mitigation Measure BIO-15, as identified in the program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-15: Install Temporary Trench Plates over Open Trenches
Applies to all Program-level Components and River Trunk Realignment Project

The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.

Impact BIO-14: Conflict with Local Ordinances or Policies Protecting Biological Resources

Finding:

Implementation of Mitigation Measures BIO-1 through BIO-15 would ensure that the Proposed Program would be consistent with all local ordinances and policies protecting biological resources, reducing impacts to a level that is less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Implementation of the mitigation measures described above would reduce adverse effects related to compliance with local ordinances or policies protecting biological resources. The Proposed Program's overall impact would be less than significant with mitigation.

CULTURAL, PALEONTOLOGICAL, AND TRIBAL RESOURCES

Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources

Finding:

Projects proposing earthwork within archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Section VII-F Policy2-k, which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Improvements proposing earthwork in the Planned Urbanizing Area must also adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c (also presented above), which require the applicant (City in this case) to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures.

All proposed components must adhere to City of Modesto Urban Area General Plan Section VII-F Policies 2-k, 2-l, 2-m, 2-n, 2-o, and 3-c, which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process.

A pedestrian survey of the River Trunk Realignment Project footprint did not identify any archaeological resources; however, archaeological remains could be buried with no surface manifestation or in areas that were not surveyed because they were paved and there was no ground surface visibility (i.e., city streets, parking lots, etc.). Although archaeological materials were not observed on the ground surface at the locations of proposed launch and receiving pits for borings under Dry Creek for the River Trunk Realignment Project, the banks of this

waterway are known to be sensitive for archaeological remains. The locations of the proposed launch and receiving pits for the outfall pipeline crossings under the Tuolumne River are also known to be sensitive for archaeological resources, and thus could affect archaeological remains that are present. Installation of new or replacement sewer lines, construction of pump or lift stations, or excavations for borings, for example, could uncover buried archaeological deposits. Various locations along Tuolumne Boulevard, Colorado Avenue, and within the Dryden Golf Course are underlain by patches of Tujunga loamy sand, which is sensitive for buried archaeological remains.

In addition, construction of the new third outfall pipeline and the new Tuolumne River pipeline crossings would involve trenchless pipeline construction methods in which excavation would be required for the launch and receiving pits for the pipeline borings to the north and south of the Tuolumne River. Should a previously undiscovered resource be found during construction and be determined eligible for inclusion in the California Register of Historical Resources (CRHR), and should project construction activities render the resource ineligible for inclusion in the CRHR, the impact would be significant. Implementation of existing City policies regarding archaeological investigation, construction requirements, and proper mitigation for any resources discovered, as well as Mitigation Measure CR-1, would reduce any impacts on CRHR-eligible archaeological sites accidentally uncovered during construction to a level that is less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

This potentially significant effect can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the program EIR:

Mitigation Measure CR-1: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work

Applies to all Program-level components and the River Trunk Realignment Project

Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive information about the kinds of archaeological materials that could be present at the River Trunk Realignment Project site and other CIP sites, and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.

Impact CR-3: Disturb Any Human Remains, Including those Interred Outside of Dedicated Cemeteries

Finding:

Based on information available for the proposed components, the Proposed Program does not appear to propose earthwork in proximity to any known cemeteries or Native American burial

grounds. However, components implemented as part of the Proposed Program have the potential to disturb previously undiscovered human remains. All of the City of Modesto Urban Area General Plan policies identified above for Impact CR-2 also pertain to the discovery of human remains. Specifically, Policy VII-F.2[k](2) cites California Health and Safety Code 7050.5, which requires the cessation of further excavation and disturbance in the event of a human remains discovery, and coordination with the County coroner and (if applicable) the Native American Heritage Commission (NAHC) regarding further action.

Adherence to Policy VII-F.2[k] and other relevant general plan policies identified for Impact CR-2 and the California Health and Safety Code, as well as Mitigation Measures CR-1, would ensure that impacts on human remains as a result of constructing CIPs would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

This potentially significant effect can be reduced to a less-than-significant level by incorporating Mitigation Measure CR-1 (described above) identified in the program EIR.

Impact CR-5: Potential for a Substantial Adverse Impact on Tribal Cultural Resources

Finding:

TCRs have not been identified within the Program study area. None of the tribes contacted under Public Resources Code Section 21080.3.1 have responded with concerns about the potential impact of the Program on tribal cultural resources (TCRs); thus, the City, as the lead CEQA agency, has determined that no known TCRs exist within the study area.

Construction grading and earthmoving activities could disturb previously undiscovered archaeological deposits or buried historic resources. Proposed pipelines, lift stations, and other wastewater infrastructure to be located within riverbeds and otherwise adjacent to natural channels are particularly susceptible to encountering Native American artifacts. The City has adopted guidelines to aid project compliance with requirements for archaeological resources analysis, and subsequent projects would be required to adhere to these guidelines.

Projects proposing earthwork within archaeological resource study areas must adhere to general plan Section VII-F Policy 2-k, which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Projects proposing earthwork in the Planned Urbanizing Area must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c , which require the applicant to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures.

All subsequent projects must adhere to other City of Modesto Urban Area General Plan Sections VII-F Policies listed above, including 2-l, 2-m, 2-n, and 2-o, which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are

encountered during the construction process. Adherence to existing City policies regarding archaeological investigations, construction requirements, and proper mitigation for any resources discovered on the site, as well as to Mitigation Measure CR-1, would ensure that specific projects implemented subsequent to the Proposed Program would result in less-than significant with mitigation impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

This potentially significant effect can be reduced to a less-than-significant level by incorporating Mitigation Measure CR-1 identified in the program EIR.

GREENHOUSE GAS EMISSIONS AND ENERGY

Impact GHG-1: Generate a Substantial Amount of GHG Emissions

Finding:

Construction of the program-level components, including various collection system components, new outfall pipelines, and facility upgrades at the Sutter and Jennings Plants, would involve activities that would result in one-time emissions of greenhouse gases (GHGs). Changes in carbon sequestration due to land use change and tree planting would also result in one-time emissions of GHGs. GHG emissions would also be generated from construction equipment exhaust, including exhaust from haul or equipment trucks and worker commutes. Specific project-level data about the amount, use, and locations of these equipment are not available at this time, nor are specific project-level data about the construction periods for each individual CIP. In general, replacement and maintenance of existing facilities and strengthening and replacement of existing sewer pipelines would be categorically exempt from CEQA. For other CIPs, in the absence of specific project-level information, it has been conservatively assumed that construction activities for each program-level component would generate GHG emissions that, in combination with the other program components, could be substantial because they would exceed the significance threshold of 10,000 million tons of carbon dioxide equivalents per year (MT CO_2e/year). This is considered a significant impact.

Consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from construction of WWMP components. However, it is still possible that these emissions would not be reduced below the applicable significance threshold of 10,000 MT GHG emissions and therefore the Proposed Program would result in a significant and unavoidable impact.

Operation of the program-level components would indirectly and directly generate GHG emissions through operation and replacement of pumps at lift stations, installation of new or larger emergency electrical generators, and employee vehicle trips for operation and maintenance of future facilities. Expanding tertiary treatment facilities to increase recycled water use may decrease GHG emissions in comparison to using freshly collected and distributed water. In addition, the beneficial use of the recycled water helps with a more efficient use of the water supply and is important in addressing the impacts of climate change such as reduced water supply. However, in total, operation of new or larger pumps at lift stations as well as the increased capacity and improved level of wastewater treatment would potentially generate

GHG emissions greater than the applicable significance threshold of 10,000 MT CO_2e per year for industrial sources. Several of the proposed stationary sources may have applicable best performance standards (BPSs) for boilers, and process heaters. Consistency with these BPS and any future BPSs should be evaluated during project-level analyses once sufficient design details are available regarding operation of the facilities to allow for such an analysis. In the meantime, this impact has conservatively been considered significant. Again, consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from operational activities under the Proposed Program. However, these emissions may not be able to be reduced below the applicable significance threshold, and no other feasible mitigation has been identified which can further reduce emissions.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

On the whole, since specific details regarding the program-level components are not yet available, construction and operation of these components have been conservatively determined to potentially generate GHG emissions that exceed the significance threshold. These emissions may not be able to be reduced below the applicable significance threshold, and no other feasible mitigation has been identified which can further reduce emissions. Therefore, the Proposed Program's impact related to increased GHG emissions would be significant and unavoidable.

Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs

Finding:

Consistency with strategies outlined in California Air Resources Board's (CARB's) Scoping Plan and future updates are used to ensure that the state goals of Assembly Bill (AB) 32, Senate Bill (SB 32) and Executive Order (EO) S-3-05 will be met. CARB's renewable portfolio standard (RPS) would reduce GHG emissions compared to the existing mix of energy sources, and would likely result in the program-level components having more than a 29-percent reduction by at least 2030. This is consistent with the emissions reductions goal of AB 32 and SB 32, as well as the policies/actions described in CARB's 2017 Scoping Plan.

In addition, individual program-level components would comply with the Stanislaus Regional Sustainability Toolbox's regional climate action plan goals, strategies, and policies, as well as the County's general plan policies related to reduced energy use. Specifically, Proposed Program-level components would have an energy-efficient design, and utilize Modesto Irrigation District's, Turlock Irrigation District's, and Pacific Gas and Electric's increased renewable energy sources.

Program-level components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. Therefore, these program-level components would generally comply with applicable plans, policies, and regulations, including AB 32 and SB 32, and as well as the policies/actions described in the CARB's Scoping Plan. However, at this time the state is still developing strategies that will be needed to fully reach the goals of SB 32 and EO S-3-05 and new strategies may be developed that are inconsistent with the project. In addition, as described in Impact GHG-1, the GHG emissions for the entire Program would be significant and, as such, may impede

the state from reaching the goals of AB 32 and SB 32, and EO S-3-05, to reduce GHG emissions within California. Consulting with and permitting through the SJVAPCD would reduce this impact, but not necessarily to less-than-significant levels and may not be consistent in the future with new strategies. Therefore, this impact would be significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Program-level components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. However, for the reasons described above, the Proposed Program may impede the state from reaching the goals of AB 32, SB 32, and EO S-3-05 to reduce GHG emissions within California. The City would consult with and conduct permitting through the SJVAPCD to help reduce this impact but no other feasible mitigation has been identified that could further reduce this impact. Therefore, the Proposed Program's overall impact would be significant and unavoidable.

HYDROLOGY AND WATER QUALITY

Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality during Construction

Finding:

Construction of the proposed components could result in discharges of poor quality water to nearby water bodies if adequate precautions are not taken. Trenching and other ground-disturbing activities could expose loose soils that could be eroded during precipitation events. Construction equipment also would use hazardous materials (e.g., fuel and diesel) that could spill during routine use, storage, transport, or disposal, and then seep into groundwater or be washed into nearby water bodies. Use of trenchless construction methods (e.g., horizontal directional drilling [HDD]) also could present hazards to water quality, such as from frac-out accidents during boring activities below or near streams. Additionally, construction of Program components may require dewatering of excavations, particularly for those components adjacent to the Tuolumne River. Discharge of this water back to the river or other areas could result in adverse water quality effects if adequate precautions are not taken.

Many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. Compliance with this permit would minimize any impacts of Proposed Program construction activities on water quality, but construction water quality impacts of individual program components could nevertheless be significant.

Construction of the new Cannery Segmentation and primary effluent outfall pipeline crossings (Component No. OP-1.1), new primary effluent outfall pipeline (Component No. OP-1.2), and the River Trunk Realignment Project would involve trenchless pipeline construction methods. In the event of a frac-out during construction, adverse water quality effects could occur resulting in a significant impact. To ensure that the Proposed Program would not adversely impact water quality from trenchless pipeline installation methods beneath waterways, the City would implement Mitigation Measure HYD/WQ-1 (Prepare and Implement a Frac-Out Contingency

Plan for Trenchless Pipeline Installation Methods). This measure would require the City's drilling contractor to prepare and implement a frac-out contingency plan for trenchless construction methods. The plan would be designed to minimize the potential for frac-out, provide for the timely detection of frac-outs, and ensure a timely and effective response in the event a frac-out occurs (California Public Utilities Commission [CPUC] 2003). Implementation of this mitigation measure would reduce adverse water quality impacts from frac-out associated with trenchless activities to a level that less than significant. Additionally, compliance with the General Construction Permit, the Central Valley Regional Water Quality Control Board's (RWQCB's) general permit for low threat discharges to surface water, the Central Valley RWQCB's Low Risk General Order, and/or the Low Risk Waiver for activities involving discharging dewatered groundwater to land would prevent substantial adverse impacts from dewatering activities during construction of Program components. Overall, this impact would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Construction of program-level components and the River Trunk Realignment Project could result in similar water quality impacts due to trenching, pipeline installation and other ground-disturbing activities. Both the River Trunk Realignment Project and outfall pipelines (Component Nos. OP-1.1, OP-1.2, and OP-1.3) would involve trenchless construction methods beneath waterways and, in the event of a frac-out, adverse water quality impacts may occur. Compliance with NPDES permit requirements and the City's Standard Specifications, and implementation of Mitigation Measure HYD/WQ-1would minimize adverse effects on water quality. In conclusion, the Proposed Program's overall impact would be less than significant with mitigation.

<u>Mitigation Measure HYD/WQ-1: Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods</u>
Applies to River Trunk Realignment Project, New Tuolumne River Crossings (OP-1.1), and New Primary Effluent Outfall (OP-1.2)

The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling, microtunneling, pipe bursting) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include the following components/measures:

- Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions.

- Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route.

- Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below.

- Maintain necessary response equipment on-site or at a readily accessible location and in good working order.

- Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003):

  For a terrestrial frac-out:

  - Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud.

  - Based on consultation with CDFW (see below), either:

    - Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or

    - Leave the drilling mud in place to avoid potential damage from vehicles entering the area.

  - Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

  For an aquatic frac-out:

  - Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location).

  - Based on consultation with CDFW (see below), either:

    - If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column.

    - If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain).

    - If the fracture becomes excessively large, call in a spill response team to contain and clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site.

  - If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

- Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.

Impact HYD/WQ-6: Place Within a 100-year Flood Hazard Area Structures Which Would Impede or Redirect Flood Flows

Finding:

Most Program components would be either belowground or outside of the 100-year FEMA flood hazard area. At the Sutter Plant, primary treatment facilities would be demolished after the new primary treatment facilities are constructed and operating at the Jennings Plant and several facilities to remain at the Sutter Plant would be floodproofed to meet FEMA's 100-year flood protection standards. New facilities at the Jennings Plant that would be within the 100-year flood hazard zone involve modifications to existing facilities and would not be substantial enough to impede or redirect flood flows.

Of all Program components, the Benson lift station (Component No. LS #3 – Benson) would be within the mapped 100-year Federal Emergency Management Agency (FEMA) flood hazard area (i.e., 1-percent annual chance flood zone). While improvements to the Benson lift station are anticipated to occur within the facility's existing footprint (paved), it is possible that the facility may need to be relocated to a nearby parcel. As such, proposed above-ground structures at the Benson lift station could impede or redirect flood flows in the event of a 100-year flood event, a significant impact. Depending on the degree of impedance, this could result in adverse effects on nearby properties by changing the inundation area or water flow rate during a flood event. Mitigation Measure HYD/WQ-2 (Conduct Flood Flow Study for New Structures within the 100-year Flood Hazard Area Mapped by FEMA) would require the City to conduct a flood flow study to determine the degree to which the lift station could impede or redirect flood flows, or affect nearby properties, and develop mitigation measures to reduce impacts, if needed. This mitigation measure would ensure that impacts on flood flows from the proposed Benson lift station components would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measure HYD/WQ-2, as identified in the program EIR, will reduce this potentially significant effect at the Benson Lift Station (Component LS #3) to a less-than significant level.

<u>Mitigation Measure HYD/WQ-2: Conduct Flood Flow Study for Benson Lift Station</u>
Applies to lift station component LS #3 – Benson Lift Station

Prior to final project design, the City of Modesto and/or its contractor(s) shall conduct a study to ascertain the changes in flows that may be caused by the proposed Benson Lift Station structure in the event of a 100-year flood. The study shall model the change, if any, in inundation area that may be caused by restriction in flood flow passage caused by the structure. If the study determines that the proposed lift station may cause inundation of adjacent or upstream/downstream properties or structures during a 100-year flood event, the City shall develop mitigation measures to address this impact. Feasible mitigation measures may include construction of flood protection structures for potentially affected properties or reconfiguration of the proposed project facilities to reduce impedance or redirection of flows (e.g., elevating critical facilities such as electrical panels and underground pump vault doors to levels above

flood stage). Alternatively, the City may identify an alternative site for the proposed lift station that would avoid impacts on flood flows.

NOISE

Impact NOI-1: Expose Persons to Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or in the Applicable Standards of Other Agencies

Finding:

Construction activities would generally occur Monday through Friday between 7:00 a.m. and 5:00 p.m., excluding City-observed holidays. However, since the construction timeframes and schedules for each individual CIP have not yet been determined, future construction activities have potential to expose people (particularly residential receptors) to noise levels exceeding the above-listed timeframe and other standards in the local general plan and noise ordinances. This impact is considered significant. Construction of all program-level components would be required to follow applicable local laws, and the City's contractor(s) would be required to adjust the times of construction accordingly. Stanislaus County and the City of Modesto municipal codes contain some exemptions for noise from construction and maintenance activities performed by, or for, public utilities and facilities (e.g., a special exemption permit allowed by Modesto Municipal Code Section 4-9.103[b][6]). With implementation of Mitigation Measure NOI-1 (Employ Noise-Reducing Construction Practices) and Mitigation Measure NOI-2 (Limit Nighttime Construction Noise), the City's contractor(s) would be required to ensure that construction activities occur in a manner consistent with local noise standards when operating during allowable daytime hours outlined above. Therefore, this impact during the construction phase would be less than significant with mitigation.

Once construction is complete, program-level components involving pipeline replacement or rehabilitation would not generate excess noise levels. In addition, future components planned at the Jennings Plant would not expose people to noise levels in excess of local standards. However, operation of proposed lift station components and Sutter Plant components would generate ongoing noise levels in areas that could expose people to noise levels in excess of established noise levels without mitigation. Some of the Proposed Program's lift station components would be located in residential areas of Modesto. Currently, the level of design detail for proposed lift station and Sutter Plant facility components is not sufficient to conduct a quantitative noise analysis; thus, operational noise impacts for these components are conservatively considered to be significant. For the Sutter Plant components, Mitigation Measure NOI-3 (Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components) requires a detailed noise study to determine whether appropriate measures have been implemented to reduce noise levels to less than a 10-decibel (dB) increase in residential areas. If the project-level noise analysis shows that relevant thresholds (10-dB increase) would be exceeded at the Sutter Plant, Mitigation Measure NOI-4 (Employ Noise-Reducing Methods during Operations) would be implemented for the Sutter Plant. For lift station components, Mitigation Measure NOI-4 would also require implementation of noise-reducing methods so that noise from lift stations does not exceed City or County noise-level standards at adjacent residences. In conclusion, implementation of Mitigation Measures NOI-1, NOI-2, NOI-3, and NOI-4 would reduce noise levels for construction and operation of the WWMP program-level components. This impact would be less than significant with mitigation.

While construction timeframes have been generally established for the River Trunk Realignment Project, the possibility exists that project construction activities could occur outside the construction hour timeframe due to weather constraints and other unexpected delays that sometimes arise during construction projects. Thus, this impact is considered significant. Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce this impact for the River Trunk Realignment Project to less than significant with mitigation during the construction phase.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Considering the WWMP components as a whole, construction-related noise impacts would be reduced with implementation of Mitigation Measures NOI-1 and NOI-2. Design details for some program-level components (e.g., new/upgraded facilities at the Sutter Plant) have not yet been developed such that a quantitative operational noise analysis can be conducted at this time. Implementation of Mitigation Measure NOI-3 would ensure that a detailed project-level noise analysis is completed for future Sutter Plant components. Mitigation Measure NOI-4 would ensure that noise-reducing design measures are incorporated into lift station designs and, if necessary, the Sutter Plant's design. In conclusion, implementation of these mitigation measures would reduce noise levels associated with the Proposed Program's construction and operation, and noise levels would not be in excess of standards established in the relevant noise ordinances and policies. Therefore, this impact would be less than significant with mitigation.

Mitigation Measure NOI-1: Employ Noise-Reducing Construction and Maintenance Practices
Applies to all Program-level components and the River Trunk Realignment Project

The following measures will be implemented by the City or its contractor(s) to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected:

- Locate stationary equipment as far as practical from noise-sensitive land uses;
- Use electrified or otherwise quieter equipment when practical;
- Use sound-control devices on equipment that are more effective than devices originally provided on the equipment;
- Use noise-reducing enclosures around noise-generating equipment; and
- Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission.

When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.

Mitigation Measure NOI-2: Limit Nighttime Construction Noise
Applies to all Program-level components and the River Trunk Realignment Project

When feasible, the City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays unless a special exemption permit allowed by Modesto Municipal Code Section 4-9.103(b)(6) is obtained.

Mitigation Measure NOI-3: Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components
Applies to proposed Sutter Plant components

The City or its contractor(s) shall prepare a project-level noise analysis for operation of proposed Sutter Plant components. The detailed noise study should show that appropriate mitigation measures will be implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the analysis demonstrates that significant operational noise impacts are likely to occur, Mitigation Measure NOI-4 shall be implemented. Alternately, the City can assume that the impacts would be significant and implement Mitigation Measure NOI-4 without first conducting a noise study under Mitigation Measure NOI-3.

Mitigation Measure NOI-4: Employ Noise-Reducing Methods During Operations
Applies to lift station components and potentially Sutter Plant components

The City or its contractor(s) shall implement noise-reducing methods so that noise from lift stations does not exceed City or County noise-level standards at adjacent residences. This measure shall also be implemented to achieve City or County noise-level standards for Sutter Plant components if deemed necessary per Mitigation Measure NOI-3. Example measures may include, but are not limited to, the following:

- Locate stationary equipment as far as practical from noise-sensitive land uses;
- Use electrified or otherwise quieter equipment when practical;
- Use sound-control devices on equipment that are more effective than devices originally provided on the equipment;
- Install permanent barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (terrain and structures) to block sound transmission;
- Limit operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas; and
- Use sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available.

Impact NOI-2: Expose Persons to Excessive Groundborne Vibration or Groundborne Noise Levels

Finding:

Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receptor. Impact construction activities, including the use of pile drivers and similar equipment, may be perceived hundreds of feet away and can cause damage to susceptible buildings located over 100 feet away. Multiple components of the River Trunk Realignment Project would involve the use of pile drivers and loaded trucks, both of which are substantial sources of construction-related vibration. Such equipment, particularly loaded trucks, would likely be used during construction of program-level components, which would involve travel along residential roads in Modesto.

Multiple sensitive receptors (primarily residences) along the River Trunk Realignment Project route are located within the calculated vibration perception and annoyance threshold distances. As a result, vibration effects on sensitive receptors would be significant. Given the short duration of construction in any given location, implementation of Mitigation Measure NOI-5 (Implement Vibration Reduction Measures) would reduce construction-related impacts from vibration to a less-than-significant level.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Given the temporary nature of vibration resulting from construction activities and the implementation of Mitigation Measures NOI-5, this impact would be less than significant with mitigation.

Mitigation Measure NOI-5: Implement Vibration Reduction Measures.
Applies to River Trunk Realignment Project and other Program-level components

The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:

- Ensure proper tuning of vibration-causing equipment.
- Use vibration damping devices to the extent feasible.
- Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings.
- Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 A-weighted decibels (dBA). External

jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.

- Use electric stationary equipment (e.g., generators) where feasible.

- Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.

Impact NOI-3: Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program

Finding:

Aside from components involving new, rehabilitated or replaced pipelines, operation of other program-level components would result in permanent sources of noise that could be substantial. This would include operation of large industrial equipment associated with the wastewater treatment plants that may generate high noise levels without implementation of proper noise mitigation measures such as sound attenuation enclosures and other barriers. Future noise levels of the Sutter Plant's wastewater facilities would be significant. Mitigation Measure NOI-3 requires Sutter Plant components to undergo a detailed noise study to show that appropriate measures have been implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the project-level noise analysis shows that relevant thresholds (10-dB increase) would be exceeded at the Sutter Plant, Mitigation Measure NOI-4 would be implemented for the Sutter Plant. Mitigation Measure NOI-4 and its noise-reducing measures would ensure that the Proposed Program's operations comply with applicable noise standards and would not cause the overall exterior noise level to exceed the "normally acceptable" noise standard compatible with exterior land uses or result in an increase of ambient noise levels by 10 dBA. Thus, the Proposed Program's operation-related increase in ambient noise would not be substantial. This impact would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Some program-level components involving operation of large industrial equipment at the Sutter Plant's wastewater treatment facilities would result in a permanent increase in ambient noise levels. Implementation of Mitigation Measure NOI-3 and, if necessary, Mitigation Measure NOI-4 would ensure that operation of new and upgraded facilities would not result in substantial permanent increases in ambient noise levels. In conclusion, the Proposed Program's effects on ambient noise levels would be less than significant with mitigation.

Impact NOI-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program

Finding:

Temporary and periodic increases in noise levels associated with the Proposed Program's construction activities, periodic maintenance activities, and associated periodic truck traffic would increase ambient noise levels above the ambient noise levels existing without the Proposed Program. However, implementation of Mitigation Measures NOI-1 and NOI-2, which include several construction noise-reducing measures and limit nighttime construction, would reduce short-term noise impacts to a level that is less than significant with mitigation.

The River Trunk Realignment Project includes the construction of two pump stations and the installation of roughly four miles of pipeline, much of which would pass through residential areas of Modesto. Construction activities would likely exceed noise thresholds at individual sensitive receptors along the pipeline route. For several components of the River Trunk Realignment Project, construction activities would raise ambient noise levels above 90 dB, the Federal Transit Administration (FTA) significance threshold at residential and noise-sensitive land uses, for the nearest residences. Approximately 156 residential land parcels would be exposed to noise levels exceeding the 90 dBA threshold. These noise levels would be disruptive to nearby sensitive receptors because noise levels would substantially exceed existing ambient noise levels, which generally range from 67 to 70 dBA along Tuolumne Boulevard (as shown in the City's General Plan EIR [City of Modesto 2019a]) and likely be at similar noise levels within other areas of the River Trunk Realignment Project area depending on the proximity to traffic-related noise or other noise sources. This impact would be significant.

Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce the noise levels during construction to the extent feasible. However, noise impacts may still exist and exceed the 90 dBA threshold for sensitive receptors located near the River Trunk Realignment Project; therefore the impact would remain significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce temporary construction noise effects associated with program-level components and the River Trunk project. However, these measures may not fully reduce construction noise impacts for sensitive receptors near the River Trunk alignment. Thus, even with implementation of Mitigation Measures NOI-1 and NOI-2, the Proposed Program's temporary impacts related to increases in ambient noise levels would be significant and unavoidable.

<u>POPULATION AND HOUSING</u>

Impact PH-3: Long-term Inducement of Unplanned Substantial Population Growth, Both Directly and Indirectly

Finding:

The Proposed Program includes upgrading the City's collection and treatment systems to provide improved wastewater service to the City of Modesto, north Ceres, the community of Empire, and other areas serviced by the City. The Program would not directly induce growth as

it does not entail construction of new housing. However, by upgrading the City's collection and wastewater treatment systems to provide more wastewater service, the Proposed Program would remove an obstacle to planned development that would support population growth. Although this growth would be consistent with projected growth evaluated in adopted general plans including the recently amended *City of Modesto Urban Area General Plan* (2019b), such growth could not occur without the proposed wastewater collection system and treatment components addressed in this EIR.

New growth facilitated by the Proposed Program would result in associated physical environmental impacts; this could include aesthetic effects, conversion of farmland, air pollutant and greenhouse gas emissions, conversion of habitat, impacts on cultural or tribal cultural resources, increased point source or nonpoint source water pollution, use and possible releases of hazardous materials, noise, traffic, additional demands for public services and utilities such as police protection, fire protection, schools, parks, wastewater treatment, solid waste disposal, and energy.

Growth-inducing and secondary impacts are addressed by the policies of general plans of Stanislaus County, Ceres, and Modesto. These policies ensure that development within the planned growth areas occur as demand arises and services are available, and that utilities are sized appropriately to serve such development. The general plans mitigate for impacts through advanced planning and the implementation of growth management strategies, the provision of adequate public services and utilities such as wastewater collection and treatment, and the protection of open space and habitat areas.

In conclusion, proposed improvements to the City's wastewater collection and treatment system would remove an obstacle to urban development and population growth within the study area. This development would occur in accordance with general plans and thus would not result in unplanned or disorderly growth. Nevertheless, the Program would remain growth-inducing and the impacts of growth inducement, and the secondary environmental effects of induced growth, are considered significant.

The policies contained in general plans, as well as the mitigation measures contained in the WWMP EIR, would reduce the secondary effects of growth to a level of insignificance. Individual development improvements would also be required to comply with CEQA, which may result in additional mitigation for growth and its effects. For these reasons, this impact is considered to be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The policies contained in general plans, as well as the mitigation measures described throughout the WWMP EIR, would reduce the secondary effects of growth to a level of insignificance. Individual development improvements would also be required to comply with CEQA, which may result in additional mitigation for growth and its effects. For these reasons, this impact is considered to be less than significant with mitigation.

CUMULATIVE IMPACTS

Impact CUM-1: Cumulative Impacts on Aesthetics

Finding:

Several cumulative projects identified in the EIR involve new development throughout Modesto and the County in the vicinity of planned Program components. Additionally, the Proposed Program would support planned growth in the City's service area which would involve conversion of agricultural lands. Cumulative impacts on aesthetics and visual resources would be considered significant and the Program's contribution, if left unmitigated, may be considerable.

The proposed components would not substantially affect existing visual quality or characteristics in Modesto or the County. New and rehabilitated sewer pipelines would be underground and therefore would not affect visual resources, while new lift and pump stations would be similar in visual character to existing lift and pump stations. Construction of Program components could adversely affect the visual quality and visual character of a particular site in the short-term but Mitigation Measure AES-1 would reduce this impact by requiring that construction staging areas be located away from public areas. Other projects in the Modesto area, particularly new development projects and future water infrastructure projects, would alter the visual landscape in the study area. However, once constructed, given that most proposed CIPs would not be visible and the relatively small scale of the proposed lift and pump station components, and with the above-referenced mitigation measure, the Proposed Program would not make a considerable contribution to any significant cumulative impacts pertaining to aesthetics and visual resources. Therefore, the Program's contribution to this cumulative impact would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measure AES-1, identified in the program EIR, would reduce the Proposed Program's cumulative impacts on visual resources and ensure that the Proposed Program would not make a considerable contribution to any significant cumulative impacts regarding aesthetics and visual resources. This impact would be less than significant with mitigation.

Impact CUM-2: Cumulative Impacts on Agriculture

Finding:

Several cumulative projects identified in Table 18-3 of the EIR could result in conversion of agricultural land, including Farmland, to non-agricultural uses. Additionally, buildout of the City of Modesto, Stanislaus County, and City of Ceres General Plans would convert agricultural land to non-agricultural use. The Proposed Program would result in the conversion of approximately 18.6 acres of Farmland to non-agricultural use associated with development of the sludge cake drying beds.

Given the importance of agriculture to Stanislaus County and that loss of Farmland has been occurring in recent years and is an ongoing concern with increasing urban development in the

region, the loss of Farmland is a significant cumulative impact, and the Proposed Program's contribution would be considerable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

LAFCO's Agricultural Preservation Policy (2015) and Policy 2.15 in the *Stanislaus County General Plan*, which require that agricultural land converted to residential use be replaced at a 1:1 ratio, do not apply to the Proposed Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing conservation easements, that mitigation program is designed to address loss of Farmland resulting from residential development and not public infrastructure projects such as the Proposed Program. Furthermore, the City has determined that the cost of establishing a conservation easement would substantially increase the cost of the Proposed Program and burden on ratepayers which would not be acceptable and purchasing an agricultural easement over off-site agricultural land would not ultimately avoid or reduce the impact of converting Farmland. Additional mitigation (e.g., restoration of Farmland) is not considered feasible. Based on this, no feasible mitigation measures have been identified. This impact of the Proposed Program would be significant and unavoidable at the project level, and a considerable contribution to significant cumulative impacts related to loss of Farmland. Therefore, the Program's contribution to this cumulative impact would be significant and unavoidable.

Impact CUM-3: Cumulative Impacts on Biological Resources

Finding:

Construction projects in the Program area, such as those listed in Table 18-3 of the EIR, as well as elsewhere in Stanislaus County would have the potential to impact biological resources. Ground-disturbing construction activities could directly injure or kill wildlife, while development of new areas may result in permanent loss of habitat. Given that many of the special-status species known to occur in Stanislaus County are found in riparian areas, this may be particularly true for projects that are located along the Tuolumne River, Dry Creek, or the San Joaquin River. This is considered a cumulatively significant impact.

The Proposed Program would involve various construction activities that could impact wildlife, plants and fish, which, left unmitigated, would be considered a considerable contribution to this cumulative impact. However, implementation of Mitigation Measures BIO-1 through BIO-15 would avoid and/or minimize impacts. In addition, compliance with the NPDES General Construction Permit, the City of Modesto's Standard Specifications related to erosion control, and implementing Mitigation Measure HYD/WQ-1 (Prepare and Implement a frac-out Contingency Plan for Trenchless Pipeline Installation Methods) would serve to avoid and minimize impacts on water quality that could affect fish and aquatic life. Considering that the Proposed Program would not convert large of areas of sensitive habitat and would avoid or minimize temporary effects to the maximum extent practicable with implementation of the above-mentioned mitigation measures, its contribution to cumulative impacts on biological resources would not be considerable. Therefore, this impact would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Implementation of Mitigation Measures BIO-1 through BIO-15 would avoid and/or minimize impacts. In addition, compliance with the NPDES General Construction Permit, the City of Modesto's Standard Specifications related to erosion control, and implementing Mitigation Measure HYD/WQ-1 regarding a frac-out contingency plan for trenchless pipeline installation methods would serve to avoid and minimize impacts on water quality that could affect fish and aquatic life. Considering that the Proposed Program would not convert large of areas of sensitive habitat and would avoid or minimize temporary effects to the maximum extent practicable with implementation of the above-mentioned mitigation measures, its contribution to cumulative impacts on biological resources would not be considerable and less than significant with mitigation.

Impact CUM-4: Cumulative Impacts on Cultural, Paleontological Resources, and Tribal Cultural Resources

Finding:

It is possible that construction of proposed components in the Program area could impact buried cultural or paleontological resources. Any project that would disturb the ground surface would have the potential to disturb buried cultural resources (including TCRs). Therefore, many of the cumulative projects, as well as currently unknown projects that may be constructed in accordance with the City of Modesto, City of Ceres, and Stanislaus County General Plans, could impact buried cultural resources (including TCRs). Such projects also could affect above-ground historical structures depending on the nature of the project and location. For these reasons, cumulative impacts on cultural, paleontological, and tribal cultural resources are considered significant.

If the Proposed Program were to impact resources or groups of resources, which are also being impacted by other projects, the Proposed Program's contribution to cumulative impacts, if left unmitigated, would be potentially considerable. However, the Proposed Program would comply with various cultural resources policies in the Modesto Urban Area General Plan and implement Mitigation Measure CR-1 to avoid and/or minimize impacts to cultural, paleontological, and tribal cultural resources. This would include requirements to conduct cultural resources awareness trainings for construction workers prior to commencing ground-disturbing activities.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Compliance with cultural resources policies in the Modesto Urban Area General Plan and with implementation of Mitigation Measure CR-1, the Proposed Program would not substantially affect cultural, paleontological, or tribal cultural resources and would not contribute considerably to any cumulative impacts on such resources in the Modesto area or greater Stanislaus County. Therefore, this impact would be less than significant with mitigation.

Impact CUM-5: Cumulative Impacts on Hydrology and Water Quality

Finding:

Cumulative projects could adversely affect hydrology and water quality (e.g., via stormwater discharges from construction sites). In particular, projects located near the Tuolumne River,

Dry Creek, or San Joaquin River would have potential to affect water quality in these water courses, which is already substantially compromised. The existing impairments to water quality in the region are considered to be a cumulatively significant impact. The Proposed Program, if left unmitigated, would result in discharges to impaired water bodies and therefore would make a considerable contribution to this impact.

The Proposed Program's impacts to hydrology and water quality would be avoided and/or minimized through compliance with all local, state, and federal regulations concerning hazardous materials; the NPDES General Construction Permit; and the City's Standard Specifications related to erosion control, and implementation of Mitigation Measure HYD/WQ-1, which would require preparation and implementation of a frac-out contingency plan for trenchless pipeline installation methods. Compliance with applicable regulations and Mitigation Measure HYD/WQ-1 would avoid or reduce any such discharges to minimal levels.

Operation of the Proposed Program would include tertiary-treated effluent discharges to the San Joaquin River and land application of secondary-treated wastewater, which could directly or indirectly contribute to the existing cumulative water quality impacts of the San Joaquin River and downstream water bodies. However, operation of the City's wastewater treatment system, particularly the Jennings Plant, under the Proposed Program would remove additional pollutants and/or suspended solids from the various discharges compared to the existing treatment and discharge operations. With these improved treatment processes, the Proposed Program would not have a substantial contribution to the existing cumulative water quality impacts of the San Joaquin River and downstream water bodies, and would likely have a beneficial contribution.

Several of the cumulative projects could add impervious surface area to the region or require additional use of groundwater supplies. The Proposed Program's new primary treatment and solids handling facilities at the Jennings Plant would increase impervious surface area by approximately 27 acres and potentially contribute to a reduction in groundwater recharge or storage in the underlying aquifers. However, this new impervious surface area, concentrated largely within or near urban areas, would not substantially affect groundwater recharge because the majority of groundwater recharge within the Modesto and Turlock Subbasins occurs via percolation of irrigation water in the vast agricultural lands in the area.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

With implementation of Mitigation Measure HYD/WQ-1, the Proposed Program would not contribute considerably to cumulative impacts on hydrology and water quality. This impact would be less than significant with mitigation.

Impact CUM-6: Cumulative Impacts related to Noise and Vibration

Finding:

Cumulative projects could add to, or exacerbate, noise generated by construction and/or operation of the proposed components. Additionally, projects that may be constructed in the future in accordance with applicable jurisdiction's general plans could be located in immediate proximity to the proposed CIP projects. Because the schedule for the cumulative projects and that for specific CIP projects under the Proposed Program (other than the River Trunk

Realignment Project) is unknown and/or is subject to change, it is conservatively assumed that construction of CIPs may overlap with other cumulative projects in the vicinity, potentially producing significant cumulative noise effects.

With respect to cumulative noise effects associated with the River Trunk Realignment Project, temporary construction noise associated with operating equipment and periodic truck traffic would likely exceed FTA noise thresholds (90 dB) at individual sensitive receptors along the pipeline alignment even after implementation of Mitigation Measures NOI-1 and NOI-2, resulting in a significant and unavoidable impact. The Tuolumne River Regional Park (TRRP) is located close to the River Trunk Realignment Project. The City is currently constructing recreational trails on the Gateway Parcel, which would establish a connection to the downtown corridor and existing pathways along the Tuolumne River. Because it is possible that construction of the River Trunk Project could overlap with construction of the TRRP, temporary or periodic increases in ambient noise levels caused by the River Trunk Project could be exacerbated by construction and operation activities for such other projects, contributing considerably to significant cumulative noise impacts. Implementation of Mitigation Measures NOI-1 through NOI-5 would help reduce construction and operation noise impacts associated with the Proposed Program. No feasible mitigation beyond these mitigation measures exists to reduce this impact and the Proposed Program may still result in an exceedance of FTA noise thresholds. Therefore, this impact is considered to be significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

No feasible mitigation beyond Mitigation Measures NOI-1 through NOI-5 exists to reduce this impact; therefore, this impact is considered to be significant and unavoidable.

B. FINDINGS SUPPORTING REJECTION OF ALTERNATIVES

The final program EIR discussed and evaluated a range of alternatives as required by CEQA Guidelines section 15126.6. In order to reject an alternative, the City must find:

> Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the [Program] EIR.

Following are the findings supporting rejection of each of the alternatives.

Alternative 1 – No Program Alternative

CEQA requires analysis of the No Project Alternative. Under this alternative, no new wastewater infrastructure would be constructed or upgraded. Operation of the City's collection system and treatment facilities and wastewater treatment facilities would continue similar to existing conditions. Existing sewer mains, trunk lines, and lift stations that are currently under capacity would continue functioning but capacity issues may increase over time.

Finding for rejection:

> Specific legal and social considerations make infeasible the alternative identified in the program EIR. The No Program Alternative would not address deficiencies in the City's wastewater collection and treatment systems, which could result in sanitary sewer overflows. This alternative also would not meet any of the City's objectives to plan for and provide sewer infrastructure in a timely and cost-effective manner to serve new and existing development; repair and replace aging wastewater infrastructure; ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's sphere of influence (SOI); or plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

Supporting Evidence:

> Under Alternative 1, the Sutter Plant facilities would remain in the 100-year floodplain, the facilities of which could be subject to damage during a 100-year flood event. It also may impede attainment of the City's land use plans and policies which rely upon wastewater service capacity that would be provided by the Proposed Program. This alternative would also not meet any of the City's objectives related to providing sewer infrastructure for new and existing development, replacing aging wastewater infrastructure, ensuring adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's SOI, or providing such facilities to reliably meet the changing regulatory requirements . While this alternative would reduce or avoid most of the significant impacts of the Proposed Program, for the reasons described above, this alternative is considered to be infeasible.

Alternative 2 – Deferred Implementation Alternative

Under the Deferred Implementation Alternative, the schedule for construction of some program-level WWMP components would be deferred by 5 years, compared to the schedule for implementation of the Proposed Program. The City would revisit the list of CIPs and prioritize those that should be constructed in the near-term and determine which could be delayed by up to 5 years. New wastewater collection and treatment infrastructure would be constructed or upgraded as indicated for the Proposed Program, but some CIPs would be implemented at a later date. Construction or upgrades of pump stations, lift stations, sewer pipelines, and wastewater treatment facilities would continue, but at a slower pace. Maintenance of existing collection and wastewater treatment facilities would continue.

Finding for rejection:

Specific legal and social considerations make infeasible the alternative identified in the program EIR. This alternative would delay the City's ability to meet Program objectives and thus would not fully meet objectives aimed to provide sewer infrastructure in a timely and cost-effective manner to serve new and existing development and provide adequate wastewater infrastructures and services to serve new growth within the General Plan and City's SOI.

Supporting Evidence:

Although some new wastewater collection and treatment infrastructure would be constructed and upgraded, construction or upgrades of pump stations, lift stations, sewer pipelines, and wastewater treatment facilities would take place at a slower pace. Some shortfalls in the City's collection system and treatment capacity or pressure flows may result from the delay in implementation of identified CIPs. In addition, development in the City's sewer service area may be delayed to the extent that construction of necessary infrastructure to support such development would be delayed under this alternative. This alternative would delay significant impacts of the Proposed Program on air quality, GHG emissions, and noise but would not avoid or substantially lessen any significant and unavoidable impacts to a degree that would reduce them to a less-than-significant level. For these reasons, this alternative is considered to be infeasible.

<u>Alternative 3: Primary Treatment and Solids Handling Facilities to the North of Jennings Plant Alternative</u>

This alternative was evaluated in the City's Wastewater Treatment Master Plan (Carollo Engineers 2016) and entails purchasing approximately 50 acres of land to the north of the Jennings Plant. Instead of constructing the new primary treatment facilities east of the BNR/tertiary treatment facilities, as proposed under the Proposed Program, these facilities would be constructed on purchased land to the north of the Jennings Plant along the alignment of the two existing outfall pipelines.

Compared to the Proposed Program, this alternative would use a less complex yard piping arrangement because the new primary treatment and solids handling facilities would be sited adjacent to the existing outfall pipelines and could more directly tie into the secondary treatment facilities. All other WWMP components, including collection system CIPs and CIPs planned at the Sutter Plant, would be constructed under this alternative. This alternative would meet all of the Program objectives.

Finding for rejection:

Specific legal and social considerations make infeasible the alternative identified in the program EIR. Under Alternative 3, the construction timeframe for all collection system components would be the same as for the Proposed Program. The alternative would require additional property acquisition and approvals by outside jurisdictions, potentially delaying the start of construction compared to the Proposed Program. In addition, Alternative 3 would result in additional significant and unavoidable impacts related to agricultural conversion.

Supporting Evidence:

The ability of the City to obtain the necessary approvals, purchase the property, negotiate with the Turlock Irrigation District (TID) regarding potential de-annexation into the TID irrigation service area and annexation into the Modesto Irrigation District service area and City SOI (potentially requiring LAFCO approval), and acquire the necessary encroachment agreements and/or right-of-way is central to the feasibility of this alternative.

While this alternative is potentially feasible, it would not substantially reduce some of the significant impacts associated with the Proposed Program. This alternative would involve development of primary treatment and solids handling facilities on agricultural land. This land is designated as Important Farmland; therefore, this alternative would result in a larger amount of permanent loss of Farmland than under the Proposed Program, and mitigation would be insufficient to reduce the impact to a less-than-significant level. In addition, Alternative 3 would not avoid or substantially lessen significant and unavoidable impacts on air quality, GHG emissions, or noise to a degree that would reduce them to a less-than-significant level.

Furthermore, obtaining the necessary property, easements, agreements, and permits to implement this alternative would potentially delay program-level components. Such delay is unacceptable when the specific land use considerations and existing system deficiencies are considered. For these reasons, this alternative is considered to be infeasible.

Alternative 4: River Trunk Realignment Project Design Alternative 4A

Alternative 4 (referred to as Alternative 4A in the Preliminary Design Report [Carollo Engineers 2015]) would follow largely the same alignment as the proposed River Trunk Realignment Project, but would not involve construction of the Shackelford Pump Station. Rather, the existing pipeline that would otherwise tie into the Shackelford Pump Station under the Proposed Program would tie into existing sewer lines that cross the Tuolumne River. Additionally, Alternative 4 would include rehabilitation of the Sutter Trunk within Sutter Avenue, and also would involve constructing the River Trunk Pump Station at a slightly different location than under the Proposed Program, between Highway 99 and 7th Street.

Compared to the River Trunk Realignment Project, this alternative would involve less overall construction by rehabilitating the Sutter Trunk instead of constructing the Shackelford Pump Station. The River Trunk Pump Station would also be constructed in a slightly different location. This alternative would meet most of the Program objectives.

Finding for rejection:

Specific economic and technological considerations make infeasible the alternative identified in the program EIR. Not constructing the Shackelford Pump Station, rehabilitating the Sutter Plant, and constructing the River Trunk Pump Station at an alternate location would reduce impacts on various environmental resources, but not to a substantial degree.

Supporting Evidence:

Although Alternative 4 would achieve most of the Program objectives and would reduce one or more significant environmental impacts, none of the significant and unavoidable impacts of the Proposed Program would be avoided or substantially lessened to a degree that would reduce them to a less-than-significant level. In addition, based on Carollo's alternatives evaluation, this alternative ranked lower from a reliability/redundancy standpoint and greater cost than the River Trunk Realignment Project as described under the Proposed Program (Carollo Engineers 2015). Although this alternative is potentially feasible, for these reasons, this alternative was rejected for economic and technological reasons and thus considered to be infeasible.

Alternative 5: River Trunk Realignment Project Design Alternative 1

This alternative was based on the recommendations documented in the 2007 Wastewater Master Plan. The alternative would replace the Beard Brook Siphon with an 1,800-linear-foot, triple barrel inverted siphon. Capacity deficiencies in the River Trunk would be mitigated by constructing a peak-flow diversion structure that diverts flows to the Cannery Segregation Line (CSL) during wet weather

events, such that capacity in the CSL can be used to convey peak domestic wastewater flows. A second diversion structure would be constructed upstream of the Sutter Plant to divert the flows back to the River Trunk for primary treatment. The CSL would be flushed after the diversions multiple times prior to returning to normal canning season operation. Additionally, the alternative would mitigate capacity deficiencies in the Sutter Trunk by replacing the existing sewer with a new 24-inch diameter gravity sewer. The existing River Trunk also would be rehabilitated to correct its deteriorating condition.

Finding for rejection:

Specific legal, technological, and social considerations make infeasible the alternative identified in the program EIR. The rehabilitated River Trunk line under Alternative 5 would continue to be subject to certain vulnerabilities including erosion due to its adjacency to the Tuolumne River which could result in adverse water quality effects. Although Alternative 5 would reduce one or more significant environmental impacts, none of the significant and unavoidable impacts of the River Trunk Realignment Project would be avoided or substantially lessened to a degree that would reduce them to a less-than-significant level.

Supporting Evidence:

Alternative 5 would meet many of the Program objectives by addressing existing capacity issues and repairing aging wastewater infrastructure; however, it was identified as not meeting many of the important design goals (Carollo Engineers 2015). Specifically, the alternative may create treatment plant impacts from comingled flows, may create or fail to address CSL peak-flow limitations, and would not correct existing problems with operations and maintenance access and vulnerability issues of the River Trunk and CSL (e.g., erosion) by being located along the Tuolumne River.

While this alternative is potentially feasible, it would not substantially reduce some of the significant impacts associated with the River Trunk Realignment Project. In addition, Alternative 5 would not avoid or substantially lessen significant and unavoidable impacts on air quality, GHG emissions, or noise to a degree that would reduce them to a less-than-significant level. For these reasons, this alternative is considered to be infeasible.

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EXHIBIT "B"

STATEMENT OF OVERRIDING CONSIDERATIONS

STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to Public Resources Code Section 21081 and Section 15093 of the State CEQA Guidelines (14 California Code of Regulations 15000, et seq.), the City of Modesto cannot approve a project for which an Environmental Impact Report (EIR) has been certified which identifies significant effects on the environment unless it adopts a statement of overriding considerations that finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh its significant effects on the environment.

A. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following significant impacts have been identified for which no mitigation is available that would reduce the impact to a less-than-significant level:

- Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use
- Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan
- Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-attainment Under an Applicable Federal or State Ambient Air Quality Standard
- Impact GHG-1: Potential to Generate a Substantial Amount of GHG Emissions
- Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs
- Impact NOI-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program
- Impact CUM-2: Cumulative Impacts on Agriculture
- Impact CUM-6: Cumulative Impacts related to Noise and Vibration

B. STATEMENT OF OVERRIDING CONSIDERATIONS

The City Council has determined that the Wastewater Master Plan Program EIR should be approved and that any remaining unmitigated environmental impacts attributable to the Proposed Program are outweighed by the following specific benefits. The Proposed Program will:

i. Meet existing and future wastewater treatment demands for the City and its customers in unincorporated areas of Stanislaus County through 2035, and meet existing and future wastewater collection service needs for the City and its customers in outlying service areas through 2057;

ii. Implement the City's economic goals and General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development;

iii. Repair and replace aging wastewater infrastructure;

iv. Ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's Sphere of Influence, and planned wastewater demands; and

v. Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

City of Modesto

Wastewater Master Plan

Final Environmental Impact Report

Prepared for:

City of Modesto
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353

Prepared by:

Horizon Water and Environment, LLC
266 Grand Avenue, Suite 210
Oakland, California 94610

October 2019

For accessibility assistance with this document, please contact the City of Modesto at 209-577-5402 or through the California Relay Service by dialing 711.

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Acronyms and Abbreviations

B	
Basin Plan	Water Quality Control Plan
BMP	best management practice
C	
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Modesto
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
D	
DEIR	draft environmental impact report
FEIR	Final Environmental Impact Report
J	
Jennings Plant	Jennings Road Secondary and Tertiary Treatment Plant
L	
LID	low-impact development
M	
MEP	maximum extent practicable
MS4	municipal separate storm sewer system
N	
NOA	Notice of Availability
NOD	Notice of Determination
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
O	
OAL	Office of Administrative Law
OPR	Governor's Office of Planning and Research
P	
Proposed Program	2016 Wastewater Master Plan
R	
RWQCB	Regional Water Quality Control Board
S	
SOI	sphere of influence
Sutter Plant	Sutter Avenue Primary Treatment Plant
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board

U	
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
W	
WDR	waste discharge requirement
WWMP	2016 Wastewater Master Plan

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Chapter 1
INTRODUCTION

The City of Modesto (City) as the lead agency has prepared this Final Environmental Impact Report (FEIR) to provide other responsible agencies and the public with information about the potential environmental effects of the proposed Wastewater Master Plan (WWMP or Proposed Program). The document has been prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). Together with the Draft Environmental Impact Report (DEIR), this document constitutes the FEIR for the Proposed Program.

1.1 FEIR Context

The Proposed Program updates and revises the City's 2007 Wastewater Master Plan. The City periodically reevaluates its wastewater system through development of a wastewater system capital improvement program (CIP), which addresses existing deficiencies and replacement needs. The Proposed Program involves numerous improvements to the City's sewer collection system and upgrades to the primary treatment (Sutter Plant) and secondary and tertiary treatment facilities (Jennings Plant). The Proposed Program is intended to accommodate the wastewater collection service needs of the population and land uses described in the City's Urban Area General Plan (General Plan) and community plans of service areas outlying the City's urban area or sphere of influence, and accounts for sphere of influence (SOI) boundary adjustments, zoning revisions, updated growth projections, and sewer demand information through 2057. The Proposed Program would also accommodate wastewater treatment needs for those same customers through 2035. The Proposed Program was evaluated in a DEIR in accordance with CEQA and the State CEQA Guidelines and was circulated for a 45-day public review period.

CEQA requires the lead agency to prepare an FEIR, addressing all substantive comments received on the DEIR, before approving a project. The FEIR must include a list of all individuals, organizations, and agencies that provided comments on the DEIR, and must contain copies of all comments received during the public review period along with the lead agency's responses.

1.2 Summary of Public Participation

1.2.1 Notice of Preparation and Public Scoping

Scoping refers to the public outreach process used under CEQA to determine the coverage and content of an environmental impact report (EIR). The scoping comment period offers an important early opportunity for public review and comment on the focus of the CEQA analysis. The scoping process for an EIR is initiated by publication of the Notice of Preparation (NOP), as required by CEQA, which provides formal notice to the public and to interested agencies and organizations that a DEIR is in preparation. Additionally, the NOP informs responsible agencies

and the public whether the proposed project could have significant effects on the environment and to solicit their comments so that any concerns raised could be considered during the preparation of the DEIR. During the scoping period, agencies and the public are invited to comment on the project, the approach to environmental analysis, and any issues of concern to be discussed in the DEIR. Scoping also can assist the lead agency with identification of project alternatives and mitigation measures. CEQA does not require public meetings during the scoping phase.

In accordance with State CEQA Guidelines Sections 15082(a), 15103, and 15375, the City circulated an NOP for the Proposed Program beginning on February 28, 2017, and ending on March 30, 2017. The NOP was circulated to the public; local, state, and federal agencies; and other interested parties. A copy of the NOP was included in Appendix A, *Scoping Summary,* of the DEIR. Comment letters received in response to the NOP were also compiled in the scoping summary and were considered during preparation of the DEIR.

1.2.2 Notice of Availability of the DEIR and Public Review

Upon completion of the DEIR, the City issued a Notice of Availability (NOA), providing agencies and the public with formal notification that the document was available for review. The notice was sent to the Governor's Office of Planning and Research (OPR) State Clearinghouse, responsible and trustee agencies, persons and organizations that requested a copy, and the Stanislaus County Clerk's office for posting. A notice was also published in the *Modesto Bee*.

These actions triggered a 45-day public review period, which began on June 12, 2019, and concluded on July 27, 2019. A notice advertising the availability of the DEIR and the location and time of the DEIR public meeting was published in the *Modesto Bee* on June 12, 2019.

During the review period for the DEIR, all documents related to the Proposed Program were available for review on City business days, between the hours of 8 a.m. and 5 p.m., at the following location:

City of Modesto Utilities Department
1010 10th Street, Suite 4600
Modesto, CA 95353

In addition, an electronic copy of the DEIR was available for review and download from the City's website (modestogov.com/884/Wastewater-Plans-Reports), and CD copies of the DEIR were also available by contacting Jim Alves, Associate Civil Engineer at City of Modesto. Copies were also available for review at the Stanislaus County Library.

1.2.3 Comments on the DEIR

Written comments or questions concerning the DEIR were accepted during the public review period at the following address:

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 Tenth Street)

Modesto, CA 95353
Email: jalves@modestogov.com

A total of 5 comment letters were received during the public review period. Chapter 2 provides additional information about comments received on the DEIR.

1.3 FEIR Review and Certification

The FEIR will be distributed to public agencies that provided comments at least 10 days prior to certifying the FEIR. At the close of the 10-day public agency review period, City staff will recommend to the City Council whether or not to certify the FEIR. This governing body then will review the FEIR, consider staff recommendations and public testimony, and decide whether to certify the FEIR.

For significant impacts identified in the EIR that cannot be mitigated, a statement of overriding considerations must be included in the administrative record of the Proposed Program and, if the City chooses to certify the EIR and approve the Proposed Program, mentioned in the Notice of Determination (NOD) to be filed with OPR and at the office of the County Clerk (14 CCR Section 15093[c]).

1.4 Organization and Content of the FEIR

This FEIR contains the following chapters:

- **Chapter 1, *Introduction*.** This chapter describes the context of the FEIR; summarizes the public participation process to date, including the NOP and public scoping, the DEIR and public review, and comments on the DEIR; explains the FEIR review and certification process; and describes the organization of the document.
- **Chapter 2, *Comments on the DEIR and Responses*.** This chapter contains the substantive comments received on the DEIR and provides City's responses to those comments.
- **Chapter 3, *Revisions to the DEIR*.** This chapter presents revisions to the text of the DEIR made in response to comments received during the public review period or initiated by the City.
- **Chapter 4, *Report Preparation*.** This chapter lists the firms and individuals who assisted in the preparation of this FEIR.
- **Chapter 5, *References*.** This chapter provides a list of sources that are cited to support responses to comments on the DEIR.

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Chapter 2
COMMENTS ON THE DEIR AND RESPONSES

2.1 Introduction

CEQA requires the lead agency to prepare an FEIR, addressing all substantive comments received on the DEIR. The FEIR must include a list of all individuals, organizations, and agencies that provided comments on the DEIR, and must contain copies of all comments received during the public review period, along with the lead agency's responses.

This chapter provides a list of comments received, copies of the comments, and responses to those comments that address environmental issues.

Individual comments within each submittal are marked and numbered in the margin of the comment letter. The marked individual comments correspond to the responses to those comments. For example, Comment A-1 from Letter A corresponds to the response to Comment A-1.

2.2 List of Comments Received

The City received 5 comment submittals, including letters and emails, during or immediately following the public review period. **Table 2-1** lists the identifier for each submittal; the name and affiliation of the individual who submitted each comment; and the date the comment was sent.

Table 2-1. List of DEIR Comment Submittals Received During the Public Review Period

Comment Letter	Commenter Name and Affiliation	Date Sent
A	Tom Dumas, Office of Metropolitan Planning, California Department of Transportation	July 24, 2019
B	Andrea Buckley, Environmental Services and Land Management Branch Chief, Central Valley Flood Protection Board	June 24, 2019
C	Jordan Hensley, Environmental Scientist, Central Valley Regional Water Quality Control Board	July 12, 2019
D	Scott Morgan, Director, State Clearinghouse	July 29, 2019
E	Patrick Cavanah, Sr. Management Consultant, Stanislaus County Environmental Review Committee	July 22, 2019

2.3 Comments and Responses

This section contains a copy of each comment letter received during the DEIR review period. Following each submittal are the City's responses to each comment that addresses an environmental issue. Revisions to the DEIR that are indicated in these responses are provided in Chapter 3 of this FEIR.

1 # Letter A – Tom Dumas, California Department of Transportation

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DISTRICT 10 DIRECTOR
P.O. BOX 2048, STOCKTON, CA 95201
(1976 E. DR. MARTIN LUTHER KING JR. BOULEVARD 95205)
PHONE (209) 948-7943
FAX (209) 948-3670
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

Letter A

July 24, 2019

10-STA-99 PM VAR
City of Modesto Wastewater Master Plan
SCH# 2016062033

Mr. Jim Alves
Associate Civil Engineer
City of Modesto,
P.O. Box 642
Modesto, CA 95353

Dear Mr. Alves:

Thank you for the opportunity to review the above-referenced document, the City of Modesto Wastewater Master Plan, SCH# 2016062033. The Department has the following comments:

An Encroachment Permit will be required for work (if any) done within the Department's right of way. This work is subject to the California Environmental Quality Act. Therefore, environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy the Department's environmental review responsibilities. Ground disturbing activities to the site prior to completion and/or approval of required environmental documents may affect the Department's ability to issue a permit for the project. Furthermore, if engineering plans or drawings will be part of your permit application, they should be prepared in standard units. A-1

Please forward the final Conditions of Approval to the Caltrans District 10-Transportation Planning Division, Attention IGR Coordinator. If you have any questions, please contact Steven Martinez at (209) 942-6092 (email: steven.r.martinez@dot.ca.gov) or me at (209) 941-1921. We look forward to continuing to work with you in a cooperative manner. A-2

Sincerely,

FOR
TOM DUMAS, Chief
Office of Metropolitan Planning

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

2

Response to Comment A-1

The commenter indicates that an encroachment permit will be required for any work conducted with California Department of Transportation's (Caltrans') right of way and that environmental studies may be required as part of the encroachment permit application(s).

As shown in Table 2-8 of the DEIR (page 2-62), the City understands that an encroachment permit will be required for proposed construction activities associated with the River Trunk Pipeline that affect Caltrans right of way. In addition, as described on page 2-63, the City also understands that approvals may be required from Caltrans for program-level components. Once design details for proposed program-level components have been further advanced, the City will determine whether additional environmental studies are required and apply for encroachment permits from Caltrans as needed. Engineering plans or drawings will also be submitted as part of the City's permit application(s).

Response to Comment A-2

The comment requests that the final Conditions of Approval be sent to Caltrans District 10-Transportation Planning Division.

In response to this comment, the Proposed Program's final Mitigation Monitoring and Reporting Program will be available for public review on the City's website upon certification of the EIR.

Letter B – Andrea Buckley, Central Valley Flood Protection Board

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY GAVIN NEWSOM, GOVERNOR
CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Ste. 170
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682

Letter B

June 24, 2019

Mr. Jim Alves
City of Modesto
P.O. Box 642
Modesto, CA 95353

Subject: Draft Environmental Impact Report for the City of Modesto Wastewater Master Plan, SCH No.: 2019049024

Location: Stanislaus County

Dear Mr. Alves,

Central Valley Flood Protection Board (Board) staff has reviewed the subject document and provides the following comments:

The proposed plan may result in projects located within the following regulated streams under Board jurisdiction and may require a Board permit prior to starting work: Stanislaus River; San Joaquin River; and the Tuolumne River.

The Board's jurisdiction covers the entire Central Valley including all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins south of the San Joaquin River.

B-1

Under authorities granted by California Water Code and Public Resources Code statutes, the Board enforces its Title 23, California Code of Regulations (Title 23) for the construction, maintenance, and protection of adopted plans of flood control, including the federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways.

Pursuant to Title 23, Section 6 a Board permit is required prior to working within the Board's jurisdiction for the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee. Permits may also be required to bring existing works that predate permitting into compliance with Title 23, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the works has not been clearly established or ownership and use have been revised. Other federal (including U.S. Army Corps of Engineers Section 10 and 404 regulatory permits), State and local agency permits may be required and are the applicant's responsibility to obtain.

B-2

Mr. Jim Alves
June 24, 2019
Page 2 of 2

Board permit applications and Title 23 regulations are available on our website at http://www.cvfpb.ca.gov/. Maps of the Board's jurisdiction are also available from the California Department of Water Resources website at http://gis.bam.water.ca.gov/bam/.

Encroachment permit applications received on or after July 1, 2019 are subject to fees, additional information is available on the Board's website at http://cvfpb.ca.gov/fees-2019/.

B-2 cont.

Please contact James Herota at (916) 574-0651, or via email at James.Herota@CVFlood.ca.gov if you have any questions.

Sincerely,

Andrea Buckley
Environmental Services and Land Management Branch Chief

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

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Response to Comment B-1

The comment states that the Proposed Program may include projects located within the streams that regulated by the Central Valley Flood Protection Board (CVFPB) including Stanislaus River, San Joaquin River, and the Tuolumne River. The comment notes that the CVFPB's jurisdiction covers the entire Central Valley including tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins south of the San Joaquin River.

As shown in Table 2-8 of the DEIR (page 2-62), the City understands that a permit may be required from the CVFPB prior to installing the Dry Creek pipeline crossing and force main beneath the Tuolumne River for the River Trunk Realignment Project. Additionally, as described on page 2-63, the City also understands that approvals may be required from CVFPB for program-level components. Once design details for proposed program-level components have been further advanced, the City will determine whether any components would be within CVFPB's jurisdiction.

Response to Comment B-2

This comment describes CVFPB's regulatory authority under California Code of Regulations (Title 23) and activities that require CVFPB permits pursuant to Title 23, Section 6. The comment also includes web links as to where their permit application, Title 23 regulations, maps depicting CVFPB jurisdiction, and encroachment permit application fees are available.

This comment is informational. No response is required.

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Letter C – Jordan Hensley, Central Valley Regional Water Quality Control Board

CALIFORNIA Water Boards

GAVIN NEWSOM GOVERNOR

JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

Letter C

12 July 2019

Jim Alves
City of Modesto
P.O. Box 642
Modesto, CA 95353

CERTIFIED MAIL
7017 2620 0001 1359 1182

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF MODESTO WASTEWATER MASTER PLAN PROJECT, SCH#2016062033, STANISLAUS COUNTY

Pursuant to the State Clearinghouse's 12 June 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report* for the City of Modesto Wastewater Master Plan Project, located in Stanislaus County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

C-1

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

RECYCLED PAPER

Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

C-1

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

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For more information on the Construction General Permit, visit the State Water Resources Control Board website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

C-1

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

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is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification
If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State
If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Waste Discharge Requirements – Discharges to Land
Pursuant to the State Board's Onsite Wastewater Treatment Systems Policy, the regulation of the septic system may be regulated under the local agency's management program.

For more information on waste discharges to land, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_land/index.shtml

Dewatering Permit
If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board

C-1

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General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture
If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the

C-1

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Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

C-1

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

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Response to Comment C-1

The City acknowledges and appreciates the Central Valley Regional Water Quality Control Board's (RWQCB's) review and comments on the DEIR, and its input regarding the various regulatory permitting requirements which may apply to the Proposed Program. Many of the permitting requirements stated in the Central Valley RWQCB's letter are described in Section 12.2.2 of Chapter 12, *Hydrology and Water Quality,* and in Section 7.2.1 of Chapter 7, *Biological Resources,* of the DEIR.

Of the permitting requirements described in the Central Valley RWQCB's letter, the following were not described in the DEIR and may be applicable to the Proposed Program: Antidegradation considerations, dewatering permit requirements, and Industrial Storm Water General Permit.

In response to this comment, the following discussion about the State Water Resources Control Board's Antidegradation Policy has been added to DEIR page 12-5 above "National Pollutant Discharge Elimination System Permits".

California State Antidegradation Policy

The State Water Board adopted the Antidegradation Policy (State Water Board Resolution 68-16) and Antidegradation Implementation Policy which is described in the Basin Plan. This policy states that disposal of wastes into State waters will be "maintained to achieve the highest water quality possible consistent with the maximum benefit to the people of the State." The policy also states that this "information must be presented as an analysis of the impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives." This analysis is a mandatory element of the NPDES and waste discharge requirements permitting processes. (Central Valley RWQCB 2018)

In response to this comment, the following discussion about the dewatering permits has been added to DEIR page 12-5 on line 26 under "Dewatering Activities".

Dewatering Activities

Although some construction-related dewatering is covered under the General Construction Permit, the Central Valley RWQCB has also adopted a general permit for limited threat discharges to surface water, including construction dewatering discharges (Order No. R5-2016-0076 [NDPES No. CAG995002]) (Central Valley RWQCB 2016b). This permit would most likely apply to the Proposed Program if construction would require dewatering in greater quantities than that allowed by the General Construction Permit and would discharge the effluent to surface waters. The general permit for limited threat discharges to surface water contains waste discharge limitations and prohibitions similar to those in the General Construction Permit. To obtain coverage, the applicant must submit a Notice of Intent and a pollution prevention and monitoring program.

In addition, in the event that construction activities require construction or groundwater dewatering to be discharged to land, the City would need to apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley RWQCB's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. These permits provide coverage for small temporary construction

dewatering projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. To obtain coverage for either the General Order or Low Risk Waiver, the applicant must file a Notice of Intent with the Central Valley RWQCB.

Additionally, the following text has been added to DEIR page 12-6 after line 3 to include discussion about the Industrial General Permit.

Industrial Activities

In April 2014, the SWRCB adopted an updated Industrial Storm Water General Permit (Industrial General Permit) for storm water discharges associated with industrial sites (Order No. 2014-0057-DWQ). This authorizes discharges of industrial stormwater from specific industry categories such as sewage or wastewater treatment facilities to surface waters. The updated Industrial General Permit became effective on July 1, 2015, and replaces Order 97-03-DWQ. The Industrial General Permit requires dischargers to eliminate unauthorized non-stormwater discharges, develop and implement SWPPPs that include BMPs, implement BMPs and conduct monitoring for indicator parameters.

Lastly, the third paragraph on page 12-22 of the DEIR has been revised to include a cross-reference to the Central Valley RWQCB's Low Risk General Order and Low Risk Waiver as compliance with these permits (in addition to the General Construction Permit and Central Valley RWQCB's general permit for low threat discharges to surface water) would help prevent adverse water quality impacts from construction dewatering activities.

Additionally, compliance with the General Construction Permit, ~~or~~ the Central Valley RWQCB's general permit for low threat discharges to surface water, the Central Valley RWQCB's Low Risk General Order, and/or the Low Risk Waiver for activities involving discharging dewatered groundwater to land would prevent substantial adverse impacts from dewatering activities during construction of Program components. Overall, this impact would be **less than significant with mitigation**.

1 # Letter D – Scott Morgan, State Clearinghouse

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

July 29, 2019

Letter D

Jim Alves
Modesto, City of
P.O. Box 642
1010 Tenth Street
Modesto, CA 95353

Subject: Draft Environmental Impact Report for the City of Modesto Wastewater Master Plan
SCH#: 2016062033

Dear Jim Alves:

The State Clearinghouse submitted the above named EIR to selected state agencies for review. The review period closed on 7/26/2019, and the comments from the responding agency (ies) is (are) available on the CEQA database for your retrieval and use. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

D-1

Check the CEQA database for submitted comments for use in preparing your final environmental document: https://ceqanet.opr.ca.gov/2016062033/2 . Should you need more information or clarification of the comments, **we recommend that you contact the commenting agency directly**.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL 1-916-445-0613 state.clearinghouse@opr.ca.gov www.opr.ca.gov

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Response to Comment D-1

The comment states that the State Clearinghouse submitted the WWMP EIR to selected state agencies for review and indicates that the CEQA database holds submitted comments. The comment also acknowledges that the City has complied with State Clearinghouse review requirements for draft environmental documents pursuant to CEQA.

The City checked the CEQA database and all comments submitted have been addressed herein.

1 # Letter E – Patrick Cavanah, Stanislaus County

CHIEF EXECUTIVE OFFICE

Jody L. Hayes
Chief Executive Officer

Patricia Hill Thomas
Chief Operations Officer/
Assistant Executive Officer

Keith D. Boggs
Assistant Executive Officer

Patrice M. Dietrich
Assistant Executive Officer

Letter E

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

July 22, 2019

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
1010 10th Street, Suite 4600
Modesto, CA 95354

SUBJECT: ENVIRONMENTAL REFERRAL – CITY OF MODESTO – WASTEWATER MASTER PLAN (SCH NO. 2016062033) – NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT REPORT

Mr. Alves:

Thank you for the opportunity to review the above-referenced project.

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has no comments at this time. E-1

The ERC appreciates the opportunity to comment on this project.

Sincerely,

Patrick Cavanah
Sr. Management Consultant
Environmental Review Committee

PC:ss

cc: ERC Members

STRIVING TOGETHER TO BE THE BEST!

1010 10th Street, Ste. 6800, Modesto, CA 95354 Post Office Box 3404
Modesto, California 95353 Phone: 209.525.6333 Fax: 209.544.6226

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Response to Comment E-1

This comment states that the Stanislaus County Environmental Review Committee has reviewed the WWMP EIR and has no comments at this time.

The comment is informational; no response is required.

Chapter 3
REVISIONS TO THE DEIR

This chapter presents revisions to the DEIR in response to the public review and comment process. This chapter also corrects minor errors from the DEIR that are corrected herein. Changes made in response to comments are discussed in FEIR Chapter 2 and indicated below. Text added to the DEIR is underlined, and deleted text is shown in ~~strikeout~~. DEIR text changes are presented in the order they would appear in the DEIR; page numbers and line numbers from the DEIR are provided to assist in identifying the location of the revisions.

Chapter 12, Hydrology and Water Quality

On page 12-1, the following sentence under "Clean Water Act" has been revised on line 14 to clarify that Section 404 and 401 of the Clean Water Act (CWA) are described in Chapter 7 of the DEIR.

The key sections of the CWA that are potentially relevant to the Proposed Program are Sections 303(d) and 402, as described below. Sections 404 and 401 are also relevant and described in Chapter 7, *Biological Resources.*

On page 12-5, the following discussion has been inserted as line 1 before "National Pollutant Discharge Elimination System Permits."

California State Antidegradation Policy

The State Water Board adopted the Antidegradation Policy (State Water Board Resolution 68-16) and Antidegradation Implementation Policy which is described in the Basin Plan. This policy states that disposal of wastes into State waters will be "maintained to achieve the highest water quality possible consistent with the maximum benefit to the people of the State." The policy also states that this "information must be presented as an analysis of the impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives." This analysis is a mandatory element of the NPDES and waste discharge requirements permitting processes. (Central Valley RWQCB 2018)

On page 12-5, the following discussion has been inserted on line 26 under "Dewatering Activities":

> In addition, in the event that construction activities require construction or groundwater dewatering to be discharged to land, the City would need to apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley RWQCB's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. These permits provide coverage for small temporary construction dewatering projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. To obtain coverage for

either the General Order or Low Risk Waiver, the applicant must file a Notice of Intent with the Central Valley RWQCB.

On page 12-6, the following discussion has been added after line 3:

Industrial Activities

In April 2014, the SWRCB adopted an updated Industrial Storm Water General Permit (Industrial General Permit) for storm water discharges associated with industrial sites (Order No. 2014-0057-DWQ). This authorizes discharges of industrial stormwater from specific industry categories such as sewage or wastewater treatment facilities to surface waters. The updated Industrial General Permit became effective on July 1, 2015, and replaces Order 97-03-DWQ. The Industrial General Permit requires dischargers to eliminate unauthorized non-stormwater discharges, develop and implement SWPPPs that include BMPs, implement BMPs and conduct monitoring for indicator parameters.

On page 12-22, the following text starting on line 22 has been revised:

Additionally, compliance with the General Construction Permit~~, or~~ the Central Valley RWQCB's general permit for low threat discharges to surface water, the Central Valley RWQCB's Low Risk General Order, and/or the Low Risk Waiver for activities involving discharging dewatered groundwater to land would prevent substantial adverse impacts from dewatering activities during construction of Program components. Overall, this impact would be **less than significant with mitigation**.

Chapter 14, Noise and Vibration

On page 14-11, the following text has been revised on lines 27 through 31 to reflect the correct cross-reference to the City's 2019 General Plan EIR instead of the 2008 General Plan EIR. These revisions do not warrant any substantial changes to the impact analysis in Chapter 14.

The noise environment varies across the study area and is described generally in the City's ~~2008~~2019 Final Master Environmental Impact Report for the Modesto General Plan Update (referred to here as ~~2008~~2019 General Plan EIR), the noise section of which is incorporated by reference and summarized here. Figure V-3-~~2~~8 and Figure V-3-3 in the ~~2008~~2019 General Plan EIR shows the projected traffic noise levels at General Plan buildout in ~~2025~~2040 generated by traffic, the airport, and the railroads.

On page 14-12, the first and second paragraphs have been revised to reflect noise conditions as described in the City's 2019 General Plan EIR instead of the 2008 General Plan EIR. These revisions do not warrant any substantial changes to the impact analysis in Chapter 14.

As the City's ~~2008~~2019 General Plan EIR discusses, substantial noise increases (3 dBA Ldn or greater) would occur along multiple roadways under 2040 General Plan buildout conditions. Existing residential land uses are located within the projected 65 dBA Ldn noise contours under 2040 General Plan buildout conditions along most of these existing roadways. In addition to projected traffic noise increases along existing roadway segments, traffic noise levels would increase in areas adjacent to proposed future roadways and roadway extensions. ~~traffic on highways State Route (SR) 99, SR 132, and SR 108, various arterial streets, and other streets in~~

~~particular truck routes, the railroads, and the Modesto City-County Airport would cause elevated noise levels greater than 75 dBA Ldn at buildout of the General Plan. Within a relatively short distance away from the highways, arterials, and railroads, the average noise levels typically drop to 65 dBA Ldn or lower. Noise levels in some commercial and industrial areas are described in the 2008 General Plan EIR in Table V-3-1 which indicates measured noise levels in some commercial and industrial areas were between 65 and 74 dBA. Measured noise levels in residential areas ranged from 54 to 70 dBA, based on the 2008 General Plan EIR's Table V-3-1. Based on Figure V-3-2 in the City's 2008 General Plan EIR, residences along Tuolumne Boulevard, between Paradise Avenue and North 9th Street, would experience noise levels that generally ranged from 60 to 65 dB.~~

The specific Proposed Program components, in particular the wastewater pipelines, would be located in almost all areas of the City and would be within the range of all noise levels indicated in the ~~2008~~2019 General Plan EIR.

On page 14-15, the first sentence on line 1 has been revised to correctly reference the City's 2019 General Plan EIR.

Areas outside of the City's ~~2008~~2019 General Plan EIR scope (i.e., the new primary effluent outfall connecting the Sutter Plant to the Jennings Plant and the Jennings Plant itself) would have similar noise contour trends around traffic on highways, arterial streets, railroads, airports, and industrial areas as described for the City.

On page 14-25, the following sentence starting on line 9 has been revised to correctly reference ambient noise levels along Tuolumne Boulevard as cited in the 2019 General Plan EIR instead of those cited in the City's 2008 General Plan EIR. This revision does not result in any substantial changes to the impact analysis and would not change the impact conclusion in Impact NOI-1.

These noise levels would be disruptive to nearby sensitive receptors because noise levels would substantially exceed existing ambient noise levels, which generally range along Tuolumne Boulevard from 6~~7~~0 to ~~65~~70 dBA (as shown in the City's ~~2008~~2019 General Plan EIR) and likely at similar noise levels within other areas of the River Trunk Realignment Project area (Figure 14-1) depending on the proximity to traffic-related noise or other noise sources.

Chapter 20, References

On page 20-18, the following reference has been added on line 23:

> _____. 2018. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region. Fifth Edition. The Sacramento River Basin and the San Joaquin River Basin. Revised May.

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Chapter 4
REPORT PREPARATION

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Chapter 5
REFERENCES

Chapter 1, Introduction

None cited.

Chapter 2, Comments on the DEIR and Responses

None cited.

Chapter 3, Revisions to the DEIR

None cited.

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City of Modesto

Wastewater Master Plan

Draft Environmental Impact Report

Prepared for:

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June 2019

City of Modesto

Wastewater Master Plan

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June 2019

Horizon Water and Environment. 2019. City of Modesto, Wastewater Master Plan, Draft Environmental Impact Report. June. (HWE 15.043) Oakland, CA.

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Appendix B Air Quality and Greenhouse Gas Modeling Results
Appendix C Biological Resources Technical Information
Appendix D Cultural Resources Technical Information
Appendix E Noise and Vibration Modeling Results
Appendix F Tribal Cultural Resources Technical Information
Appendix G Mitigation Monitoring and Reporting Plan

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Acronyms and Abbreviations

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
A	
A	attainment
AB	Assembly Bill
ACE	Altamont Commuter Express
ADWF	average dry weather flows
AF	acre-foot
af/yr	acre-feet per year
ALUCP	airport land use compatibility plan
ATCM	airborne toxic control measure
B	
B	beneficial
Basin Plan	Water Quality Control Plan
BAU	business as usual
bgs	below ground surface
BMP	best management practice
BNR	biological nutrient removal
BOD	biological oxygen demand
BP	business park
BPS	best performance standard
C	
C	commercial
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Cal EMA	California Emergency Management Agency
Ca/lEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	climate action plan
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CBC	California Building Standards Code
CCIC	Central California Information Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CCTV	closed-circuit television
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEC	California Energy Commission

CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CIP	capital improvement project
CIPP	cured-in-place-pipe
City	City of Modesto
CMP	*Congestion Management Process for the Stanislaus County Region*
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
Court	U.S. Supreme Court
CPD	Comprehensive Planning District
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
cy	cubic yard

D

DAF	dissolved air flotation
dB	decibel
dBA	A-weighted decibel
DBCP	1,2-dibromo-3-chloropropane
DEIR	draft environmental impact report
DMC	Delta-Mendota Canal
DOF	California Department of Finance
DPM	diesel particulate matter
DPWD	Del Puerto Water District
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources

E

EIR	environmental impact report
EO	Executive Order
ESA	Endangered Species Act
ESA	environmental site assessment
ESU	evolutionarily significant unit

F

FD	federally delisted
FE	federally endangered

FEMA	Federal Emergency Management Agency
FFR	fixed film reactor
F&G Code	California Fish and Game Code
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FR	Federal Register
FT	federally threatened
FTA	Federal Transit Administration
G	
g	unit of measure for ground shaking, expressing the acceleration of movement relative to the acceleration of gravity
GAMAQI	*Guidance for Assessing and Mitigating Air Quality Impacts*
General Permit	General Permit for Storm Water Discharges Associated with Construction Activity
General Plan	Proposed (or Alternative) Urban Area General Plan
GHG	greenhouse gas
GIS	geographic information systems
GSA	groundwater sustainability agency
GSP	groundwater sustainability plan
Guidance	*Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*
GWP	global warming potential
H	
H_2O	atmospheric water
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HAZCOM	hazardous materials communication
HCM	*Highway Capacity Manual*
HCP	habitat conservation plan
HDD	horizontal directional drilling
HDPE	high-density polyethylene
HFCs	hydrofluorocarbons
HMWMP	hazardous materials and waste management plan
hp	horsepower
HSC	Health and Safety Code
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
I	
I	industrial
in	inch
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
J	
Jennings Plant	Jennings Road Secondary and Tertiary Treatment Plant
K	

km	kilometer
L	
LAFCO	Local Agency Formation Commission
L_{dn}	day-night sound level
L_{eq}	equivalent steady-state sound level
lf	linear feet
LID	low-impact development
L_{max}	maximum sound level
L_{min}	minimum sound level
LOS	level of service
LS	less than significant
LSM	less than significant with mitigation
M	
MAP	model accreditation plan
MAX	Modesto Area Express
MBR	membrane bioreactor
MBTA	Migratory Bird Treaty Act
MEI	maximally exposed individual
mgd	million gallons per day
mg/L	milligrams per liter
MID	Modesto Irrigation District
MLD	most likely descendent
MMI	Modified Mercalli Intensity Scale
MMRP	mitigation monitoring and reporting plan
MMT	million metric tons
MRWTP	Modesto Regional Water Treatment Plant
MS4	municipal separate storm sewer system
msl	mean sea level
MT CO_2e	million tons of carbon dioxide equivalents
MU	mixed use
N	
N	nonattainment
N	nitrogen
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NI	no impact
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOP	notice of preparation

NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSF	National Science Foundation
NSPS	Standards of Performance for New Stationary Sources
NVRRWP	North Valley Regional Recycled Water Program
O	
O_2	oxygen
O_3	ozone
O&M	operations and maintenance
OBD	on-board diagnostic
OEHHA	California Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OS	open space
OSHA	U.S. Department of Labor, Occupational Safety and Health Administration
P	
Pb	lead
PD	planned development
PFCs	perfluorocarbons
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less
ppm	parts per million
PPV	peak particle velocity
Proposed Program	2016 Wastewater Master Plan
PST	Pacific Standard Time
PUA	planned urbanizing area
Pub. Res. Code	Public Resources Code
PVC	polyvinyl chloride
PWWF	peak wet weather flow
R	
R	residential
R-1	low-density residential
RC	regional commercial
RCRA	Resource Conservation and Recovery Act of 1976
RMP	risk management plan
ROG	reactive organic gases
ROWD	report of waste discharge
RPD	Redevelopment Planning District
RPS	renewable portfolio standard
R&R	rehabilitation and replacement
RST	Stanislaus Regional Sustainability Toolbox
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board

S	
SAR	second assessment report
SB	Senate Bill
SBAPCD	Santa Barbara Air Pollution Control District
SC (Endangered)	state candidate for listing as endangered
SCAQMD	South Coast Air Quality Management District
SCP	*Salida Community Plan*
SCS	sustainable communities strategy
SE	state endangered
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act of 1990
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-Lived Climate Pollutant
SMBRP	Site Mitigation and Brownfields Reuse Program
SO_2	sulfur dioxide
SOI	sphere of influence
S-P	specific plan
SPFC	State Plan of Flood Control
SR	State Route
SRWA	Stanislaus Regional Water Authority
SSC	state species of special concern
SSO	sanitary sewer overflow
ST	state threatened
StanCOG	Stanislaus Council of Governments
StaRT	Stanislaus Regional Transit
STRGBA	Stanislaus and Tuolumne Rivers Groundwater Basin Association
SU	significant and unavoidable
Sutter Plant	Sutter Avenue Primary Treatment Plant
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
SWSP	Surface Water Supply Project
T	
TAC	toxic air contaminant
TCP	traditional cultural property
TCR	tribal cultural resource
TDS	total dissolved solids
TID	Turlock Irrigation District
TMDL	total maximum daily load
TMP	traffic management plan
TRRP	Tuolumne River Regional Park
TSO	time schedule order
U	
U	unclassified
UPRR	Union Pacific Railroad
U.S.	United States

	USACE	U.S. Army Corps of Engineers
	USC	U.S. Code
	USEPA	U.S. Environmental Protection Agency
	USFWS	U.S. Fish and Wildlife Service
	USGS	U.S. Geological Survey
	UST	Underground Storage Tank
	UV	ultraviolet
	UWMP	urban water management plan
	V	
	VdB	vibration velocity in decibels
	VELB	Valley elderberry long-horned beetle
	VERA	voluntary emission reduction agreement
	VOC	volatile organic compound
	VR	village residential
	W	
	WAS	waste activated sludge
	WDR	waste discharge requirement
	WMP	water management plan
	WQCF	Water Quality Control Facility
	WSA	water supply assessment
	WWMP	2016 Wastewater Master Plan

EXECUTIVE SUMMARY

INTRODUCTION

The City of Modesto (City), as lead agency, has prepared this Draft Environmental Impact Report (DEIR) to provide the public, responsible agencies, and trustee agencies with information about the environmental effects of the proposed Wastewater Master Plan (WWMP or Proposed Program). This DEIR was prepared in compliance with the California Environmental Quality Act of 1970 (CEQA), as amended, and the State CEQA Guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq.).

BACKGROUND AND OVERVIEW

The Proposed Program updates and revises the City's 2007 Wastewater Master Plan. The City periodically reevaluates its wastewater system through development of a wastewater system capital improvement program (CIP), which addresses existing deficiencies and replacement needs. The Proposed Program is intended to accommodate the wastewater collection service needs of the population and land uses described in the City's Urban Area General Plan (General Plan) and community plans of service areas outlying the City's urban area or sphere of influence, and accounts for SOI boundary adjustments, zoning revisions, updated growth projections, and sewer demand information through 2057. The Proposed Program would also accommodate wastewater treatment needs for those same customers through 2035.

PROGRAM LOCATION

The Proposed Program is located in the City of Modesto, California (**Figure ES-1**). The City's wastewater service area includes all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, the Beard Industrial Park District, and unincorporated "islands" in Stanislaus County that are served by agreement. The City's primary treatment facilities (Sutter Plant) are located in the southern portion of Modesto just north of the Tuolumne River. Other secondary and tertiary treatment facilities (Jennings Plant) are located on City-annexed property located about 6.5 miles southwest of the City proper, and the Primary Effluent Outfall and Cannery Segregation Line Outfall, which are pipelines, are located in unincorporated Stanislaus County.

PROGRAM BACKGROUND

Existing Wastewater System

The City operates and maintains the wastewater collection system servicing the urban area of Modesto. The City's wastewater collection system is divided into two separate systems: the domestic system and the segregated cannery process water system. The City's wastewater system consists of approximately 40 sewer lift stations and more than 600 miles of pipelines ranging from 6 to 66 inches in diameter. Of the 600 miles of pipeline, 69 miles are trunk lines (pipelines greater than 15 inches in diameter), and 15 miles of trunk lines connect cannery food processors directly to land disposal (application) areas. Most of the City's wastewater

system flows by gravity, but in some areas, lift stations (also referred to as pump stations) are necessary to convey wastewater generated within the service area to the Sutter Avenue Primary Treatment Plant (Sutter Plant) and the Jennings Road Secondary and Tertiary Treatment Plant (Jennings Plant).

Once wastewater makes its way to the Sutter Plant, the wastewater undergoes primary treatment, which includes several steps. The primary effluent is pumped through the Primary Effluent Outfall (and sometimes through the Cannery Segregation Line) to the secondary treatment facilities at the Jennings Plant. During the secondary treatment phase, microorganisms metabolize biological matter. Once secondary treatment is complete, effluent either is applied to approximately 2,500 acres of agricultural ranch land owned by the City or is discharged to the San Joaquin River or stored in the City's ponds. Any water that is discharged to the San Joaquin River (typically between October and May) is first disinfected with chlorine and then dechlorinated with sulfur dioxide.

The City's National Pollutant Discharge Effluent System (NPDES) surface water discharge permit (Order R5-2017-0064, NPDES No. CA0079103), recently issued in June 2017, allows up to 14.9 million gallons per day (mgd) of tertiary-treated wastewater discharges to the San Joaquin River year-round. The City is not permitted to discharge secondary treated wastewater to the San Joaquin River. Algae typically grows in the storage reservoirs in October and November, which generates high suspended solids concentrations that typically exceed discharge limitations. The City, however, has addressed this issue by installing dissolved air flotation units to remove algae, which gets discharged to the southwest corner of the recirculation channel. Installation of the DAF units has allowed the City to extend the discharge season into October and November. The City constructed the first two phases of tertiary treatment facilities at the Jennings Plant. The City is also participating in the North Valley Regional Recycled Water Program (NVRRWP), which is currently being constructed and will provide recycled water to the Delta-Mendota Canal. Once the NVRRWP project is completed, up to 14.9 mgd of tertiary treated water at the Jennings Facility would be conveyed by pipeline to the Delta-Mendota Canal.

More information about the various components of the City's existing wastewater treatment system is provided in Chapter 1 of this DEIR.

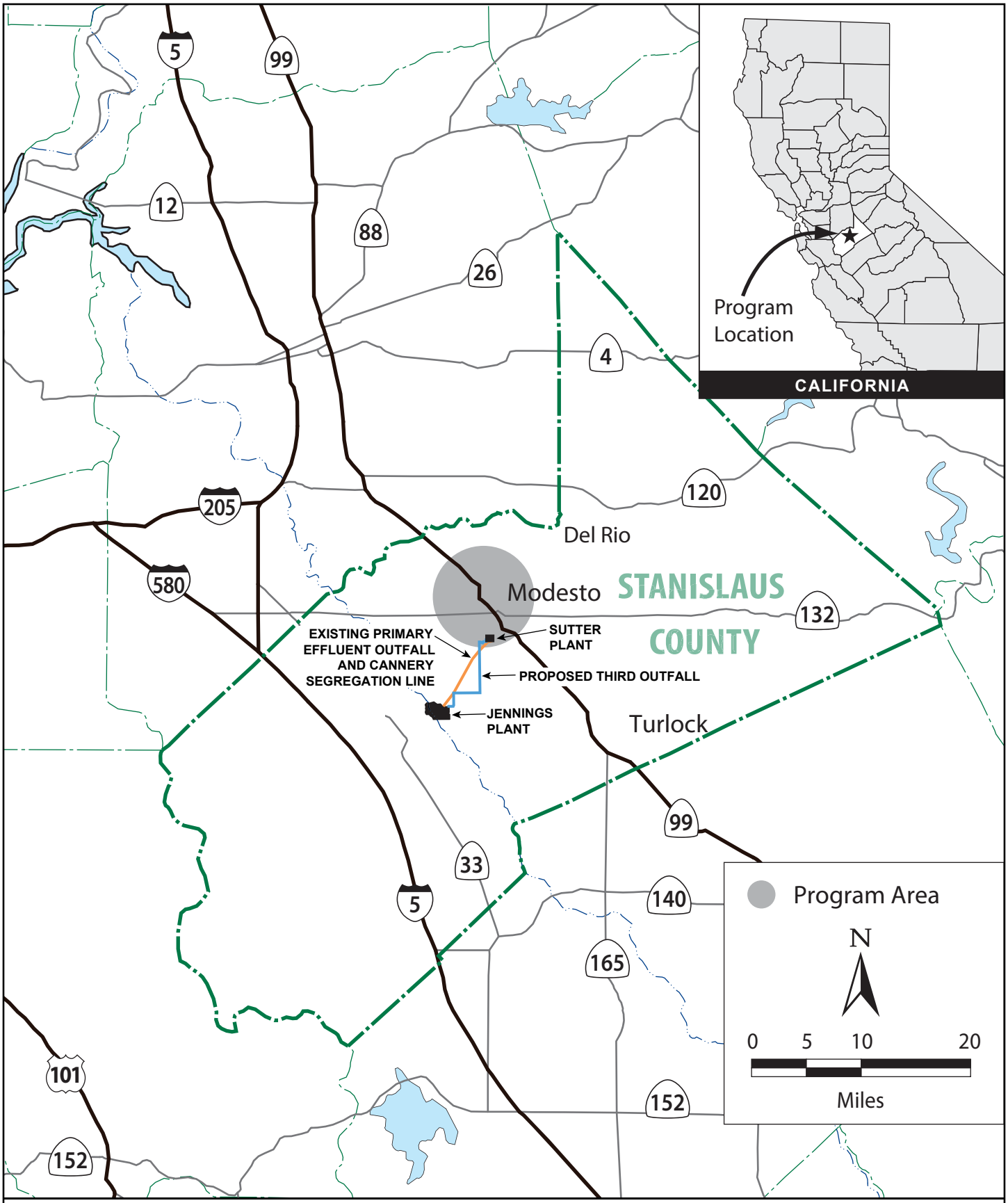

Figure ES-1
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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PROGRAM PURPOSE AND OBJECTIVES

The overall purpose of the Proposed Program is to meet existing and future wastewater treatment demands for the City and its customers in unincorporated areas of Stanislaus County, through 2035. The Program is also intended to meet existing and future wastewater collection service needs for the City and its customers in outlying service areas through 2057. The objectives of the Proposed Program as a whole are as follows:

- To implement the City's economic goals and General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
- To repair and replace aging wastewater infrastructure.
- To ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's sphere of influence, and planned wastewater demands.
- To plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system components, the objectives of the Proposed Program are:

- To extend service to new customers.
- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event and, where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To replace, repair, or rehabilitate existing trunk sewers, and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant components, the objectives are:

- To reduce flooding impacts at the Sutter Plant site and increase treatment process operational flexibility and efficiencies.
- To increase the capacity of the outfalls connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.
- To increase treatment systems efficiency, reliability, and functionality for both domestic and cannery process stream flows.
- To increase or modify treatment systems to remain in compliance with existing Central Valley Regional Water Quality Control Board's NPDES requirements and plan for potential future permitting regulations.

PROGRAM DESCRIPTION

The Proposed Program involves numerous improvements to the City's collection system and upgrades to the Sutter and Jennings plants. These include collection system and treatment plant CIPs located throughout the City's service area and unincorporated Stanislaus County. One project, the River Trunk Realignment Project, is evaluated at a project level of detail. All other components are evaluated at a program level of detail. Program-level components are projects that the City would likely construct in the future, but design of these components has not been advanced to a level at which a detailed evaluation can be completed. As such, a more general, program-level analysis of these components is included in this DEIR.

RIVER TRUNK REALIGNMENT PROJECT

The existing River Trunk is approximately 5 miles long and generally parallels the right bank (north side) of the Tuolumne River. It begins near the intersection of Beard Avenue and Nathan Avenue and terminates at Sutter Plant, conveying nearly 50 percent of the City's domestic wastewater to the Sutter Plant. This trunk line is subject to severe corrosion and isolated sections of the line have failed or are close to failure. This project entails realigning the majority of the River Trunk line such that it would be further inland from the Tuolumne River (see Figure 2-1 in Chapter 2, *Program Description*). This project includes construction of two pump stations: the River Trunk Pump Station which would be located at the corner of B Street and Beard Street, and the Shackelford Pump Station which would be located west of Zeff Road and immediately east of the Tuolumne River. This project also involves installation of a 48-inch siphon at the Dry Creek crossing using trenchless methods, River Trunk force main, gravity pipelines along Tuolumne River Boulevard, Colorado Avenue, Neece Drive, and Pelton Avenue. From the Shackelford Pump Station, wastewater would be conveyed through existing siphons that cross Tuolumne River to the Dryden Golf Course. A new force main would be installed beneath the golf course, traverse westerly, and terminate at the Dryden Golf Course parking lot where it would tie in with the gravity system described above.

COLLECTION SYSTEM COMPONENTS

The City would install several types of collection system components including the following:

- **New and Upgraded Sewers.** The City would construct a number of new and upgraded sewer lines throughout Modesto. These components are needed either to correct an existing or future capacity deficiency during peak wet weather flows or to accommodate anticipated and planned growth.

- **Sewer Rehabilitation.** Based on continued monitoring and inspection, the City has identified several sewer lines in need of rehabilitation. Deteriorating sewer lines may require rehabilitation to avoid failure and to improve functionality. Rehabilitation may include installing a liner or flexible coating on the interior of the pipeline. Sewer rehabilitation could also include slip lining or cured-in-place-pipe methods.

- **Lift Stations.** The Proposed Program includes constructing seven new lift stations and upgrading four existing lift stations. Upgrades of existing lift stations may include the replacement of undersized pumps, installation of new or larger emergency electrical generators, and elimination of overflows. If necessary, the lift station structure may need to be enlarged to accommodate proposed upgrades.

- **Stormwater/Sanitary Sewer Cross-Connect Disconnections.** Another component of the Proposed Program focuses on decreasing peak flows in the sanitary system by disconnecting up to 60 interconnections between the storm sewers and sanitary sewers. After storm events, these cross-connections typically show substantially increased peak flows. Improvements may include installing new storm drainage pipes, detention basins and various underground storage and percolation methods.

- **Small Pipeline Rehabilitation and Replacement Projects.** Aside from the City-wide storm drain disconnection improvements, the City proposes other improvements to the overall collection system. The new City-wide program would focus on small pipeline rehabilitation and replacement projects as identified by relatively recent closed-circuit television (CCTV) footage. These projects would be conducted outside of the WWMP scope of work, and focus on the City's 6-inch and 8-inch-diameter sewer mains. This effort also includes some larger pipelines; however, the specific locations of the pipelines that require rehabilitation and repair have not yet been identified or prioritized yet. However, based on CCTV data collected, there was enough evidence to create a program to address these smaller mains on an annual basis. It is anticipated that most of these pipeline rehabilitation and replacement projects are in the older parts of the City including portions of downtown Modesto.

TREATMENT PLANT COMPONENTS

Sutter Plant Components

The following primary treatment facilities are near or exceeding their useful life and are vulnerable to flooding as they are located within the 100-year floodplain: the primary clarifiers, anaerobic digesters, and sludge drying beds. Under the Proposed Program, these facilities would be decommissioned after the new primary treatment and solids handling components at the Jennings Plant are complete. Similar to existing condition, the Sutter Plant would continue to provide influent pumping, screening, and grit removal. The following components are planned at the Sutter Plant:

- Influent Pump Station Improvements
- Primary Effluent Pump Station Replacement
- Demolition of identified Sutter Treatment Facilities
- Flood Protection Improvements

Outfall Pipelines

Under the Proposed Program, the City would conduct three major outfall improvement projects to accommodate increased capacity and improve reliability of the existing outfall pipelines.

- New Tuolumne River Crossings (at the Cannery Segregation Line Outfall and Primary Effluent Outfall)
- New Primary Effluent Outfall Pipeline
- Slip Lining of a Portion of the Cannery Segregation Line Outfall

Jennings Plant Components

CIPs proposed at the Jennings Plant include various modifications to the secondary and tertiary treatment facilities and construction of new primary treatment and solids processing facilities including digesters and drying beds. Such improvements would increase the impermeable surface area of the Jennings Plant by approximately 27 acres. The following CIPs are proposed at the Jennings Plant:

- Biological Nutrient Removal /Tertiary Phase 3 Expansion
- Secondary Treatment Modifications
- Cannery Segregation Treatment Facilities Upgrade
- Interim Waste Activated Sludge Handling Facilities
- Primary Treatment and Solids Handling Facilities Relocation

CONSTRUCTION METHODS

Construction of proposed improvements to the City's collection system and treatment facilities would involve several types of activities: site preparation; demolition and removal of some existing facilities; earthwork (grading and excavation); pipeline installation; and facility construction. Pipeline construction would primarily occur using open trench methods. However, in areas where pipelines would cross waterways including Dry Creek and Tuolumne River, trenchless installation methods would be employed.

CONSTRUCTION SCHEDULE

Construction of the overall WWMP would occur over an approximately 25-year period, beginning in 2018 and completed in 2030 to 2035. As described in Chapter 2, *Program Description,* program-level components would be constructed in phased manned in which critical components are planned in the near-term. Construction of the River Trunk Realignment Project is anticipated to begin in 2018 and be completed within an 18-month period.

PERMITS AND APPROVALS

In addition to use by the City, the EIR for the Proposed Program will be used by various regulatory agencies issuing permits, as well as other approvals and consultations for the Proposed Program. Specifically, information about the Proposed Program and the environmental analysis will be used by several agencies as part of their decision-making processes. Agencies that may use the EIR as part of their decision-making process for the Proposed Program include the following:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- State Water Resources Control Board
- Central Valley Regional Water Quality Control Board
- California Department of Fish and Wildlife
- California Department of Transportation
- California State Lands Commission
- Central Valley Flood Protection Board

- Stanislaus County
- San Joaquin Valley Air Pollution Control District
- Modesto Irrigation District
- Turlock Irrigation District

PUBLIC INVOLVEMENT PROCESS

SCOPING COMMENT PERIOD

A Notice of Preparation (NOP) for the Proposed Program was prepared pursuant to the State CEQA Guidelines (Section 15082) and circulated to the Office of Planning and Research's State CEQA Clearinghouse on June 10, 2016. The scoping period continued for 30 days and concluded on July 10, 2016.

The Notice of Preparation presented general background information on the Proposed Program, the scoping process, and environmental issues to be addressed in the EIR. Approximately 50 copies of the Notice of Preparation were mailed to a broad range of stakeholders, including state, federal, and local regulatory agencies and jurisdictions and nonprofit organizations.

The City accepted written comments during the 30-day scoping period, June 10 to July 10, 2016. A scoping meeting was held on June 22, 2016, which one person attended. During the scoping period, one comment letter was received. This comment and oral comments received at the scoping meeting were considered in the environmental impact evaluation.

DRAFT EIR PUBLIC COMMENT PERIOD

The City has prepared this DEIR, as informed by public and agency input received during the scoping period, to disclose significant environmental impacts associated with the Proposed Program. Where any such impacts are significant, feasible mitigation measures and potentially feasible alternatives that substantially lessen or avoid such effects are identified and discussed. The public review period provides the public an opportunity to provide input to the lead agency on the DEIR.

The DEIR will undergo public review for the period specified in the Notice of Availability of the DEIR. During this period, the City will hold a public meeting. The date, time, and exact location of the public meeting will be included in the Notice of Availability of this DEIR.

SUBMITTAL OF WRITTEN COMMENTS

The City is circulating this DEIR for public review and comment for the period specified in the Notice of Availability. As discussed above, the City will host a public meeting during this period. The purpose of public circulation is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of this DEIR. Specific dates, times and locations for the meeting will be provided in the Notice of Availability.

Written comments concerning this DEIR can be submitted at the public meeting described above or at any time during the DEIR public review period. All comments must be received

by 5:00 p.m. on the final date of public review as identified in the Notice of Availability, and directed to the name and address listed below:

Jim Alves, Acting Senior Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353
jalves@modestogov.com

Submittal of written comments via e-mail (Microsoft Word or Adobe PDF format) is preferred. Written comments received in response to this DEIR during the public review period will be addressed in a Response to Comments section of the Final EIR.

AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

State CEQA Guidelines Section 15123(b) requires that an Executive Summary identify "areas of controversy known to a lead agency including issues raised by agencies and the public." There are no major areas of known controversy related to the Proposed Program or this EIR. To date, while not considered controversial, the following questions or concerns have been raised regarding the Proposed Program during the scoping period:

- Future plans for managing stormwater/flooding once the storm drain/sewer cross-connections have been removed in Modesto.
- Questions about how the WWMP evaluated leaking pipes.
- Future disposition of the Sutter Plant after treatment facilities have been decommissioned.
- Potential flooding impacts at the Jennings Plant.
- Disposition of discharges from the Cannery Segregation Outfall to the City's ranch lands.
- Need for a new third outfall pipeline and redundancy.
- WWMP area boundary and its relation to the Proposed and "Alternative" General Plan Update Land Use Map boundaries.

SIGNIFICANT IMPACTS

This section presents the significant impacts that were identified in the DEIR. This is not a comprehensive discussion of impacts of the Proposed Program; the reader is directed to **Table ES-1**, Summary of Impacts and Mitigation Measures, at the end of this chapter for additional information. Environmental resource topics with the potential for one or more significant environmental impacts and which are evaluated in detail in this DEIR include the following:

- Aesthetics and Visual Resources
- Agricultural Resources

- Air Quality
- Biological Resources
- Cultural and Paleontological and Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions and Energy Use
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Transportation and Traffic
- Utilities and Service Systems
- Cumulative Impacts

Chapters 4 through 18 of this DEIR address each of these environmental resource topics and the impacts of the Proposed Program in more detail.

ALTERNATIVES CONSIDERED

The purpose of the alternatives analysis in an EIR is to describe a range of reasonable alternatives to the Proposed Program that could feasibly attain most of the objectives of the Proposed Program while avoiding or substantially lessening one or more of the Proposed Program's significant effects. The range of alternatives considered must include those that offer substantial environmental advantages over the Proposed Program and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors.

The following alternatives have been evaluated for their potential feasibility and their ability to achieve most of the Proposed Program objectives while avoiding, reducing, or minimizing significant impacts identified for the Proposed Program:

- Alternative 1: No Program Alternative
- Alternative 2: Deferred Implementation Alternative
- Alternative 3: Primary Treatment and Solids Handling Facilities to the North of the Jennings Plant Alternative
- Alternative 4: River Trunk Realignment Project Design Alternative 4A
- Alternative 5: River Trunk Realignment Project Design Alternative 1

In addition, several alternatives were considered, but ultimately eliminated from further analysis for one or more of the following reasons: (1) they would not sufficiently meet the Proposed Program objectives; (2) they were determined to be infeasible; or (3) they would not avoid or substantially reduce one or more significant impacts of the Proposed Program. Refer to Section 20.6, "Alternatives Considered and Eliminated," in Chapter 20, *Alternatives,* for a description of these alternatives.

ALTERNATIVE 1: NO PROGRAM ALTERNATIVE

Under this alternative, no new wastewater infrastructure would be constructed or upgraded. Operation of the City's collection system and treatment facilities would continue similar to existing conditions. Under this alternative, the existing collection system and treatment

facilities would continue to operate. Existing sewer mains, trunk lines, and lift station that are currently under capacity would continue functioning but capacity issues may worsen over time.

While this alternative would not meet any of the Program objectives, it would avoid all of the impacts associated with construction and operation of the Program. No new facility construction or ground disturbing activities would occur. Impacts anticipated to be reduced include: construction-related and operation-related air pollutant and GHG emissions, traffic delays and congestion, noise and vibration effects, conversion of farmland to non-agricultural uses, and impacts on biological resources. However, by not addressing existing wastewater collection and treatment system deficiencies, significant environmental impacts could occur over time. For example, the potential for sanitary sewer overflows and subsequent water quality impacts would increase. The Sutter Plant facilities would also continue to be subject to damage during a 100-year flood event, which could have adverse effects on the Sutter Plant's operations.

ALTERNATIVE 2: DEFERRED IMPLEMENTATION ALTERNATIVE

Under the Deferred Implementation Alternative, the schedule of all program-level WWMP components would be delayed by 5 years, compared to the schedule for implementation of the Proposed Program. Under this alternative, new wastewater collection and treatment infrastructure would be constructed or upgraded as indicated for the Proposed Program, but some CIPs would be implemented at a later date. Because necessary improvements may not occur in a timely fashion, some development relying upon the new infrastructure would need to be postponed. This alternative would delay the City's ability to meet Program objectives and thus would not fully meet objectives aimed to provide sewer infrastructure in a timely and cost-effective manner to serve new growth within the General Plan and City's SOI. While this alternative would not necessarily avoid significant impacts of the Proposed Program, extending the overall schedule would reduce the severity of construction impacts for the 5-year period. Construction-related impacts such as traffic congestion and delays, air pollutant emissions, and noise and vibration would be reduced when compared to the Proposed Program.

ALTERNATIVE 3: PRIMARY TREATMENT AND SOLIDS HANDLING FACILITIES TO THE NORTH OF JENNINGS PLANT ALTERNATIVE

This alternative was evaluated in the City's Wastewater Treatment Master Plan (Carollo Engineers 2016) and entails purchasing of approximately 50 acres of land to the north of the Jennings Plant. Instead of constructing the new primary treatment facilities east of the proposed Biological Nutrient Removal/tertiary treatment facilities, as proposed under the Proposed Program, these facilities would be constructed on purchased land to the north of the Jennings Plant along the alignment of the two existing outfall pipelines. Compared to the Proposed Program, this alternative would involve less complex yard piping since the new primary treatment and solids handling facilities would be sited adjacent to the existing outfall pipelines and could more directly tie into the secondary treatment facilities.

This alternative would result in similar impacts as the Proposed Program but construction-related air quality impacts, GHG emissions, and hazards and hazardous material impacts would be slightly reduced since less pipeline construction would occur.

ALTERNATIVE 4: RIVER TRUNK REALIGNMENT PROJECT DESIGN ALTERNATIVE 4A

Alternative 4A from the Preliminary Design Report (Carollo Engineers 2015), referred to as Alternative 4 in this EIR, was carried forward for analysis because it would achieve most of the Program objectives and would reduce one or more significant environmental impacts. Alternative 4 would generally follow the same alignment as the proposed River Trunk Realignment Project, and would not involve construction of the Shackelford Pump Station. Rather, the existing pipeline that would otherwise tie into the Shackelford Pump Station under the Proposed Program, would tie into existing sewer lines that cross the Tuolumne River. This alternative would include rehabilitation of the Sutter Trunk within Sutter Avenue, and also would involve constructing the River Trunk Pump Station at a slightly different location than under the Proposed Program, between Highway 99 and 7th Street.

This alternative would result in less construction impacts than the Proposed Program since it would not involve construction of the Shackelford Pump Station. As such, construction-related impacts pertaining to noise, air quality, GHG emissions, hydrology and water quality, biological resources, geology and soils, and hazards and hazardous materials would be less than the Proposed Program.

ALTERNATIVE 5: RIVER TRUNK REALIGNMENT PROJECT DESIGN ALTERNATIVE 1

The alternative would replace the Beard Brook Siphon with an 1,800-linear-foot, triple barrel inverted siphon. Capacity deficiencies in the River Trunk would be mitigated by constructing a peak-flow diversion structure that diverts flows to the Cannery Segregation Line (CSL) during wet weather events, such that capacity in the CSL can be used to convey peak domestic wastewater flows. A second diversion structure would be constructed upstream of the Sutter Plant to divert the flows back to the River Trunk for primary treatment. Additionally, the alternative would mitigate capacity deficiencies in the Sutter Trunk by replacing the existing sewer with a new 24-inch diameter gravity sewer. The existing River Trunk also would be rehabilitated to correct its deteriorating condition.

This alternative would generally result in less construction impacts (e.g., air quality, GHG emissions, noise, biological resources, cultural resources, and other topics) than the Proposed Program as it would entail less pipeline construction. However, this alternative would not correct existing issues associated with operations and maintenance access and vulnerability issues of the River Trunk and CSL due to their location along the Tuolumne River.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Of the alternatives, the No Program Alternative would be environmentally superior because it would generally reduce or avoid most impacts of the Proposed Program. Consistent with the CEQA Guidelines, the following paragraphs describe the environmentally superior alternative amongst the other alternatives.

Both Alternative 4 (River Trunk Realignment Project Design Alternative 4A) and Alternative 5 (River Trunk Realignment Project Design Alternative 1) would result in less environmental impacts than the proposed River Trunk Realignment Project. Between these two alternatives, Alternative 5 would be environmentally superior because it would result in substantially less environmental impacts than Alternative 4. Alternative 5 would involve less new pipeline construction and would not involve new pump station construction. As a result, construction-

related disturbance on sensitive receptors (including noise and vibration, air pollutant and GHG emissions, and traffic impacts) would be less. Construction footprint impacts would also be less under Alternative 5 (e.g., biological and cultural resources impacts) in comparison to Alternative 4.

In comparing Alternative 3 (Primary Treatment and Solids Handling Facilities to the North of the Jennings Plant) to Alternative 2 (Deferred Implementation Alternative), Alternative 2 would be environmentally superior because, on the whole, this alternative would reduce construction impacts at a given time since some CIPs would be delayed, though they would eventually occur. Under Alternative 3, the construction timeframe for collection system components would be the same as the Proposed Program and would therefore would result in greater construction impacts collectively compared to Alternative 2.

On the whole, when comparing the EIR alternatives against the Proposed Program, the Proposed Program best meets the goals and objectives of the Program.

SUMMARY OF IMPACTS AND LEVELS OF SIGNIFICANCE

The impacts of the Proposed Program, proposed mitigation, and significance conclusions before and after mitigation are discussed in detail in Chapters 4 through 18 of this DEIR. **Table ES-1** summarizes the impacts, mitigation measures, and levels of significance identified in this document.

Table ES-1. Summary of Impacts and Mitigation Measures

Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Aesthetics and Visual Resources				
Impact AES-1: Adverse Effects on Scenic Vistas	LS	LS	LS	None required
Impact AES-2: Damage to Scenic Resources	LS	LS	LS	None required
Impact AES-3: Degradation of Visual Character or Quality of Site and Surroundings During Construction	LSM	CS, SP, OP: LSM JP: LS	LSM	**Mitigation Measure AES-1**: Locate Staging Areas Away from Public Areas and Install Screening (CS, SP, OP, River Trunk Project)
Impact AES-4: Degradation of Visual Character or Quality of Site and Surroundings During Program Operation	LS	CS, OP, SP, JP: LS	LS	None required
Impact AES-5: Permanent Source of Substantial Light or Glare	LS	CS, OP, SP, JP: LS	LS	None required
Agricultural Resources				
Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use	SU	CS, JP: SU OP: LS SP: NI	NI	None
Impact AG-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract	LS	CS, JP, OP: LS SP: NI	NI	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact AG-3: Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use	LS	LS	LS	None required
Air Quality				
Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan	SU	SU	SU	None available
Impact AQ-2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation	LSM	LSM	LS	**Mitigation Measure AQ-1**: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10} (Program-level Components) **Mitigation Measure AQ-2:** Implement Enhanced Control Measures for Construction Emissions of PM_{10} (Program-level Components) **Mitigation Measure AQ-3:** Implement Control Measures for Operation Emissions of PM10 and for Ozone Precursors (ROG and NO_x) (Program-level Components)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-attainment Under an Applicable Federal or State Ambient Air Quality Standard	SU	SU	SU	**Mitigation Measure AQ-1**: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10} (Program-level Components) **Mitigation Measure AQ-2:** Implement Enhanced Control Measures for Construction Emissions of PM_{10} (Program-level Components) **Mitigation Measure AQ-3:** Implement Control Measures for Operation Emissions of PM10 and for Ozone Precursors (ROG and NO_x) (Program-level Components)
Impact AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations	LSM	LSM	LSM	**Mitigation Measure AQ-1**: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10} (Program-level Components) **Mitigation Measure AQ-2:** Implement Enhanced Control Measures for Construction Emissions of PM_{10} (Program-level Components) **Mitigation Measure AQ-3:** Implement Control Measures for Operation Emissions of PM10 and for Ozone Precursors (ROG and NO_x) (Program-level Components)
Impact AQ-5: Create Objectionable Odors Affecting a Substantial Number of People	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Biological Resources				
Impact BIO-1: Impacts on Special-Status Plants	LSM	SP, JP: LS OP, CS: LSM	LSM	**Mitigation Measure BIO-1:** Perform Focused Surveys for Special-status Plant Species (OP, CS, River Trunk Project) **Mitigation Measure BIO-2:** Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species (OP, CS, River Trunk Project)
Impact BIO-2: Impacts on Vernal Pool Branchiopods and Western Spadefoot	LSM	LSM	NI	**Mitigation Measure BIO-3:** Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat (Program-level Components) **Mitigation Measure BIO-4:** Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat (Program-level Components)
Impact BIO-3: Impacts on Valley Elderberry Longhorn Beetle	LSM	LSM	LSM	**Mitigation Measure BIO-5:** Avoid Impacts on VELB Habitat (Program-level Components, River Trunk Project) **Mitigation Measure BIO-6:** Implement VELB Compensatory Mitigation, if Necessary (Program-level Components, River Trunk Project) **Mitigation Measure BIO-7:** Transplant Elderberry Shrubs if Avoidance Is Not Feasible (Program-level Components, River Trunk Project)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact BIO-4: Impacts on Special-status Fishes	LSM	SP, JP: LS OP, CS A-1 and A-2: LSM OC: NI	LSM	**Mitigation Measure HYD/WQ-1:** Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods (OP, CS, River Trunk Project)
Impact BIO-5: Impacts on Western Pond Turtle	LSM	OP, CS, SP, JP: LSM	LSM	**Mitigation Measure BIO-8**: Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle (Program-level Components, River Trunk Project)
Impact BIO-6: Impacts on Burrowing Owl	LSM	LSM	LS	**Mitigation Measure BIO-9**: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary (Program-level Components)
Impact BIO-7: Impacts on Golden Eagle and Bald Eagle	LS	LS	LS	None required
Impact BIO-8: Impacts on Raptors, Including Special-status Species	LSM	LSM	LSM	**Mitigation Measure BIO-10**: Avoid and Minimize Impacts on Raptors, Including Special-status Species (Program-level Components, River Trunk Project) **Mitigation Measure BIO-11:** Compensate for Loss of Raptor Foraging Habitat (Program-level Components, River Trunk Project)
Impact BIO-9: Impacts on Special-status Passerine Species and Birds Protected under the MBTA	LSM	LSM	LSM	**Mitigation Measure BIO-12:** Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary (Program-level Components, River Trunk Project)
Impact BIO-10: Impacts on Special-status Mammals	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact BIO-11: Impacts on Riparian Habitat and Other Sensitive Natural Communities	LSM	OP, CS: LSM SP, JP: LS	LSM	**Mitigation Measure HYD/WQ-1:** Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods (OP, CS, River Trunk Project) **Mitigation Measure BIO-3:** Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat (OP, CS, River Trunk Project) **Mitigation Measure BIO-4:** Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat (OP, CS, River Trunk Project)
Impact BIO-12: Impacts on Federally Protected Wetlands	LSM	SP, JP: LS OP, CS: LSM	LSM	**Mitigation Measure HYD/WQ-1:** Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods (OP, CS Components A-1 and A-2, River Trunk Project) **Mitigation Measure BIO-13**: Avoid and Minimize Impacts on Federally Protected Wetlands (OP, CS, River Trunk Project) **Mitigation Measure BIO-14**: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State (OP, CS, River Trunk Project)
Impact BIO-13: Impacts on Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites	LSM	LSM	LSM	**Mitigation Measure BIO-8**: Avoid and Minimize Impacts on Western Pond Turtle (OP, CS, JP, SP, River Trunk Project)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
				Mitigation Measures BIO-9: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary (OP, SP, JP, CS, River Trunk Project) **Mitigation Measure BIO-10:** Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species (SP, JP, CS except A-1 and A-2) **Mitigation Measure BIO-11:** Compensate for Loss of Raptor Foraging Habitat (OP, CS, SP, JP, River Trunk Project) **Mitigation Measure BIO-12:** Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary (OP, SP, JP, CS, River Trunk Project) **Mitigation Measure BIO-15**: Install Temporary Trench Plates over Open Trenches (OP, SP, JP, CS, River Trunk Project)
Impact BIO-14: Conflict with Local Ordinances or Policies Protecting Biological Resources	LSM	LSM	LSM	**Mitigation Measure BIO-1**: Perform Project-specific Site Assessment for Biological Resources (Program-level Components, River Trunk Project) **Mitigation Measure BIO-2**: Perform Surveys for Special-status Plant Species (OP, CS, River Trunk Project) **Mitigation Measure BIO-3:** Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat (Program-level Components, River Trunk Project)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
				Mitigation Measure BIO-4: Minimize Impacts on Special-status Plant Species (Program-level Components, River Trunk Project) **Mitigation Measure BIO-5:** Avoid Impacts on VELB Habitat (Program-level Components, River Trunk Project) **Mitigation Measure BIO-6:** Implement VELB Compensatory Mitigation, if Necessary (Program-level Components, River Trunk Project) **Mitigation Measure BIO-7:** Transplant Elderberry Shrubs if Avoidance Is Not Feasible (Program-level Components, River Trunk Project) **Mitigation Measure BIO-8**: Avoid and Minimize Impacts on Western Pond Turtle (OP, CS, SP, JP, River Trunk Project) **Mitigation Measures BIO-9**: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary (Program-level Components)) **Mitigation Measure BIO-10:** Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species (Program-level Components, River Trunk Project) **Mitigation Measure BIO-11:** Compensate for Loss of Raptor Foraging Habitat (Program-level Components, River Trunk Project)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
				Mitigation Measure BIO-12: Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary (Program-level Components, River Trunk Project) **Mitigation Measure BIO-13**: Avoid and Minimize Impacts on Federally Protected Wetlands (SP, JP, CS, River Trunk Project) **Mitigation Measure BIO-14**: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State (OP, CS, River Trunk Project) **Mitigation Measure BIO-15**: Install Temporary Trench Plates over Open Trenches (Program-level Components, , River Trunk Project)
Cultural Paleontological, and Tribal Cultural Resources				
Impact CR-1: Impacts on Known Historic, Archaeological, or Tribal Resources	LS	LS	NI	None required
Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources	LSM	LSM	LSM	**Mitigation Measure CR-1**: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work (Program-level Components, River Trunk Project)
Impact CR-3: Disturb Any Human Remains, Including those Interred Outside of Dedicated Cemeteries	LSM	LSM	LSM	**Mitigation Measure CR-1**: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work (Program-level Components, River Trunk Project)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact CR-4: Impacts on Paleontological Resources	LS	LS	LS	None required
Impact CR-5: Potential for Substantial Adverse Impact on Tribal Cultural Resources	LSM	LSM	LSM	**Mitigation Measure CR-1**: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work (Program-level Components, River Trunk Project)
Geology, Soils, and Seismicity				
Impact GEO-1: Cause Damage to Facilities and Exposure of People to Hazards from Strong Seismic Events, Including Ground Shaking or Landslides	LS	LS	LS	None required
Impact GEO-2: Result in Risk to Property and Life from Expansive Soils	LS	LS	LS	None required
Impact GEO-3: Result in Substantial Soil Erosion or Loss of Topsoil	LS	LS	LS	None required
Impact GEO-4: Result in Subsidence, Liquefaction, or Collapse Due to Seismic Activity or an Unstable Geologic Unit or Soil	LS	LS	LS	None required
Greenhouse Gas Emissions and Energy Resources				
Impact GHG-1: Potential to Generate a Substantial Amount of GHG Emissions	SU	SU	LS	None
Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs	SU	SU	LS	None

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact GHG-3: Cause Wasteful, Inefficient, and Unnecessary Consumption of Energy During Construction, Operation, and/or Maintenance	LS	LS	LS	None required
Impact GHG-4: Cause a Substantial Increase in Energy Demand and the Need for Additional Energy Resources	LS	LS	LS	None required
Hazards and Hazardous Materials				
Impact HAZ-1: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Construction	LS	LS	LS	None required
Impact HAZ-2: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Operation	LS	LS	LS	None required
Impact HAZ-3: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Construction	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact HAZ-4: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Operation	LS	LS	LS	None required
Impact HAZ-5: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within 0.25 Mile of an Existing or Proposed School	LS	LS	LS	None required
Impact HAZ-6: Location on a Site Which Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment	LS	LS	NI	None required
Impact HAZ-7: Location in an Airport Land Use Plan or within 2 Miles of a Public Airport or in the Vicinity of a Private Airstrip, Resulting in a Safety Hazard for People Residing or Working in the Program Area	LS	LS	LS	None required
Impact HAZ-8: Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact HAZ-9: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands Are Adjacent to Urbanized Areas or Where Residences Are Intermixed with Wildlands	NI	NI	NI	None required
Hydrology and Water Quality				
Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality during Construction	LSM	LSM	LSM	**Mitigation Measure HYD/WQ-1:** Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods (Program-level Components, River Trunk Project)
Impact HYD/WQ-2: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality during Operation	LS	LS	B	None required
Impact HYD/WQ-3: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level	LS	LS	LS	None required
Impact HYD/WQ-4: Substantially Alter the Existing Drainage Pattern of the Site or Area Such as to Result in Substantial Erosion, Siltation, or Flooding On- or Off-Site	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact HYD/WQ-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff	LS	LS	LS	None required
Impact HYD/WQ-6: Place Within a 100-year Flood Hazard Area Structures Which Would Impede or Redirect Flood Flows	LSM	SPR, OP: NI OC: NI LSC: LSM SP, JP: LS	LS	**Mitigation Measure HYD/WQ-2**: Conduct Flood Flow Study for Benson Lift Station (Component LS #3)
Impact HYD/WQ-7: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam	LS	LS	LS	None required
Land Use and Planning				
Impact LU-1: Divide an Established Community	LS	LS	LS	None required
Impact LU-2: Conflict with Land Use Plans, Policies, or Regulations Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Noise and Vibration				
Impact NOI-1: Expose Persons to Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or in the Applicable Standards of Other Agencies	LSM	LSM	LSM	**Mitigation Measure NOI-1:** Employ Noise-Reducing Construction and Maintenance Practices (Program-level Components, River Trunk Project) **Mitigation Measure NOI-2**: Limit Nighttime Construction Noise (Program-level Components, River Trunk Project) **Mitigation Measure NOI-3:** Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components (SP) **Mitigation Measure NOI-4**: Employ Noise-Reducing Methods During Operations (SP)
Impact NOI-2: Expose Persons to Excessive Groundborne Vibration or Groundborne Noise Levels	LSM	LSM	LSM	**Mitigation Measure NOI-5**: Implement Vibration Reduction Measures (River Trunk Project, Program-level Components)
Impact NOI-3: Substantial permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program	LSM	SPR, OC, OP: NI JP: LS LSC, SP: LSM	LS	**Mitigation Measure NOI-3**: Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components (SP) **Mitigation Measure NOI-4**: Employ Noise-Reducing Methods During Operations (SP, LSC)

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact NOI-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program	SU	LSM	SU	**Mitigation Measure NOI-1:** Employ Noise-Reducing Construction and Maintenance Practices (Program-level Components, River Trunk Project) **Mitigation Measure NOI-2:** Limit Nighttime Construction Noise (Program-level Components, River Trunk Project)
Impact NOI-5: Expose People Residing or Working in the Program Area to Excessive Noise Levels Associated with a Public Airport	LS	LS	LS	None required
Population and Housing				
Impact PH-1: Induce Substantial Population Growth, Both Directly and Indirectly, during Construction	LS	LS	LS	None required
Impact PH-2: Displace Substantial Numbers of People or Existing Housing, Necessitating the Construction of Replacement Housing Elsewhere	NI	NI	NI	None required
Impact PH-3: Long-term Inducement of Substantial Population Growth, Both Directly and Indirectly	LSM	LSM	LSM	Mitigation Measures AES-1, AQ-1 through AQ-3, BIO-1 through BIO-15, CR-1 through CR-3, HYD/WQ-1, and NOI-1 through NOI-5.
Transportation and Traffic				
Impact TR-1: Conflict with Applicable Circulation Plans, Ordinances, or Policies Establishing Measures of Effectiveness for the Performance of the Circulation System	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Impact TR-2: Conflict with an Applicable Congestion Management Program	LS	LS	LS	None required
Impact TR-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses	LS	LS	LS	None required
Impact TR-4: Result in Inadequate Emergency Access	LS	LS	LS	None required
Impact TR-5: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Features	LS	LS	LS	None required
Utilities and Service Systems				
Impact UTL-1: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects	LS	LS	LS	None required
Impact UTL-2: Require New or Expanded Water Supply Entitlements	NI	NI	NI	None required
Impact UTL-3: Require Additional Permitted Landfill Capacity to Accommodate the Project's Solid Waste Disposal Needs	LS	LS	LS	None required
Impact UTL-4: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste	LS	LS	LS	None required

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Impact	Level of Significance after Mitigation*			Mitigation Measure(s)
	Overall Program	Program-level Components**	River Trunk Realignment Project (Project-level Components)	
Cumulative Impacts				
Impact CUM-1: Cumulative Impacts on Aesthetics	LSM			Mitigation Measure AES-1
Impact CUM-2: Cumulative Impacts on Agriculture	SU			None available
Impact CUM-3: Cumulative Impacts on Biological Resources	LSM			Mitigation Measures BIO-1 through BIO-15 Mitigation Measure HYD/WQ-1
Impact CUM-4: Cumulative Impacts on Cultural, Paleontological Resources, and Tribal Cultural Resources	LSM			Mitigation Measures CR-1 through CR-3
Impact CUM-5: Cumulative Impacts on Hydrology and Water Quality	LSM			Mitigation Measure HYD/WQ-1
Impact CUM-6: Cumulative Impacts related to Noise and Vibration	SU			Mitigation Measures NOI-1 through NOI-5
Impact CUM-7: Cumulative Impacts related to Transportation and Traffic	LS			None required
Impact CUM-8: Cumulative Impacts on Utilities and Service Systems	B			None required

1

* Key to Significance Levels: B = beneficial; NI = no impact; LS = less than significant; LSM = less than significant with mitigation; SU = significant and unavoidable

** Key to program-level components: CS = Collection System; JP = Jennings Plant; LSC = Lift Station Components; OC = Other Components; OP = Outfall Pipelines; SPR = New/Upgraded Sewer Pipelines and Pipeline Rehabilitation; SP = Sutter Plant

Chapter 1
INTRODUCTION

The City of Modesto (City) has prepared this Draft Environmental Impact Report (DEIR) as lead agency to provide the public, responsible agencies, and trustee agencies with information about the environmental effects of implementation of the proposed 2016 Wastewater Collection System Master Plan and the 2016 Wastewater Treatment Master Plan, which are collectively referred to as the proposed 2016 Wastewater Master Plan (Proposed Program or WWMP). The Proposed Program updates and replaces the City's 2007 Wastewater Master Plan. The Wastewater Master Plan is intended to accommodate the wastewater collection service needs of the population and land uses of the City along with the City's other sanitary sewer customers in unincorporated areas (e.g., north Ceres, community of Empire, and other isolated areas within the City's Sphere of Influence) of through 2057, and to accommodate wastewater treatment needs for those same customers through 2035.

The following sections provide an overview of the California Environmental Quality Act (CEQA) requirements, organization of the DEIR, and process in which comments may be submitted on this DEIR. The last section describes the City's existing wastewater system.

1.1 Overview of CEQA Requirements

CEQA's basic purposes are to (State CEQA Guidelines Section 15002[a]):

1. Inform governmental decision-makers and the public about the potential, significant environmental effects of the Program's proposed activities.
2. Identify the ways that environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring implementation of feasible mitigation measures or Program/project alternatives that would substantially lessen any significant effects that the Program (or a particular project) would have on the environment.
4. Disclose to the public the reasons why a governmental agency approved the Program in the manner the agency chose if significant environmental effects are involved.

With certain strictly limited exceptions, CEQA requires all state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority before approving or carrying out projects. CEQA establishes both procedural and substantive requirements that agencies must satisfy to meet CEQA's objectives. For example, the agency with principal responsibility for approving or carrying out a project (the lead agency) must first assess whether a proposed project would result in significant environmental impacts. If there is substantial evidence that the project would result in significant environmental impacts, CEQA requires that the agency prepare an environmental impact report (EIR), analyzing both the proposed project and a reasonable range of potentially feasible alternatives.

As described in the State CEQA Guidelines (California Code of Regulations [CCR] Title 14, Section 15121-a]), an EIR is an informational document that assesses potential environmental effects of a proposed project, and identifies mitigation measures and alternatives to the project that could reduce or avoid significant environmental impacts. Other key CEQA requirements include developing a plan for monitoring the implementation of identified mitigation measures and carrying out specific public notice and distribution steps to facilitate public involvement in the environmental review process. As an informational document used in the planning and decision-making process, an EIR's purpose is not to recommend either approval or denial of a project. Note that an EIR does not expand or otherwise provide independent authority of the lead agency to impose mitigation measures or avoid project-related significant environmental impacts beyond the authority already within the lead agency's jurisdiction.

1.1.1 Intent and Scope of this Document

In proposing to conduct the various activities identified in Chapter 2 of this DEIR, the City is proposing to carry out and approve a discretionary project subject to CEQA (State CEQA Guidelines Section 15378). This DEIR was prepared to disclose further details of the Proposed Program, as well as the significant effects of the proposed capital improvement projects (CIPs) on the environment. The DEIR analysis considers most Program components at a program level of detail, and one individual component at a project-specific level of detail. The City will use the analyses presented in this DEIR, the public response to the DEIR, and the whole of the administrative record, to evaluate the Proposed Program's environmental impacts and to further modify, approve, or deny approval of the Proposed Program. Responsible agencies under CEQA, such as the Central Valley Regional Water Quality Control Board (Central Valley RWQCB), California Department of Fish and Wildlife (CDFW), Central Valley Flood Protection Board (CVFPB), and other agencies listed in Section 2.6, may use the EIR to support their decisions to issue permits or make other types of approvals for the Proposed Program.

This DEIR evaluates the majority of the Proposed Program at a program level of detail, as defined in State CEQA Guidelines Section 15168(a):

> A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
>
> (1) Geographically,
>
> (2) As logical parts in the chain of contemplated actions,
>
> (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
>
> (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

As described in State CEQA Guidelines Section 15168(c), for program-level components, subsequent activities implemented under the Proposed Program may require additional

environmental review if those activities would have effects that were not examined in this program EIR.

One portion of the Proposed Program, the River Trunk Realignment Project, has been evaluated at a project level of detail, as this project is ripe for implementation, and sufficient information exists to allow for a project-level evaluation without the need for further CEQA compliance beyond this EIR.

1.2 CEQA Process

1.2.1 Notice of Preparation

A Notice of Preparation (NOP) for the Proposed Program was prepared pursuant to the State CEQA Guidelines (Section 15082) and circulated to the Office of Planning and Research's State CEQA Clearinghouse on June 10, 2016. The scoping period continued for 30 days and concluded on July 10, 2016. The NOP presented general background information on the Proposed Program, the scoping process, and the environmental issues to be addressed in the EIR. Approximately 50 copies of the NOP were mailed to a broad range of stakeholders including state, federal, and local regulatory agencies and jurisdictions, non-profit organizations, and school districts. The NOP is included in this DEIR in Appendix A, *Scoping Summary*.

1.2.2 Scoping Comments and Meetings

The City accepted written comments during the 30-day scoping period, June 10 to July 10, 2016. A scoping meeting was held on June 22, 2016, at which one person attended the meeting. During the scoping period, one comment letter was received. This comment along with oral comments received at the scoping meeting were considered in the environmental impact evaluation. Copies of comment letters received during the scoping period are included in Appendix A, *Scoping Summary*.

1.2.3 Draft EIR

The City has prepared this DEIR, as informed by public and agency input received during the scoping period, to disclose significant environmental impacts associated with the Proposed Program. Where any such impacts are significant, feasible mitigation measures and potentially feasible alternatives that substantially lessen or avoid such effects are identified and discussed. The public review period provides the public an opportunity to provide input to the lead agency on the DEIR.

1.2.4 Public Review and Meetings

The DEIR will undergo public review for the period specified in the Notice of Availability of the DEIR. During this period, the City will hold a public meeting. The date, time, and exact location of the public meeting will be included in the Notice of Availability of this DEIR.

1.2.5 Final EIR

Written and oral comments received in response to the DEIR will be addressed in a Response to Comments document which, together with the DEIR and any related changes to the substantive discussion in the DEIR, will constitute the Final EIR. The Final EIR, in turn, will inform the City's exercise of its discretion as a lead agency under CEQA in deciding whether or how to approve the Proposed Program.

1.3 Organization of this DEIR

This DEIR contains the following components:

Executive Summary. A summary of the Program, a description of the issues of concern, Project alternatives, and a summary of environmental impacts and mitigation measures are provided in this chapter.

Chapter 1, *Introduction*. This chapter describes the purpose and organization of the EIR and its preparation, review, and certification process.

Chapter 2, *Program Description*. This chapter summarizes the Program, including a description of the Program purpose and objectives, a brief description of the Program area and study area, and proposed actions that would be taken under the Project.

Chapter 3, *Introduction to the Environmental Analysis*. This chapter is an introduction to the impact analysis conducted in this DEIR. This chapter also identifies resource topic areas determined not to be affected by the Program and therefore have been dismissed from further analysis in this Draft EIR.

Chapters 4-18 describe the environmental resources and environmental impacts of the Program. Each of these chapters describes the existing local and regional setting and background information for the resource topic area under consideration to aid the reader in understanding the conditions that could be affected by the Proposed Program. In addition, each of these chapters includes a discussion of the criteria used in determining the significance levels of the Program's environmental impacts. Each of these chapters also provides mitigation measures to reduce, where feasible, the adverse effects of significant impacts.

Chapter 19, *Other Statutory Considerations*, addresses the Proposed Program's contribution to cumulative impacts, outlines the Proposed Program's growth-inducing impacts, and identifies significant and irreversible environmental changes resulting from the Proposed Program.

Chapter 20, *Alternatives Analysis*. This chapter describes the process by which alternatives to the Proposed Program were developed and screened, evaluates their likely environmental impacts, and identifies the environmentally superior alternative.

Chapter 21, *Report Preparation*, lists the individuals involved in preparing this DEIR.

Chapter 22, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this DEIR.

Appendix A, *Scoping Summary*. This appendix contains the NOP issued by the City, materials from the scoping process, a summary of comments received during the scoping period, and copies of all comments submitted.

Appendix B contains supporting documentation for the air quality and global climate change impacts evaluation.

Appendix C contains the supporting documentation for the biological resource impacts evaluation.

Appendix D contains the supporting documentation for the cultural resource impacts evaluation.

Appendix E contains the supporting documentation for the noise and vibrations impacts evaluations.

Appendix F contains the supporting documentation for the evaluation of tribal cultural resources.

1.4 Submittal of Comments

The City is circulating this DEIR for public review and comment for the period specified in the Notice of Availability. As discussed above, the City will host a public meeting during this period. The purpose of public circulation is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of this DEIR. Specific dates, times and locations for the meeting will be provided in the Notice of Availability, which will be posted on the City's website (www.modestogov.com), and in a newspaper notice.

This CEQA document is also available for review at the aforementioned City website. Hard copies can be reviewed at the City's Utilities Department offices in Modesto, California. To arrange to view documents during regular business hours (8:00 a.m. to 4:30 p.m., Monday through Friday), call (209) 577-5395. This DEIR also can be reviewed electronically at the Stanislaus County library (1500 I Street, Modesto, California), which is serving as a document repository.

Written comments concerning this DEIR can be submitted at the public meeting described above or at any time during the DEIR public review period. All comments must be received by 5:00 p.m. on the final date of public review as identified in the Notice of Availability, and directed to the name and address listed below:

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95354
P.O. Box 642, Modesto, CA 95353
jalves@modestogov.com

Submittal of written comments via e-mail (Microsoft Word or Adobe PDF format) is preferred. Written comments received in response to this DEIR during the public review period will be addressed in a Response to Comments section of the Final EIR.

1.5 Proposed Program Location and Setting

The Proposed Program is located in the City of Modesto, California. The City's wastewater service area includes all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, and unincorporated "islands" in Stanislaus County that are served by agreement (see **Figures 1-1** and **1-2**). Note that although not shown in Figure 1-2, the City also provides wastewater service to an approximately 128-acre property southeast of the East Whitmore Avenue and Crows Landing Road intersection and the County's Public Safety Center located on a 95-acre parcel southeast of the East Hackett Road and Crows Landing Road intersection. The City's wastewater treatment facilities are located on City-annexed property located about seven miles southwest of the City proper, and the Primary Effluent Outfall and Cannery Segregation Line Outfall, which are pipelines, are located in unincorporated Stanislaus County.

1.6 Existing Wastewater System

The City operates and maintains the wastewater collection system servicing the urban area of Modesto. The City's wastewater collection system is divided into two separate systems: the domestic system and the segregated cannery process water system. The City's wastewater system consists of approximately 40 sewer lift stations, more than 600 miles of sanitary lines ranging from 6 to 66 inches, 69 miles of trunk lines (pipelines greater than 15 inches in diameter), and an additional separate 15 miles of trunk lines connecting cannery food processors directly to land disposal (application) areas. Most of the City's wastewater system flows by gravity, but in some areas, lift stations (also referred to as pump stations) are necessary to convey wastewater generated within the service area to the Sutter Avenue Primary Treatment Plant (Sutter Plant) and the Jennings Road Secondary and Tertiary Treatment Plant (Jennings Plant). Key facilities at the Sutter and Jennings Plants are shown in **Figures 1-3** and **1-4**.

Once wastewater makes its way to the Sutter Plant, the wastewater undergoes primary treatment which includes several steps. The first step involves removing large objects and debris such as rags, paper, and plastics, through use of bar screens. After the screening process, the grit (sand and other inorganic particles) settles out and is removed. Once grit and debris are dried, the material is hauled to the Fink Road Landfill (4000 Fink Road in Crows Landing) for disposal. Next, the wastewater enters primary settling tanks where solids are settled out and the floating material (including grease, floatable trash, and other material) is skimmed off. The settled solids removed from the wastewater (referred to as biosolids) are then conveyed to the Sutter Plant's anaerobic digesters. Anaerobic digestion involves a

sequence in which microorganisms break down the biosolids in the absence of oxygen. Digester-produced gas is the primary fuel source for the digester boiler; however, if there is not enough of this source available, the boiler can utilize natural gas.

Digester-produced gas that exceeds the need of the boiler is flared. Once broken down, the digested solids are dewatered in drying beds and, once dry, are hauled to the Jennings Plant for application on City-owned land to irrigate fodder crops.

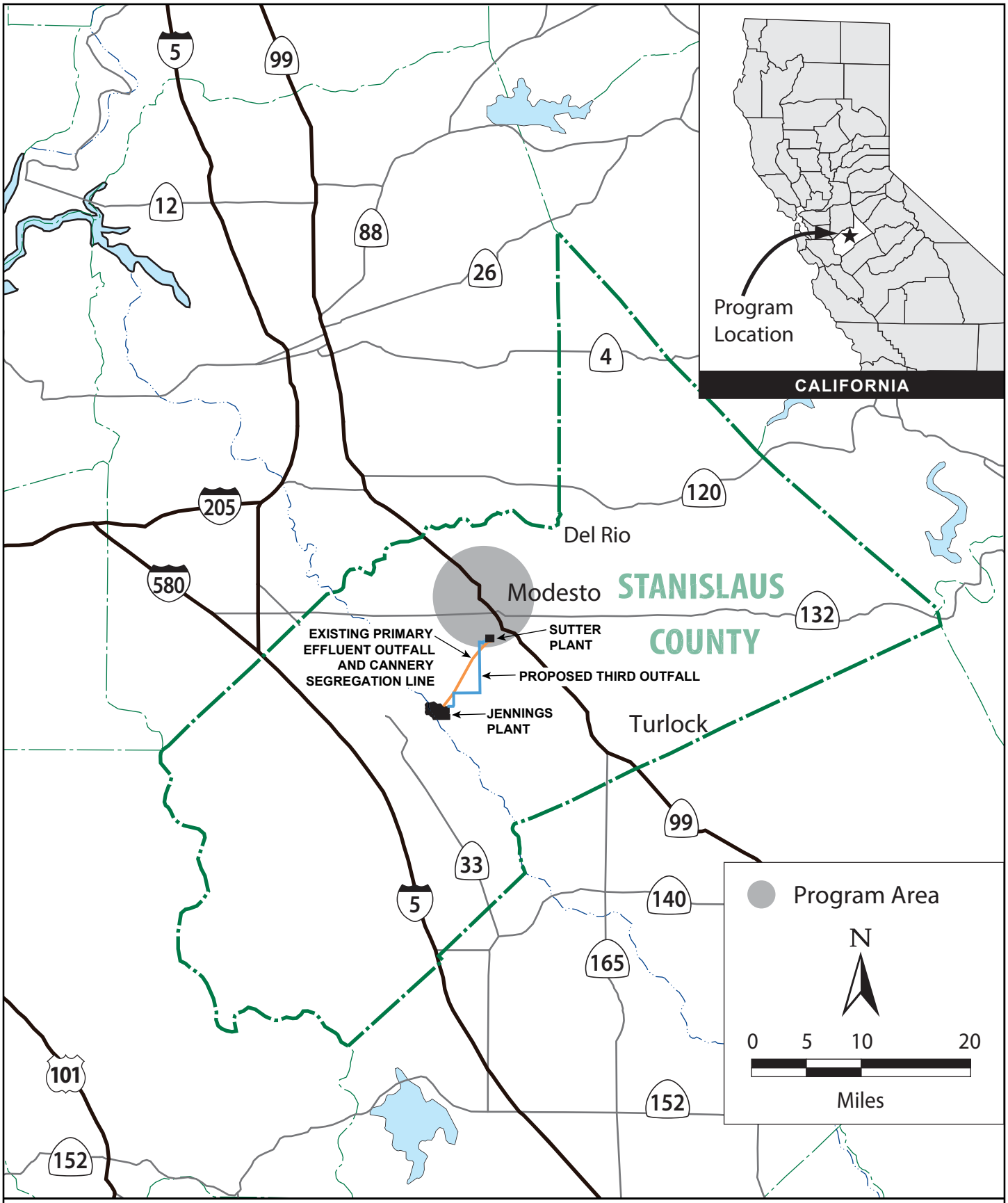
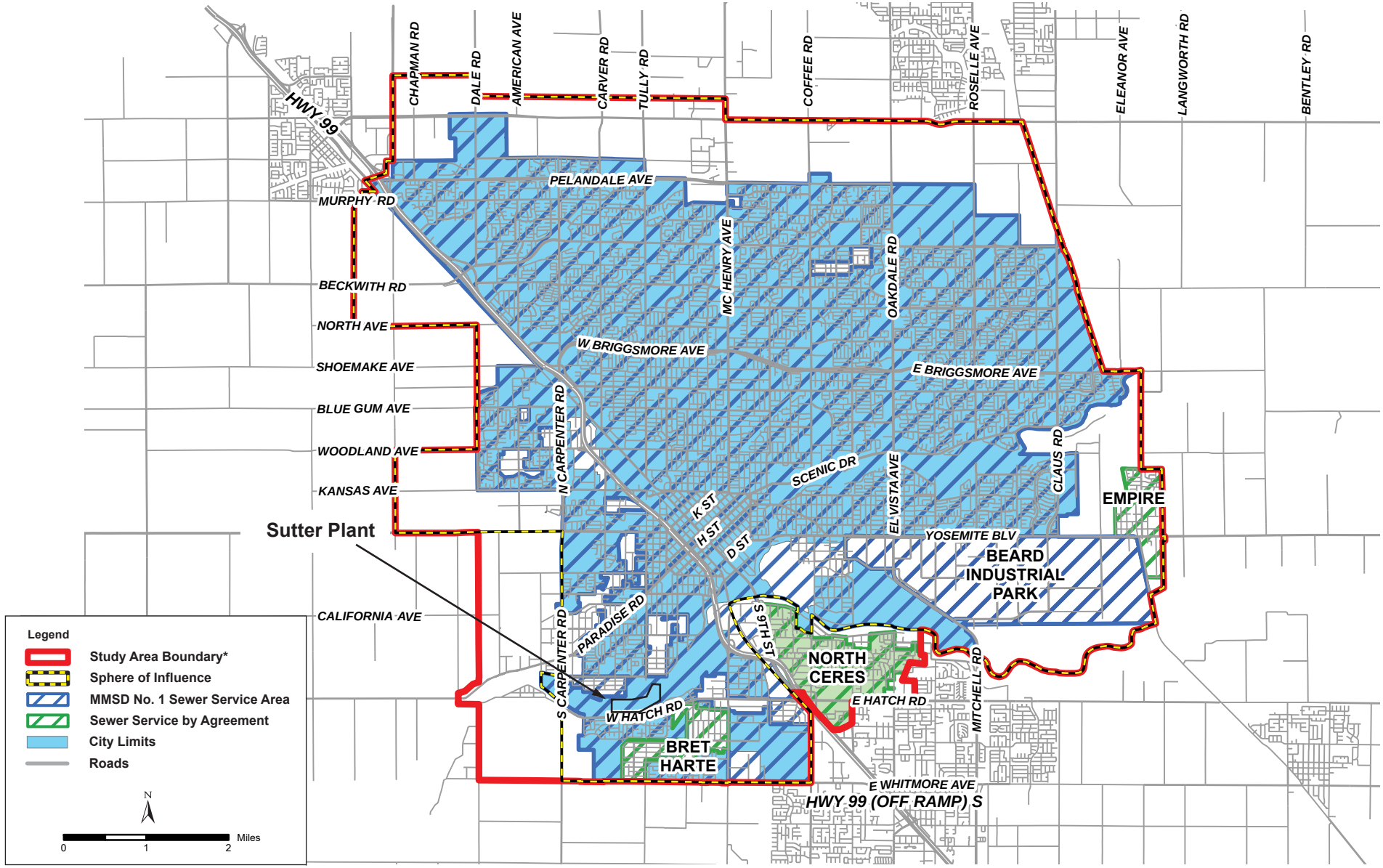


Figure 1-1.
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR



Source: City of Modesto 2016

Figure 1-2. Wastewater Master Plan Sewer Service Study Area

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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Source: Carollo 2016a

Figure 1-3.
Existing Sutter Plant Site Plan

Prepared by:
Horizon
WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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Source: Carollo 2016a

Figure 1-4.
Existing Jennings Plant Site Plan

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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The primary effluent is then pumped through the Primary Effluent Outfall (and sometimes through the Cannery Segregation Line) to the secondary treatment facilities at the Jennings Plant. During this treatment phase, microorganisms metabolize biological matter. The secondary treatment facilities at the Jennings Plant include three fixed film reactors (140 diameter each), three facultative ponds (approximately 334 acres), approximately 600 acres of wastewater storage ponds, 100-acre aerated recirculating channel and a chlorination and dechlorination facility. Incoming primary effluent first is treated in the fixed film reactors where microorganisms break down the biological matter, then enters the recirculating channel, and then enters the three facultative ponds.

Once secondary treatment is complete, effluent either is applied to approximately 2,500 acres of agricultural ranch land owned by the City or undergoes tertiary treatment.

The City's National Pollutant Discharge Effluent System (NPDES) surface water discharge permit (Order R5-2017-0064, NPDES No. CA0079103), recently issued in June 2017, allows up to 14.9 million gallons per day (mgd) of tertiary treated wastewater discharges to the San Joaquin River year-round. The City is not permitted to discharge secondary treated wastewater to the San Joaquin River. Algae typically grows in the storage reservoirs in October and November, which generates high suspended solids concentrations that typically exceed discharge limitations. The City, however, has addressed this issue by installing dissolved air flotation (DAF) units to remove algae, which gets discharged to the southwest corner of the recirculation channel. Installation of the DAF units has allowed the City to extend the discharge season into October and November. As described further in Section 1.6.2 below, the City has constructed the first two phases of tertiary treatment facilities at the Jennings Plant. As described further in Chapter 19, *Other Statutory Considerations,* the City is also participating in the North Valley Regional Recycled Water Program (NVRRWP), which is currently being constructed and will provide recycled water to the Delta-Mendota Canal. Once the NVRRWP project is completed, up to 14.9 mgd of tertiary treated water at the Jennings Facility would be conveyed by pipeline to the Delta-Mendota Canal.

The following subsections provide more detail about the City's collection and wastewater treatment facilities.

1.6.1 Collection System

The City's lift stations are all underground but have some aboveground components including one or more control panels and a small radio antenna (up to 25 feet tall). The control panels are typically comprised of metal boxes approximately five feet high, three feet wide, and one foot thick. For underground lift stations, the above-ground portion includes a small on-store structure that is several feet long, several feet wide, and several feet high. Some lift stations also have ancillary facilities on-site such as back-up generators, storage structure, restroom facility, and/or a wash station facility. The locations of the City's lift stations, major trunk lines, and collection system pipelines are shown in **Figure 1-5**. As shown in Figure 1-5, five major trunk lines convey flows to the Sutter Plant: the West Trunk, Emerald Trunk, Sutter Trunk, River Trunk, and South Trunk. The trunk sewers range in diameter from 10 inches to 66 inches. The Cannery Segregation Line parallels the River Trunk line and conveys cannery process water from the Beard Industrial Park area to the Sutter Plant.

1.6.2 Wastewater Treatment Plants

Sutter Avenue Primary Treatment Plant

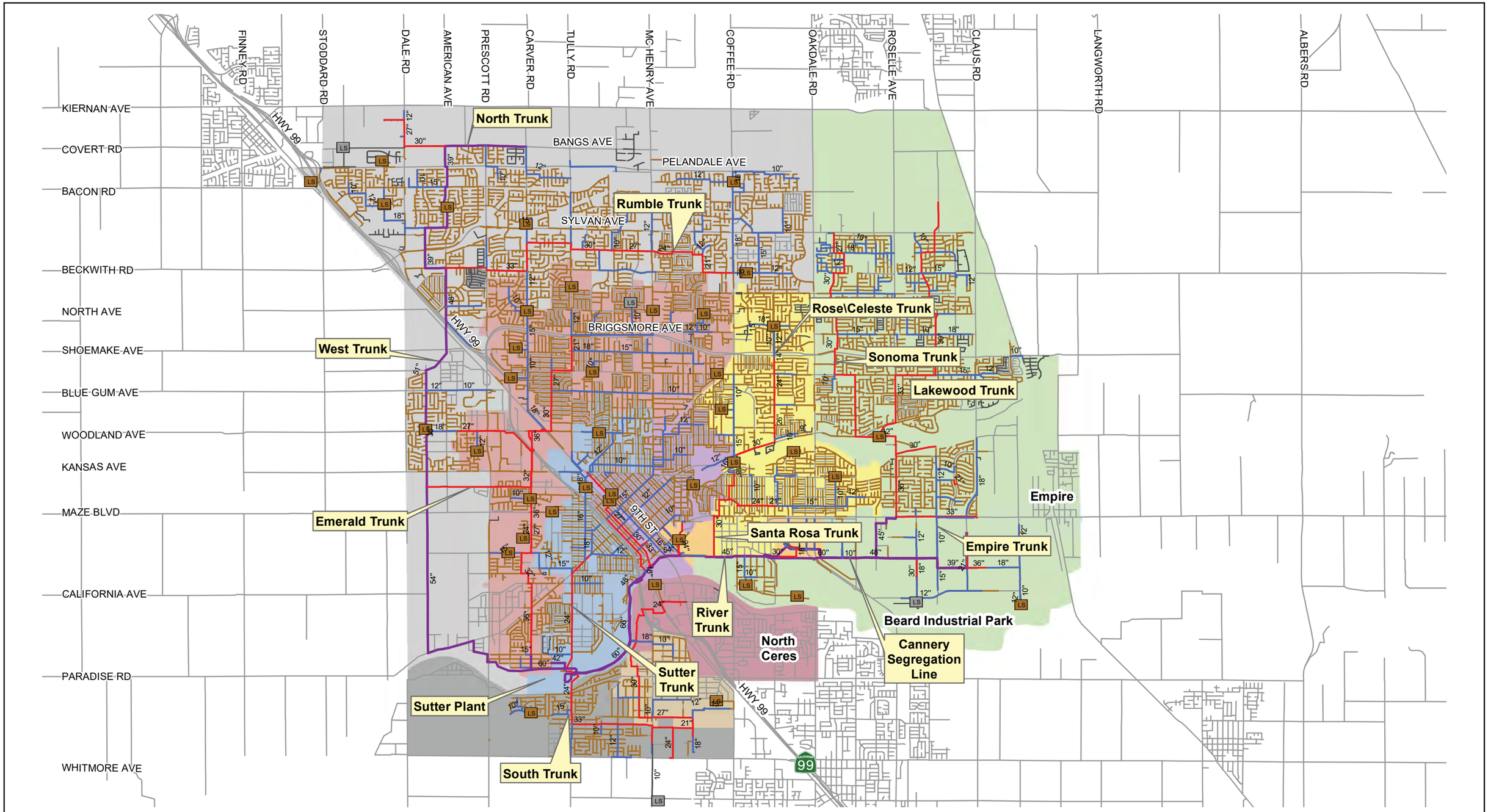
Figure 1-3 shows the current site plan of the Sutter Plant. Wastewater is transmitted to the Sutter Plant via several trunk sewer lines. Initial wastewater treatment begins at the headworks, which includes influent pumping, screening, grit removal, and primary clarification. Excess trash, debris, rags, sand, and other inorganic particles are hauled to a landfill for disposal, while removed biosolids are processed in anaerobic digesters then dried in sludge drying beds. In 2015 and 2016, the Sutter Plant removed approximately 3,000 to 4,000 tons of biosolids annually, or about half of the organic load from received wastewater. After the biosolids dry for approximately one year at the Sutter Plant's drying beds, they get delivered to the City-owned ranch lands to the south of the Jennings Plant. Primary treated wastewater (effluent) is then conveyed to the Jennings Plant for further treatment and/or disposal.

Existing Primary Effluent Outfall

Effluent from the Sutter Plant is routed underneath the Tuolumne River through the 54-inch lined Primary Effluent Outfall and 60-inch Cannery Segregation Line Outfall pipelines. From the Sutter Plant, the effluent is pumped through a river undercrossing to a point where it flows by gravity for a total length of approximately 6.5 miles south to the Jennings Plant. At the Jennings Plant, domestic effluent undergoes secondary and tertiary treatment. Both effluent outfall pipelines run predominately in a northeast to southwest direction between the two treatment plants. During the canning season (July through September or early October), canning segregated flows received at the Sutter Plant are pumped and sent directly to the Jennings Plant and get applied to ranch land.

Jennings Road Secondary Treatment Plant

Figure 1-4 shows the current site plan of the Jennings Plant. Situated on the eastern side of the San Joaquin River and approximately 5 miles northeast of Patterson, the Secondary Plant further treats incoming effluent that derives from the Sutter Plant. Wastewater enters the Jennings Plant from the Primary Effluent Outfall (and occasionally the Cannery Segregation Line Outfall) where it undergoes a multi-step biological treatment process involving three fixed film reactor towers, 300 acres of oxidation ponds, and 100 acres of recirculation ponds. Processed effluent is then transferred to 1,200 acres of storage ponds. The stored effluent is used to irrigate approximately 2,500 acres of fodder crops on City-owned ranch land, which also receives an annual application of dried and digested biosolids from the Sutter Plant. Between 2009 and 2014, the average application rate to the City-owned ranch lands was approximately 5.5 feet per year (Pers. Comm. Eve 2017). Excess effluent not used for irrigation is stored, disinfected in a chlorination/dechlorination facility, and seasonally discharged (October through May) to the San Joaquin River (City of Modesto 2016a).



Source: Carollo 2016b

Legend

Sewer Main
- 8" or Smaller
- 9" to 18"
- 20" to 36"
- Larger than 36"

- Lift Station
- Private Sewer Main
- Private Lift Station
- Roads

Sewer Tributary Areas
- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Area 7
- Area 8/Northern Ceres
- Area 9
- Area 10

N

1 0.5 0 1

Miles

Prepared by: Horizon Water and Environment

Figure 1-5.
Existing Wastewater Collection System

City of Modesto
Wastewater Master Plan EIR

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The City completed construction of the Phase 2 Tertiary Treatment facility at the Jennings Road site in 2015, which is now treating a blend of primary effluent from the Sutter Plant and recirculation water[1] from the Jennings Plant. Each plant has secondary biological reactors for biological oxygen demand (BOD) removal and nitrification/denitrification, membrane filtration, and ultraviolet (UV) disinfection. At full operation, the Phase 1 facility has production capacity of 2.3 mgd and is designed for year-round discharge.

The Phase 2 facility has production capacity of 12.6 mgd. This facility utilizes membrane bioreactor (MBR) filtration and ultraviolet disinfection facilities to produce higher quality effluent. This facility was constructed in an effort to maintain NPDES discharge permit compliance and improve operations as growth continues in the Modesto area.

1.6.3 Stormwater/Sanitary Systems Connections

The City's storm drainage system includes catch basins that convey rainwater to rockwells or to a storm drainage system that consists of storm drain piping and basins. Rockwells are fairly deep holes drilled into the soil and allow water to seep into the ground and above the water table.

In several areas of the City where there are no rockwells or rockwells are ineffective, the stormwater and sanitary systems are directly connected (also referred to as combined systems). These connections, known as inflow, allow excess stormwater to flow directly to the Sutter Plant. In addition to the intended connections, stormwater inadvertently enters sanitary lines through cracks in pipelines and loose pipe fittings, known as infiltration. The infiltration and inflow of stormwater (via groundwater) reduces the collection capacity of the sanitary system for wastewater flow during storm events. Though the City's sanitary sewer collection system is anticipated to receive some infiltration, the system has not been designed to handle substantial inflows from direct connections.

1.6.4 History of Previous Wastewater Master Plans

The City prepared a Wastewater Master Plan in 1995, followed by a Master EIR in 1997, that evaluated the environmental impacts of that plan. One major component of the 1995 plan included the segregation of wet industry wastes. Subsequently, in 2007, the City updated the Wastewater Master Plan and prepared a Master EIR. The Proposed Program updates and replaces the 2007 Wastewater Master Plan. For the purposes of this document, an EIR has been prepared for the Proposed Program. As described in Chapter 3, *Introduction to the Environmental Analysis*, this DEIR includes a number of components evaluated at a program level and one near-term component that is evaluated at a project level of detail.

1.6.5 Planning Challenges

This section describes challenges the City faces in planning a sufficient wastewater infrastructure to meet its needs. Specific anticipated wastewater treatment demands and

[1] Recirculation is the process of recirculating water as a way of reducing the load of organic waste in the water and increasing the amount of oxygen in the water. The water is piped back to the beginning of the treatment process and added to the raw wastewater.

planned growth are described in Section 2.4, *Projected Wastewater Flows*, of Chapter 2, *Program Description*.

The City of Modesto conducts a periodic review of the City's growth trends to identify potential areas of new growth, infill development, and urban infrastructure serving the area. Previous reviews recognized existing and planned sanitary sewer infrastructure as a potential constraint to the urban growth of the City. Some of these deficiencies were addressed in the City's 2007 Wastewater Master Plan and Capital Improvement Program. The City has made a number of improvements since the 2007 Wastewater Master Plan but still faces the challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

Existing and Projected Collection System Capacity Deficiencies

According to the most recent review (2015) for City growth trends, the existing collection system lacks sufficient capacity to meet current and projected demands mostly in the lower reaches of the conveyance system. Pipes that lack adequate capacity sometimes generate backwater effects and cause wastewater surcharges or could result in overflows. Depending on the location within the service area, required sanitary sewer system improvements include upgrading or replacing sewer mains, trunk lines, and lift stations necessary to convey wastewater to treatment facilities. For example, according to a preliminary design report focused on the River Trunk Alignment, Beard Brook Siphon and Cannery Segregation line (Carollo Engineers 2015), segments of the River Trunk line recently failed on the Gallo property and have created a sinkhole; other sections of this trunk line are severely corroded. The Beard Brook Siphon, which conveys effluent for the River Trunk line across Dry Creek, also has insufficient hydraulic capacity during wet weather flow conditions due to clogging of grease and debris.

Storm Drain Connections to Collection System

As previously described, in some areas of Modesto where rockwells or storm drains were not available, connections between the storm drain system and sanitary system were installed, primarily as mitigation to stormwater flooding in certain neighborhoods. These connections often capture some of the excess stormwater, which is conveyed to the Sutter Plant. Such connections have caused capacity issues both in the collection system and Sutter Plant and, during large rain events, have not effectively reduced flooding in neighborhoods where cross connections are located.

Inadequate Flood Protection and Aging Facilities at the Sutter Plant

The primary treatment facilities at the Sutter Plant (primary clarifiers, anaerobic digesters, and drying beds) are aging and require upgrading. The primary clarifiers were originally designed to treat cannery process water as well as domestic wastewater but since cannery flows are now treated at the Jennings Plant, the clarifiers are oversized. As a result, the clarifiers have caused odor concerns and other operational issues (Carollo Engineers 2015). In addition, critical primary treatment facilities at the Sutter Plant are situated within the 100-year floodplain. Based on the Sutter Treatment Facility Feasibility Study (Carollo Engineers 2015), the City has determined that reducing flooding effects on the existing primary treatment facilities would be largely infeasible as opposed to relocating these facilities.

Increase Hydraulic Capacity, Reliability and Redundancy at the Sutter and Jennings Plants

Some existing treatment facilities lack the hydraulic capacity and/or effectiveness to meet projected service demands under all hydrologic conditions. During the last 10 years, the City's wastewater demands at the Sutter plant have decreased by about 25 percent for various long- and short-term reasons. While previous issues involved a lack of immediate treatment capacity for projected future growth demands, current issues now primarily involve the reliability and redundancy of treatment infrastructure to meet existing and future demands. Capacity and reliability for future industrial demand is of particular importance. Improvements to facility headworks (initial treatment stage) capacity are necessary as well as other conveyance structures at the Sutter Plant. Existing facilities may also require maintenance upgrades of treatment processes to effectively handle existing and future volume of wastewater and increase systems reliability.

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Chapter 2
PROGRAM DESCRIPTION

2.1 Overview

This chapter describes the City's 2016 proposed Wastewater Master Plan (WWMP; Proposed Program) and discusses its purpose and objectives, location, proposed actions, and necessary permits and approvals. Background reports used to prepare this chapter include the following:

- City's *Wastewater Collection System Master Plan,* prepared by Carollo Engineers in association with West Yost & Associates and HDR. Final Draft (April 2016a)
- City's *Wastewater Treatment Master Plan*, prepared by Carollo Engineers in association with West Yost & Associates and HDR. Final Draft (December 2016b)
- City's *River Trunk Realignment Project Basis of Design Report*, prepared by Carollo Engineers (July 2016c)
- City's *River Trunk Realignment, Beard Brook Siphon and Cannery Segregation Line Improvement Project Preliminary Design Report*, prepared by Carollo Engineers (September 2015)

2.2 Purpose and Objectives

The City periodically reevaluates its wastewater system through development of a wastewater system Capital Improvement Program, which addresses existing deficiencies and replacement needs. The last WWMP was completed in 2007. The proposed WWMP revises the prior document to account for new General Plan and sphere of influence (SOI) boundary adjustments, zoning revisions, updated growth projections, updated sewer demand information, regulatory requirements, CIPs completed to date, and identifies new CIPs. The overall purpose of the Proposed Program is to meet existing and future wastewater treatment demands for the City and its customers in unincorporated areas of Stanislaus County, through 2035. The Program is also intended to meet existing and future wastewater collection service needs for the City and its customers in outlying service areas through 2057.

The objectives of the Proposed Program as a whole are as follows:

- To implement the City's economic goals and General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
- To repair and replace aging wastewater infrastructure.

- To ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's SOI, and planned wastewater demands.
- To plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system components, the objectives of the Proposed Program are:

- To extend service to new customers.
- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event, and where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To replace, repair, or rehabilitate existing trunk sewers, and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant components, the objectives are:

- To reduce flooding impacts at the Sutter Plant site and increase treatment process operational flexibility and efficiencies.
- To increase the capacity of the outfalls connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.
- To increase treatment systems efficiency, reliability, and functionality for both domestic and cannery process stream flows.
- To increase or modify treatment systems to remain in compliance with existing Central Valley RWQCB's NPDES requirements and plan for potential future permitting regulations.

2.3 Location and Setting

The City is in Stanislaus County, California, in the central San Joaquin Valley. The City is centrally located within California, approximately 70 miles southeast of Sacramento, 85 miles east of San Francisco, 90 miles northwest of Fresno, and 35 miles west of the foothills of the Sierra Nevada range. See Figure 1-1 for the Proposed Program location. The Tuolumne River flows westerly through the southern portion of the City. Dry Creek, a tributary to the Tuolumne River, runs through the central portion of the City before draining into the Tuolumne River near South 9th Street and River Road.

The proposed wastewater collection system and Sutter Avenue Primary Treatment Plant (also referred to as "Sutter Plant") components would occur within the City and its wastewater service area. The City's wastewater service area (**Figure 2-1**) includes all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, the Beard Industrial Park District, and unincorporated "islands" in the County within

Modesto that are served by agreement. The Sutter Plant is in the southwestern portion of Modesto adjacent to the north bank of the Tuolumne River. The Jennings Road Secondary and Tertiary Treatment Plant (also referred to as "Jennings Plant") is located on City-owned land, approximately 6.5 miles southwest of Modesto on the eastern side of the San Joaquin River.

For the purposes of this DEIR, the term "study area" refers to the City's wastewater service area, the City's sphere of influence, the proposed third outfall pipeline, the Jennings Plant, and the approximately 2,500 acres of City-owned agricultural lands to the south of the Jennings Plant. The term "Program area" refers to areas where proposed components would occur including the City proper and unincorporated Stanislaus County.

2.4 Projected Wastewater Flows

Table 2-1 summarizes the current and projected population (through 2035) in the City's sewer service area and estimated populations through the Collection System Master Plan's build-out year (2057). These projections take into consideration recent average annual growth rates for Modesto and unincorporated areas of the County within its sewer service area, and growth estimates for future developed areas in the City's sewer service area. For example, between 1990 and 2000, the City's population increased at an average annual growth rate of 1.4 percent but between 2000 and 2010, the City's annual average growth rate slowed down to 0.6 percent (Carollo Engineers 2016a). Estimated population values between 2015 and 2057 are based on an annual population growth of 1.3 percent per year which are derived from the California Department of Finance's population estimates.

Table 2-1. Projected Population for City's Sewer Service Area

Year	Estimated Sewer Service Population
2015	209,200
2020	223,100
2025	238,000
2030	253,900
2035	270,900
2040	288,972
2045	308,250
2050	328,814
2055	350,750
2057	359,929

Source: California Department of Finance estimates, as cited in Carollo Engineers 2016a. Extrapolation to buildout year of 2057 is based on an assumed 1.3 percent population increase between 2035 to 2057 (Eve, pers. comm. 2017a). As noted above, the Wastewater Treatment Master Plan used a planning horizon year through 2035; while the Collection System Master Plan used a build-out scenario through the year 2057.

Table 2-2 identifies existing and projected wastewater flows for the City's sewer service area. The projected flows take into consideration both the projected sewer service population values presented in Table 2-1 as well as anticipated industrial and commercial growth areas, which are based on the 2009 Urban Growth Policy Review Report and the City's General Plan. As part of the projected wastewater flow monitoring effort, wastewater generation coefficients were established based on the average wastewater flow generated by existing and land use types. These coefficients were then used to estimate average dry weather flows (ADWF) throughout build-out of the City's sewer service areas. With respect to estimating existing and projected peak wet weather flows (PWWF), the City ran a 10-year, 24-hour design storm through the hydraulic model which was calibrated for both dry weather and wet weather conditions. The PWWF also took into account wet weather infiltration and inflow that occurs during and after rainfall events and used a peak infiltration and inflow rate of 1,000 gallons per day per acre (gpd/ac) (Carollo Engineers 2016a).

As shown in Table 2-2, the current collection system does not have adequate capacity to serve future development anticipated through the build-out timeline. The projected build-out flows were estimated based on the City's preliminary land development plans prepared in 2015. In the next 35 years, flows are expected to increase by 60 percent.

Table 2-2. Existing and Projected Wastewater Flows for the Sutter Plant (MGD)

Wastewater Flows (mgd)	Existing (based on 2014 flows)	Projected Flows through 2035	Projected Build-Out Flows (2057)
Average Dry Weather Flow[a]	21.4	25.6	34.4
Peak Wet Weather Flow[b]	68.6	85.0[c]	77.1[d]

[a] Average Dry Weather Flow (ADWF) is the average flow over any five weekday period between the months of June and October. For the Master Plan, ADWF was calculated based on historical flow data at the Sutter Plant and dry weather flow data from the City's flow monitoring program.

[b] Peak Wet Weather Flow (PWWF) is the highest observed flow that occurs following a storm event and is used as the basis for establishing the Sutter Plant's hydraulic capacity and sizing upgrades.

[c] Projected PWWF for 2035 assumes that storm drain cross sections are still in place and have not been fully removed.

[d] Projected PWWF for 2057 assumes that storm drain cross connections have been removed.

Sources: Carollo Engineers 2016a, 2016b; Eve, pers. comm. 2017b.

N

0 250 500 1,000

Feet

Phase 1

Forcemain System

Gravity System

Phase 2

Gravity System

Phase 3

Forcemain System

Gravity System

Existing Shakelford FM

Trenchless Pits

Work Areas

Figure 2-1
River Trunk Realignment Project

City of Modesto Wastewater Master Plan EIR

C:\Users\GIS\Documents\ArcGIS_PROJECTS\15043_Modesto_WWMP_EIR\mxd\Figure_2-1_ProjectPhases.mxd 7/24/2017 PG

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2.5 Proposed Program Characteristics

The Proposed Program involves numerous improvements to the City's collection system and upgrades to the Sutter and Jennings plants. These include collection system and treatment plant CIPs located throughout the City's service area and unincorporated Stanislaus County. **Table 2-3** indicates proposed WWMP components evaluated throughout this DEIR. With the exception of one project, the River Trunk Realignment Project, all other components are evaluated at a program level of detail. In general, program-level components are projects that the City would likely construct in the future, but the design of these components has not been advanced to a level at which a detailed evaluation can be completed. As such, a more general, program level analysis of these components is included in this DEIR.

Section 2.4.1 provides an overview of the River Trunk Realignment Project. Sections 2.4.2 and 2.4.3 describe other collection system and treatment plant components, respectively, which are evaluated at a program level of detail.

Table 2-3. Summary of Proposed Components

Project ID No.	Project Name
River Trunk Realignment Project (project level)	
1	Dry Creek Crossing and Pipeline to River Trunk Pump Station
2	Gravity Pipelines
3	Shackelford Pump Station and Force Main
Collection System Components (program level)	
New and Upgraded Sewer Pipelines	
W-1	West Trunk
W-3	West Trunk
W-4	West Trunk
W-6	West Trunk
W-7	West Trunk
D-1 thru D-5	Dale Trunk
R-1	Rumble Trunk
R-2	Rumble Trunk
S-1	Sutter Trunk
DT-1	J Street Trunk
DT-2	Kimble Street
SR-4	Santa Rosa Trunk
EM-4	Empire Trunk
EM-3	Empire Trunk
SO-1 thru SO-3	Sonoma Trunk

Project ID No.	Project Name
SO-4	Sonoma Trunk
L-1 thru L-6	Lakewood Trunk
U-1 thru U-4	Ustick Trunk
N-1 and N-2	North Trunk
N-3 thru N-5	North Trunk
N-6	North Trunk
N-7 thru N-9	North Trunk
Sewer Rehabilitation Components	
A-3	Carver Trunk
C-1	West Trunk
B-2	Woodland Trunk
D-2	Emerald Trunk
A-2	Sutter Trunk
S-4b/C-2	Sutter Trunk and South Trunk
C-3	Downtown Tributary
D-1	Downtown Tributary
A-1	Rose Celeste/Santa Rosa
B-1	Crows Landing Trunk
RT-9	River Trunk
RT-10	River Trunk
RT-11	River Trunk & Cannery Segregation Line
RT-12	Cannery Segregation Line Diversion Structures
SR-6	Santa Rosa Tributary Trunk
Lift Station Components	
LS #29 - Rose & Celeste	Rose-Celeste
LS #3 - Benson	Benson
LS #64	Dakota
LS #63	Kansas
LS #60	Chapman
LS #67	Litt Road
LS # 59	Pelandale Road
LS #61	Wood Sorrel
LS #62	Whitmore/Carpenter

Project ID No.	Project Name
LS #65	Kiernan Avenue
LS #30	Rumble
LS #39	Woodland
Treatment Plant Components (program level)	
Sutter Plant Modifications	
SP-1	Influent Pump Station Components
SP-3	Primary Effluent Pump Station Replacement
SP-4	Demolition of Sutter Treatment Facilities
SP-5	Flood Protection Components
Outfall Pipelines	
OP-1.1	New Tuolumne River Crossings
OP-1.2	New Primary Effluent Outfall
OP-3	Slip-lining a Portion of the Cannery Segregation Line
Jennings Plant Components	
JP-1.1	Phase 3 of Tertiary Treatment Facility
JP-2.1	Fixed Film Reactors Rehabilitation
JP-2.2	Dredging
JP-2.3	Dissolved Air Flotation Piping
JP-3.1	Aerators in Recirculation Channel
JP-3.2	Nutrient Feed System
JP-3.3	Effluent Channel Berm and Effluent Pipeline
JP-3.4	Dredging
JP-3.5	Pond Aerators
JP-4.1	Aerobic Digester
JP-4.2	Solids Processing Building (waste activated sludge [WAS] thickening and biosolids dewatering facilities)
JP-4.3	Sludge Cake Drying Beds
JP-5.1	Primary Treatment Facilities
JP-5.2	Yard Piping and Structures
JP-5.3	Anaerobic Digesters
JP-5.4	Solids Processing Building (WAS thickening and biosolids dewatering facilities)
JP-5.5	Sludge Cake Drying Beds

2.5.1 River Trunk Realignment Project

As part of the River Trunk Realignment Project, the majority of the River Trunk line would be realigned further inland from the Tuolumne River. Originally constructed in 1940, the existing River Trunk is approximately five miles long and generally parallels the right bank (north side) of the Tuolumne River. It begins near the intersection of Beard Avenue and Nathan Avenue and terminates at Sutter Plant, conveying nearly 50 percent of the City's domestic wastewater to the Sutter Plant. The entire alignment is subject to heavy corrosion and isolated sections of the pipeline have recently failed or are close to failure. A segment of the River Trunk line at the Gallo property failed and created a sinkhole. In addition, the Beard Brook Siphon, a portion of the River Trunk line that conveys wastewater from eastern Modesto, below Dry Creek, and to the western end of the River Trunk line, routinely experiences grease blockages. Such blockages increase the risk of the facility overflowing and increase odor issues.

By realigning the River Trunk line, this project would improve the accessibility, capacity, and reliability of the River Trunk system, and extend the useful life of the existing infrastructure.

Figure 2-1 shows the proposed components of the River Trunk Realignment project. This project includes the following components:

- Dry Creek Crossing and Pipeline to River Trunk Pump Station
- River Trunk Pump Station
- River Trunk Force Main
- Gravity Pipelines along Tuolumne Boulevard, Colorado Avenue, Neece Drive, and Pelton Avenue
- Shackelford Pump Station and force main

Elements of the River Trunk Realignment Project are described in more detail below.

Dry Creek Crossing and Pipeline to River Trunk Pump Station

As shown in Figure 2-1, a new 48-inch siphon would be installed to replace the existing Dry Creek crossing. This pipeline would begin at the parking lot located at the Gallo property, cross beneath Dry Creek, traverse vacant land between the creek and 9th Street, and terminate at the proposed River Trunk Pump Station. Trenchless pipeline construction methods would be employed, whereby insertion pits would be established at the Gallo property, to the west of Dry Creek, on either side of 9th Street, and at the River Trunk Pump Station site. The pipeline would flow by gravity and allow the existing siphon to be used for cannery segregation flows if necessary. Pile drivers would be used during the horizontal drilling process.

River Trunk Pump Station

The River Trunk Pump Station would be constructed at the corner of B Street and Beard Street. As shown in **Figure 2-2** the facility would be oriented in the center of the site and a circular driveway would be established around the pump station. Access to the site would occur via B Street. The access road would be paved, and crushed rock would be placed on

other areas of the site. Perimeter fencing would be installed and a security gate would allow staff vehicles to enter and exit the site. Stormwater runoff would be directed to the manhole located upstream of the wet well. Landscaping consisting of low-lying shrubs and small trees may be planted in the non-paved areas of the pump station site.

Due to close proximity to the planned Tuolumne River Regional Park, which will consist of over 500 acres of parkland along 7 miles of the Tuolumne River, a biofilter would be installed at the pump station to control odor. For additional information about the Tuolumne River Regional Park, refer to Chapter 19, *Other Statutory Considerations.* The biofilter would include duplex blowers and connection for a portable biofilter unit such that the odor control facilities remain operational when the biofilter media from the permanent biofilter is replaced.

Based on preliminary design of the River Trunk Pump Station, the facility would have five 208 horsepower (hp) centrifugal submersible pumps (4 on duty and 1 standby pump) that would be located underground in fully enclosed structures that would mute any generated sounds. The interior diameter of the facility would be approximately 60 feet and have a depth of 75 feet. As shown in **Figure 2-3**, the pump station would include a wet well, and two intermediate floors at elevations of 50 feet (Level 1) and 70 feet (Level 2). Within the wet well, the influent pipe would be installed at an invert elevation of approximately 23 feet and an isolation gate would be installed to control flow into the wet well during self-cleaning. The pump motors would be controlled by variable frequency drives which provide pump speed modulation that matches the diurnal flow pattern within the collection system. The backup generator would be sound-buffered and would be operated infrequently, primarily in the event of power outages or for periodic maintenance. Operator access would be provided through a 3-foot wide access hatch and ladder located on Level 1. In addition, a vent shaft would be installed to vent the wet well, and odor control ducts would connect to the vent to help remove and treat odors.

Level 1 of the pump station would contain five 60-inch-diameter access hatches located directly above each pump to allow pump removal. The pump hatches would be installed in a trench to improve operations and maintenance staff access around the access hatches and discharge piping. Two monorail systems and exhaust and supply air ducting would also be installed.

Level 2 of the pump station would house heating, ventilation, and air conditioning (HVAC) equipment, three ducted centrifugal exhaust fans, HVAC air ducts that supply air and exhaust air within the pump station, and a 6-foot hatch to assist in the pump removal process.

Figure 2-4 shows the top level of the pump station. Aboveground components would include a monorail system that allows the submersible pumps from Level 1 to be lifted to grade, and the pumps could be delivered to a truck bed and/or trailer. Three make-up air units would be sized and installed on the top level to supply air to the pump station in accordance with National Fire Protection Association standards. The five pump discharge pipes would connect with the 36-inch force main located at the top of the site. Although not shown in Figure 2-4, lighting would also be installed to illuminate the wet well and generator locations. The exterior of the pump station building would be comprised of earth tones with a matte finish.

An overflow structure would also be located approximately 60 feet upstream of the influent pipeline connecting to the River Trunk Pump Station. In the event of a loss of service, this structure would allow flows to backup and overflow to the existing River Trunk pipelines.

The River Trunk pump station may require on-site exterior lighting. New lighting at these facilities would be consistent with outdoor lighting currently used at the two wastewater treatment plants. New lighting at these facilities would be directed inward to avoid glare or spillover effects and may be motion-activated where beneficial and effective. Exterior coating of new pump stations would appear similar to similar structures seen throughout Modesto, and that earth tones with non-reflective finishes would be used to coat aboveground components at lift stations and pump station sites.

River Trunk Force Main

Two force mains would be constructed to convey flows from the River Trunk Pump Station to a discharge structure in Tuolumne Boulevard. One force main would be 30 inches in diameter and the second would be 42 inches in diameter. The approximate alignment of these force mains is depicted in Figure 2-1. From the pump station, the force mains would continue south and then traverse underneath the Southern Pacific Railroad and 7th Street, and continue west and along Tuolumne Boulevard where it would tie into a discharge structure. For both force mains, trenchless pipeline construction methods would be used at the railroad crossing and 7th Street crossing.

Gravity Pipelines along Tuolumne Boulevard, Colorado Avenue, Neece Drive, and Pelton Avenue

The new River Trunk gravity pipeline would extend from the pipeline junction structure at Tuolumne Boulevard and Neece Drive, beneath Tuolumne Boulevard (from Neece Drive to Paradise Road), and continue south beneath Colorado Avenue (from Tuolumne Boulevard to Dryden Golf Course and the Sutter Plant). This pipeline would be 42 inches along Tuolumne Boulevard. Along Colorado Avenue, the pipeline would vary in size between 48 inches, 54 inches, and 60 inches down to the Sutter Plant.

In addition, a new 15-inch-diameter gravity flow pipeline would be installed beneath Tuolumne Boulevard from Paradise Road to Colorado Avenue. This pipeline would serve as a peak wet weather diversion for the existing Sutter Trunk such that during peak wet weather events, flows that top the passive weir would be diverted down Tuolumne Boulevard to the River Trunk line.

New gravity pipelines would also be installed near the northwestern side of the Dryden Golf Course. These would extend from Neece Drive to the Dryden Golf Course parking lot, continue south beneath Roselawn Avenue, and west on Pelton Avenue to Colorado Avenue.

Shackelford Pump Station and Force Main

As shown in Figure 2-1 the Shackelford Pump Station would be located west of Zeff Road and immediately east of the Tuolumne River. **Figure 2-5** shows the site plan for the Shackelford Pump Station. From Zeff Road, the access road to the pump station would be paved and crushed rock would be used to cover other areas of the site. Perimeter fencing would be installed to secure the site and a gate would be installed to allow vehicles to enter/exit the site. The pump station would consist of a rectangular wet well (approximately 24 feet deep), and operate with two on-duty pumps and one standby pump (each 37.7 hp). The pumps would be located underground in fully enclosed structures that would mute any generated

sounds, and the backup generator would sound-buffered and would be operated infrequently, primarily in the event of a power outage or for periodic maintenance. Aboveground components at the Shackelford Pump Station include the electrical building (approximately 15.5 feet tall) and generator (approximately 8 feet tall). The surrounding fence and/or gate and would be about 8 feet tall and the retaining wall would be about 6 feet tall. The exterior coating of these aboveground facilities would be coated with unobtrusive earth tones with matte finishes.

This pump station would deliver wastewater to the new River Trunk Pipeline by conveying wastewater flows through existing dual 18-inch siphons that were recently installed. These siphons would convey flow across the Tuolumne River. From the west end of the siphons, a new 20-inch-diameter high-density polyethylene (HDPE) force main would be installed beneath the Dryden Park Golf Course, traverse westerly, and terminate at the Dryden Park Golf Course parking lot. At this point, the force main would tie into the new gravity pipeline system described above.

The Shackelford pump station may require on-site exterior lighting. New lighting at these facilities would be consistent with outdoor lighting currently used at the two wastewater treatment plants. New lighting at these facilities would be directed inward to avoid glare or spillover effects, and may be motion-activated where beneficial and effective. Exterior coating of new pump stations would appear similar to similar structures seen throughout Modesto, and that earth tones with non-reflective finishes would be used to coat aboveground components at lift stations and pump station sites.

2.5.2 Collection System Components

New and Upgraded Sewers

In addition to the River Trunk Realignment Project, the City plans to install a number of new and upgraded sewer lines throughout the City's service area. Proposed locations of new and replacement sewer lines are shown in **Figure 2-6**. **Table 2-4** summarizes the major trunk and sub-trunk lines to be installed or replaced.

These components are needed either to correct an existing or future capacity deficiency during peak wet weather flows (PWWFs) or to accommodate future growth anticipated. Future growth areas in the City's service area are also referred to as Comprehensive Planning Districts [CPDs]).

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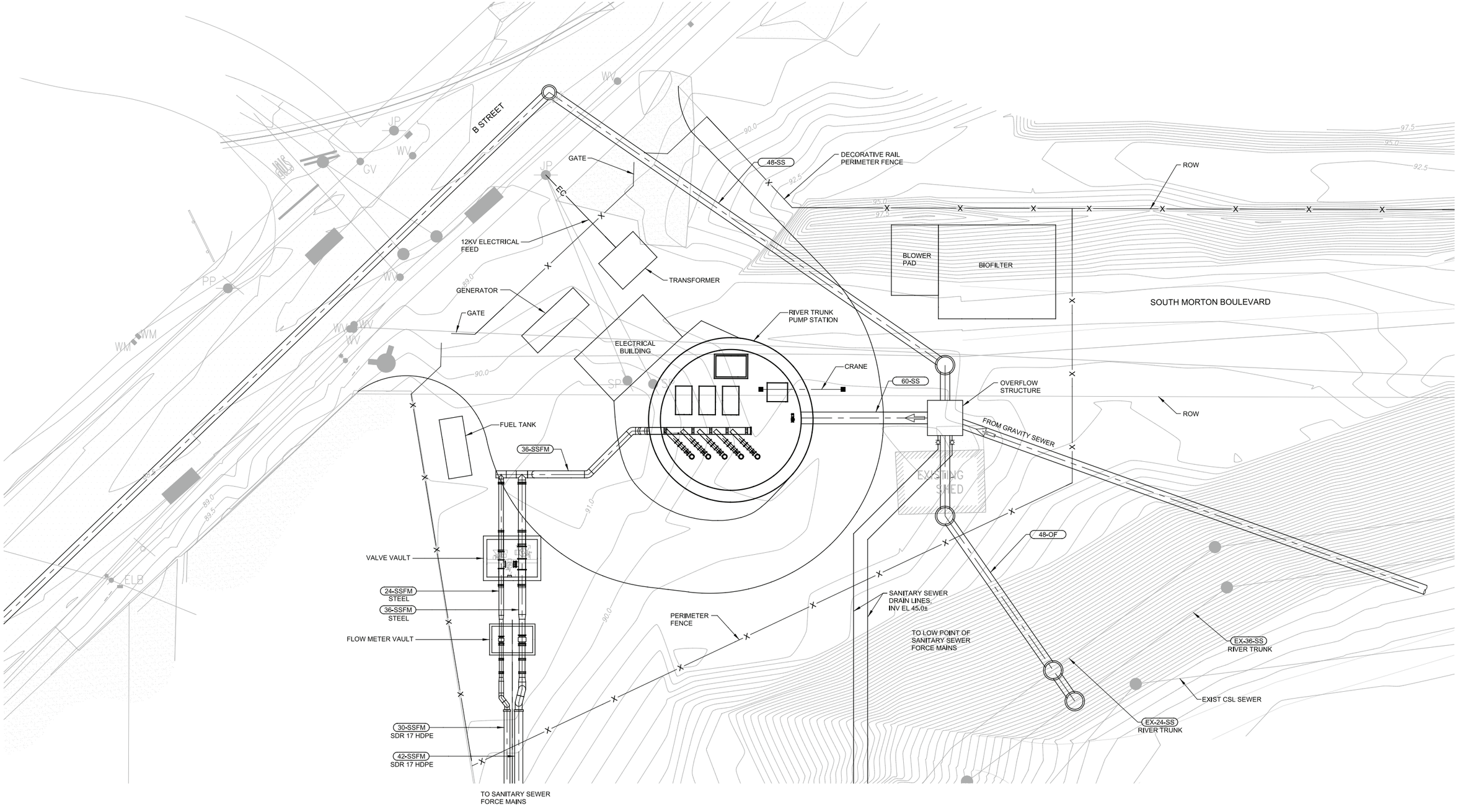

Source: Carollo 2016c

N

20 10 0 40

Feet

Prepared by: Horizon WATER and ENVIRONMENT

Figure 2-2.
River Trunk Pump Station Site Plan

City of Modesto
Wastewater Master Plan EIR

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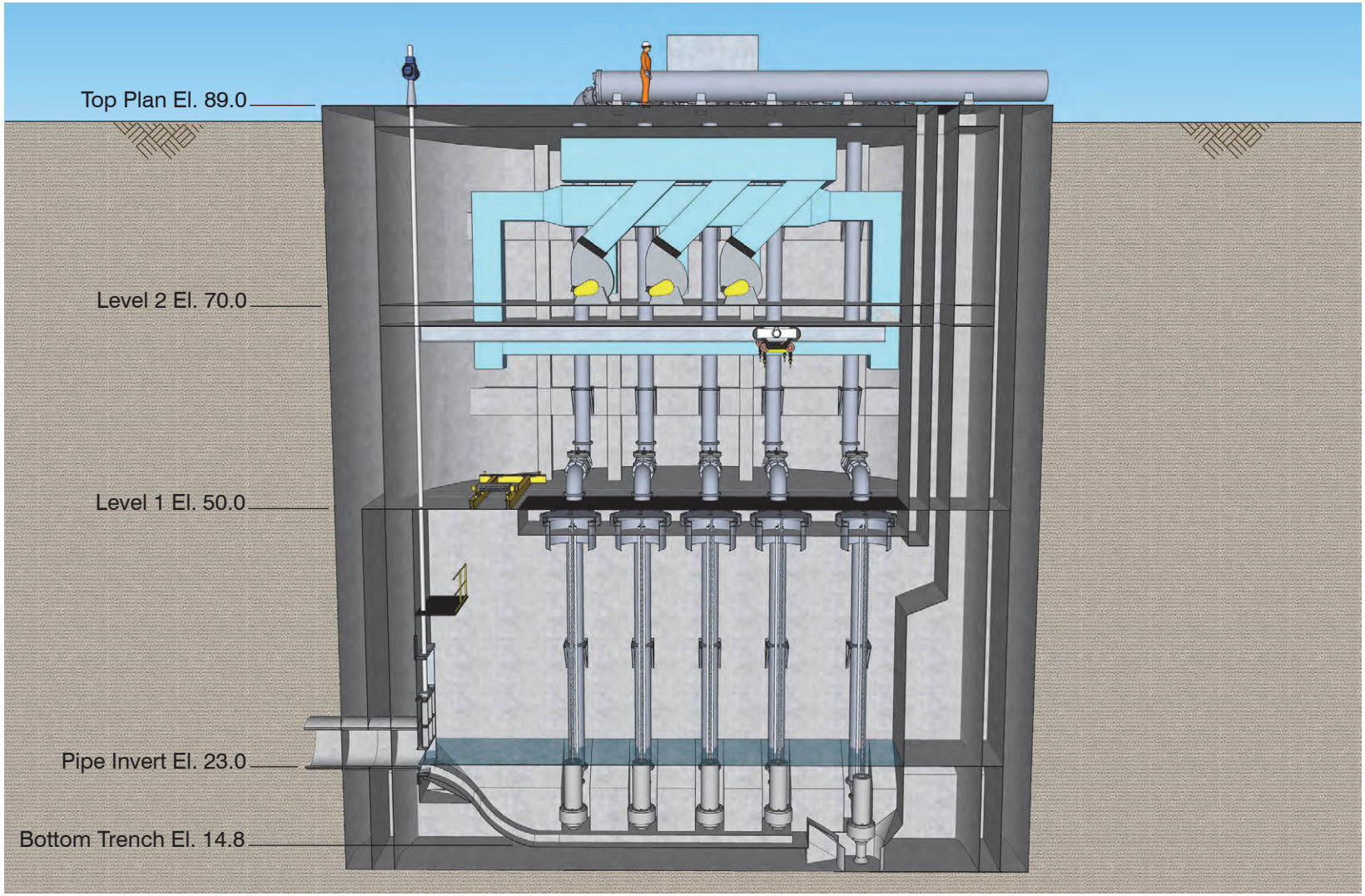

Source: Carollo 2016c

Figure 2-3. River Trunk Pump Station Section

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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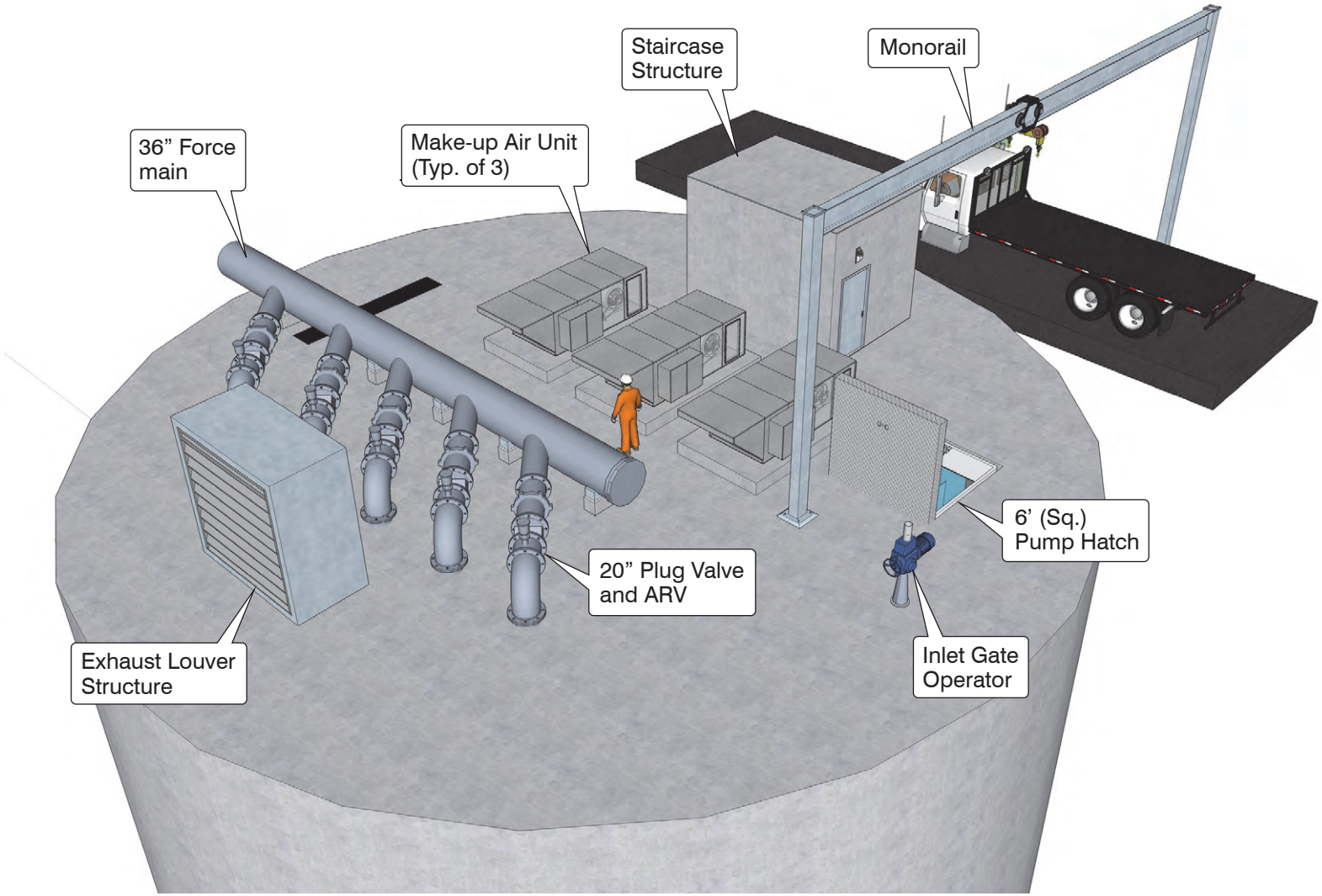

Source: Carollo 2016c

Figure 2-4. River Trunk Pump Station – Top Plan Layout

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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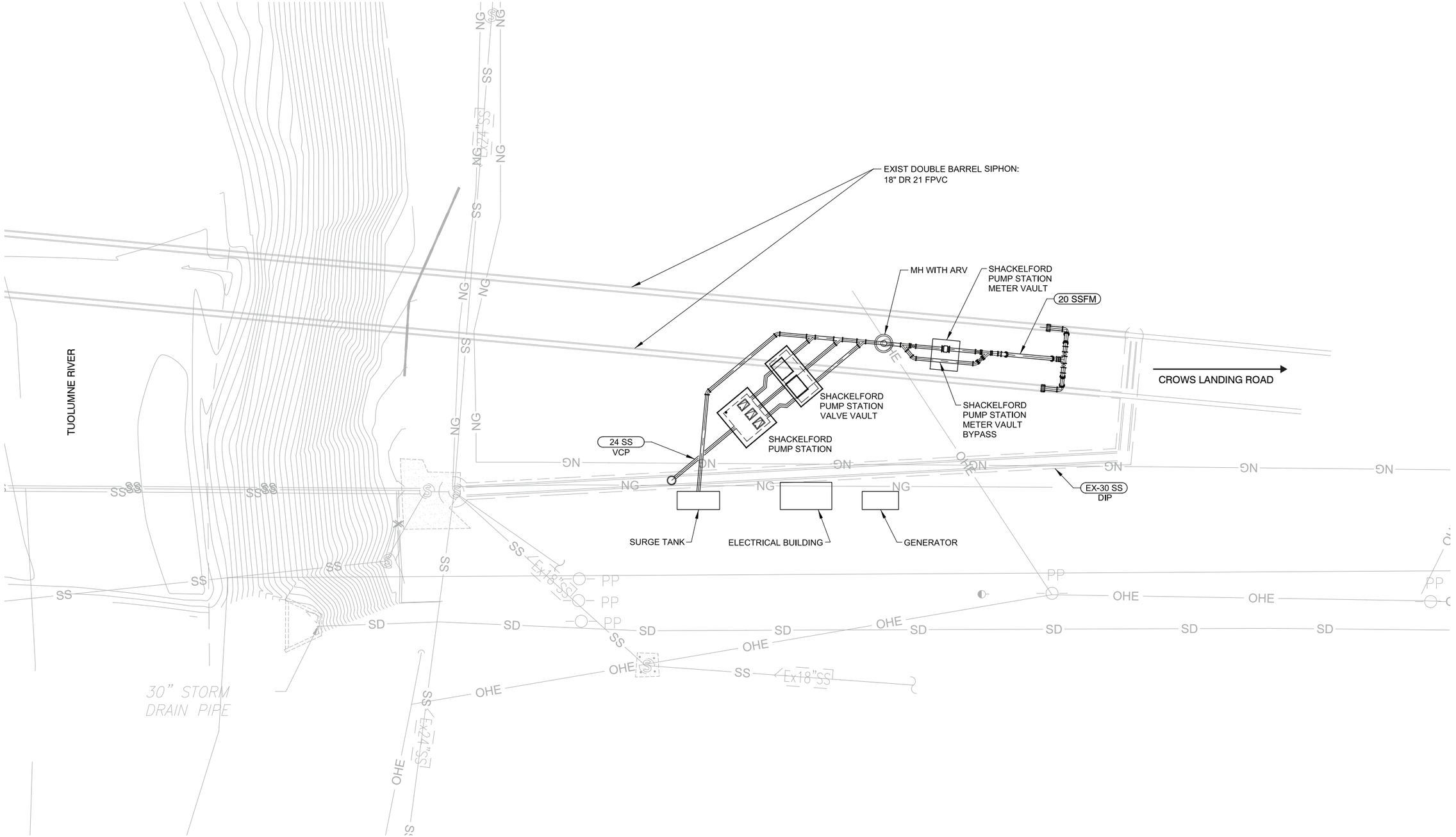

Source: Carollo 2016c

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20 10 0 40

Feet

Prepared by: Horizon WATER and ENVIRONMENT

Figure 2-5.
Shackelford Pump Station Site Plan

City of Modesto
Wastewater Master Plan EIR

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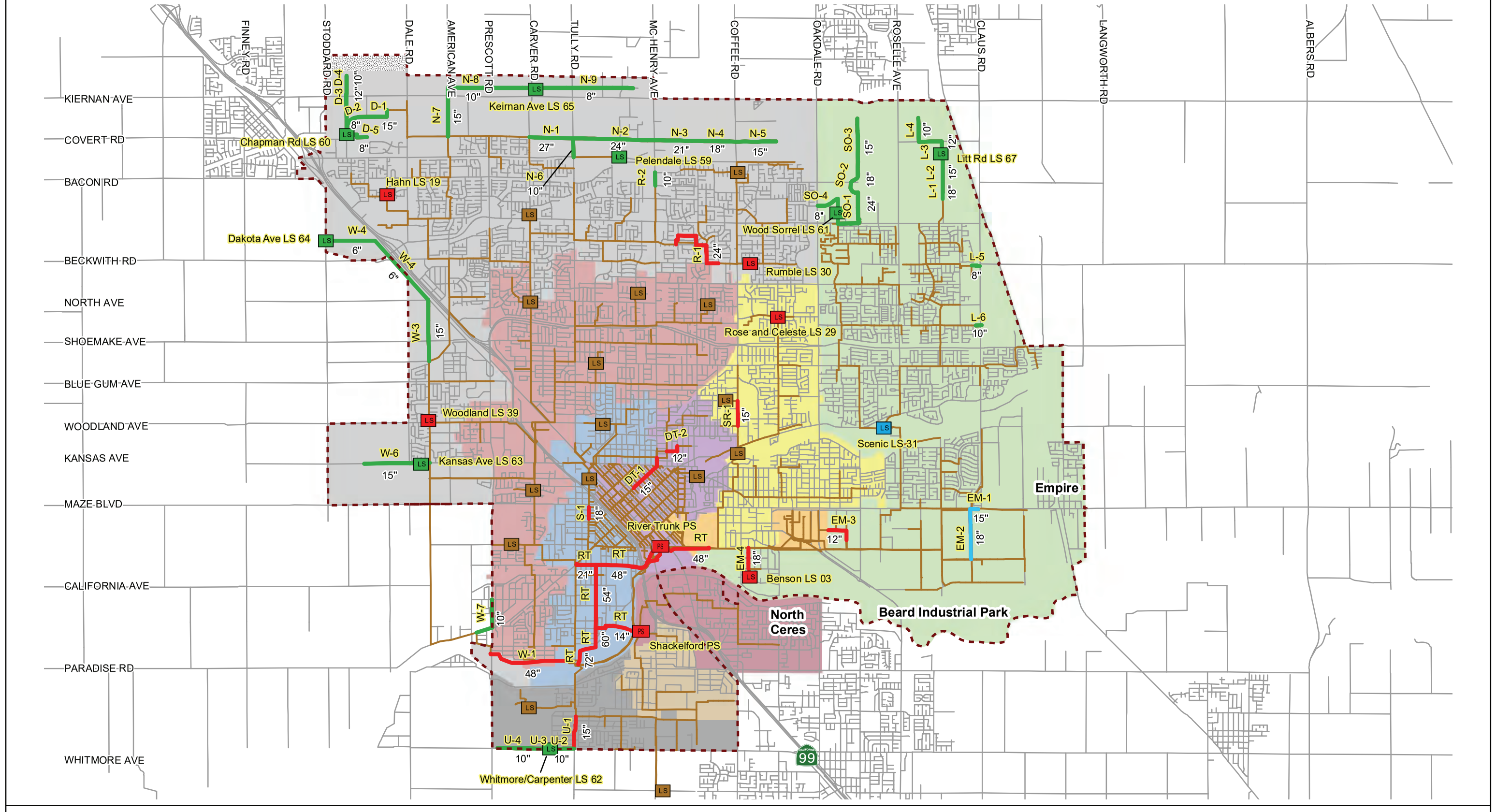

Source: Carollo 2016b

Prepared by: Horizon WATER and ENVIRONMENT

Legend

- Lift Station Upgrade in Progress
- Pipeline Upgrade in Progress
- New Service Lift Station Improvement
- New Service Pipeline Improvements
- Capacity Lift Station Improvements
- Capacity Pipeline Improvements
- Lift Station
- Sewer Main
- Sphere of Influence

Tributary Areas

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Area 7
- Area 8/Northern Ceres
- Area 9
- Area 10

N

4000 2000 0 4000

Feet

Figure 2-6.
Proposed Collection System Improvements

City of Modesto
Wastewater Master Plan EIR

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Table 2-4. Summary of New and Replacement Trunk Sewers

Project No.	Trunk Line	General Location	Description	Key Objective
Area 1				
W-1	West Trunk	Carpenter Rd.to Sutter Plant	New 5,200 linear feet (lf) of 48-inch (in) pipeline	Increase capacity to accommodate long-term growth in Area 1
W-3	West Trunk	Along North Ave. to McDonald Ave.	New 4,200 lf of 15-in main	New service to serve future CPDs
W-4	West Trunk	Along North Ave. to McDonald Ave.	New 8,300 lf of 6-in force main to connect LS 64 to Project No. W-3	New service to serve future CPDs
W-6	West Trunk	Kansas Ave.	New 4,300 lf of 15-in main	New service to serve future CPD area
W-7	West Trunk	Paradise Rd. & Carpenter Rd.	New 2,900 lf of 10-in pipeline	New service to serve existing developed County area in southwest area
D-1, D-3, D-4 and D-5	Dale Trunk	West of Healthcare Way	D-1: New 1,200 lf of 15-in diameter pipeline west of Kaiser Permanente D-3: 1,700 lf of 12-in diameter pipeline in Chapman (between Kiernan Ave. and MID Lateral 6 Canal D-4: 2,200 lf of 10-in diameter pipeline in Chapman Rd. from Kirnan Ave. to south Pirrone Rd. D-5: 1,500 lf of 8-in diameter pipeline (runs parallel to MID Lateral 6 Canal)	New service for future growth in Kiernan-Carver and Kiernan-Carver North CPDs
R-1	Rumble Trunk	Claremont Ave. & Maud Kemp Terrace	5,100 lf of 24-in diameter pipeline from Claremont Ave. to Don Caster Ln.	Increase capacity for existing and some new growth
R-2	Rumble Trunk	McHenry Ave	900 lf of 10-inc diameter pipeline to serve future development in the Pelandale/McHenry CPD	New service to serve future CPDs

Project No.	Trunk Line	General Location	Description	Key Objective
Area 3				
S-1	Sutter Trunk	Jefferson between Maze Blvd. and Oak St.	Replace 16-in with 18-in diameter pipeline	Increase capacity
Area 4				
DT-1	J Street Trunk	McHenry Ave. to 12th St.	Replace 2,400 lf of 12-in pipeline with 15-in pipeline	Increase capacity. The current trunk exceeds the maximum d/D criteria (pipe flow exceeds design standard for pipe capacity) under PWWF, which causes the existing pipeline to surcharge.
DT-2	Kimble Street	Kimble St. and Floto St.	Replace 1,000 lf of 10-in diameter pipeline with 12-in-diameter pipeline	Increase capacity; the current trunk exceeds the maximum d/D criteria under PWWF.
Area 5				
SR-4	Santa Rosa Trunk	Coffee Rd. between Fairmont Ave. and Lucern Ave.	Replace 1,600 lf of 10-in diameter pipeline with 15-in diameter pipeline.	Increase capacity
Area 6				
EM-4	Benson Ave. Trunk	Monterey Ave. to Oregon Dr.	Replace 1,400 lf of 15-in pipeline with 18-in pipeline	Increase capacity
EM-3	Hoover and Doherty	Hoover Ave. and Doherty Ave.	Replace 1,800 lf of 10-in pipeline with 12-in pipeline	Increase capacity

Project No.	Trunk Line	General Location	Description	Key Objective
SO-1 through SO-3	Sonoma Trunk	New alignment north of Sylvan Rd.to south of Kiernan Ave	SO-1: 3,300 lf of 24-in pipeline (from existing trunk west in Sylvan Ave. and north) SO-2: 2,600 lf of 18-in diameter pipeline to area north of Mabel Ave SO-3: 2,800 lf of 15-in diameter pipeline from SO-2 to area south of Claribel Rd.	New service for growth (Roselle-Claribel CPD)
SO-4	Sonoma Trunk	Sylvan Ave, Oakdale Rd. & Wood Sorrel Dr	New 3,100 lf of 8-in pipeline; will extend north from a 27-in diameter sewer in Wood Sorrel Dr.	New service for existing development and new growth
L-1 through L-6	Lakewood Trunk	North of Sylvan Rd.to south of Kiernan Ave.	L-1: 900 lf of 18-in diameter pipeline in Litt Rd. north of Sylvan Ave. L-2: 1,700 lf of 15-in diameter pipeline in Litt Rd. L-3: 800 lf of 12-in diameter pipeline from Plainview Rd. and hits Litt Rd. L-4: 3,00 lf of 10-in diameter pipeline from south of Claribel Rd.to Plainview Rd. L-5: 300 lf of 8-in diameter pipeline from intersection of Ruffed Goose Ln. and Crested Bobwhite St, to Claus Rd. L-6: 400 lf of 10-in diameter pipeline in Merle Ave.	New service for growth
Area 10				
U-1	Ustick Trunk	Ustick Ave. from Imperial to Whitmore	Replace 12-in diameter pipeline with 1,200 lf of 15-in diameter pipeline	Increase capacity
U-2 through U-4	Ustick Trunk	Whitmore Ave. from Ustick Ave. to west of Carpenter	U-2: New 1,000 lf of 10-in diameter pipeline U-3: New 400 lf of 4-in diameter force main U-4: 3,400 lf of 10-in diameter pipeline	New service for growth

Project No.	Trunk Line	General Location	Description	Key Objective
N-1 through N-5	North Trunk	Bangs Ave, east of Carver Rd	N-1: 2,800 lf of 27-in diameter pipeline in Bangs Ave. (between Tully Rd. and Carver Rd) N-2: 6,100 lf of 24-in diameter pipeline along Bangs Ave. from McHenry Ave. to Tully Rd. N-3: 1,600 lf of 21-in diameter pipeline from MID Lateral 6 Canal to McHenry Rd. N-4: 3,100 lf of 18- in diameter pipeline from Coffee Rd. to MID Lateral 6 Canal N-5: 2,400 lf of 15-in diameter pipeline from east of Oakdale Rd. to Coffee Rd.	New service for future growth & existing development (in Kiernan/Carver, Kiernan/McHenry, and Hetch Hetchy CPDs)
N-6	North Trunk	Tully Rd. at Bangs Ave	3,5000 lf of 10-in sewer main already installed; additional 800 lf of 10-in main to be installed	New service for growth & existing development
N-7 through N-9	North Trunk	American Ave. & Kiernan Ave.	N-7: 3,100 lf of 15-in pipeline in American Ave. (between Kiernan Ave. and Bangs Ave.) N-8: 5,600 lf of 10-in pipeline north of Kiernan Rd. from American Ave. to Carver Ave. N-9: 6,300 lf of 8-in pipeline parallel to Kiernan Ave. between Carver Rd. and Stratos Way	New service for growth within Kiernan/Carver North CPD

1 *Source: Carollo Engineers 2016a*

Sewer Rehabilitation

Based on continued monitoring and inspection, the City has identified several sewer lines in need of rehabilitation. Deteriorating sewer lines may require rehabilitation to avoid failure and to improve functionality. Rehabilitation may include installing a liner or flexible coating on the interior of the pipeline. Sewer rehabilitation could also include slip lining or cured-in-place-pipe (CIPP) methods. These construction methods are described in more detail in Section 2.4.3 below. Proposed locations of rehabilitated sewer lines are shown in **Figure 2-7** and **Figure 2-8**. **Table 2-5** summarizes the proposed sewer rehabilitation components.

Table 2-5. Summary of Proposed Sewer Rehabilitation Sites

Project No.	Sewer Line	General Location	Description	Key Objective
Area 1				
A-3	Carver Trunk	Roseburg/Haney Ave	Rehabilitate 3,000 lf of 18-in pipeline with cured-in-place pipe (CIPP) method recommended	Preserve existing pipe integrity and extend usable life
C-1	West Trunk	Woodland Ave. to Sutter Plant	Rehabilitate 7,500 lf of 54- and 60-in diameter pipeline with slip-lining recommended	Repair existing pipe surface to preserve integrity and extend usable life
Area 2				
B-2	Woodland Trunk	Mercy Ave. to Emerald Ave	Rehabilitate 7,500 lf of 18-, 27-, and 54-in diameter pipeline with CIPP and slip-lining methods recommended	Repair existing pipe surface to preserve integrity and extend usable life
D-2	Emerald Trunk	Briggsmore Ave. at Tully Rd	Rehabilitate 110 lf of 30-in diameter pipeline with CIPP method recommended	Preserve pipe usable life
Area 3 – Sutter Trunk				
A-2	Sutter Trunk	At the Sutter Plant	Rehabilitate 2,200 lf of 24- and 30-in diameter pipelines with CIPP method recommended	Repair existing pipe to preserve integrity and extend usable life
C-2/S-4b	Sutter Trunk	Jefferson St. under H-99	Rehabilitate 400 lf of 16-in diameter pipeline with CIPP method recommended	Increase pipe integrity at a critical crossing
Area 4				
C-3	Downtown Tributary	9th St. from Needham to 7th St.	Rehabilitate with CIPP method recommended	Repair existing pipe to preserve integrity and extend usable life
D-1	Downtown Tributary	12th St. from south of D St. Morton Blvd.	Rehabilitate 1,800 lf of 21/24/27-in diameter pipeline with CIPP method recommended	Repair existing pipe to preserve integrity and extend usable life

Project No.	Sewer Line	General Location	Description	Key Objective
Area 5				
A-1	Rose Celeste/ Santa Rosa	Scenic Dr.to Oregon Dr	Rehabilitate 8,800 lf of 16/18/24/30 diameter pipe and force main with CIPP method recommended	Repair existing pipe to preserve integrity and extend usable life
SR-6	Santa Rosa Trunk	Miller Ave. between Conejo Ave. and Phoenix Ave.	Rehabilitate 1,000 lf of 18-inch-diameter pipeline.	Repair existing pipe to preserve integrity and extend usable life
Area 9				
B-1	Crows Landing Trunk	W. Hatch Rd. at Spokane St. to Cascade Ave.	Rehabilitate 5,600 lf of 30-in diameter pipeline with CIPP method recommended	Repair existing pipe to preserve integrity and extend usable life
Area 3 – River Trunk				
RT-9	River Trunk	Sutter Ave.	Rehabilitate 1,300 lf of 24-in pipe – no recommended method yet determined	Preserve pipe usable life
RT-10	River Trunk	Open space (golf course)	Rehabilitate 15,000 lf of 48/60/66-in pipes - no recommended method yet determined	Preserve pipe usable life
RT-11	River Trunk & CSL	Open space along Tuolumne River bank	Riverbank armament	Increase reliability of both pipelines with improved stability and prevention of future river bank erosion
RT-12	CSL Diversion Structures	Open space along Tuolumne Blvd. near Calaveras Ave	New diversion structure	Provide mechanism to divert flow between River Trunk and CSL for flow reliability management and maintenance purposes.

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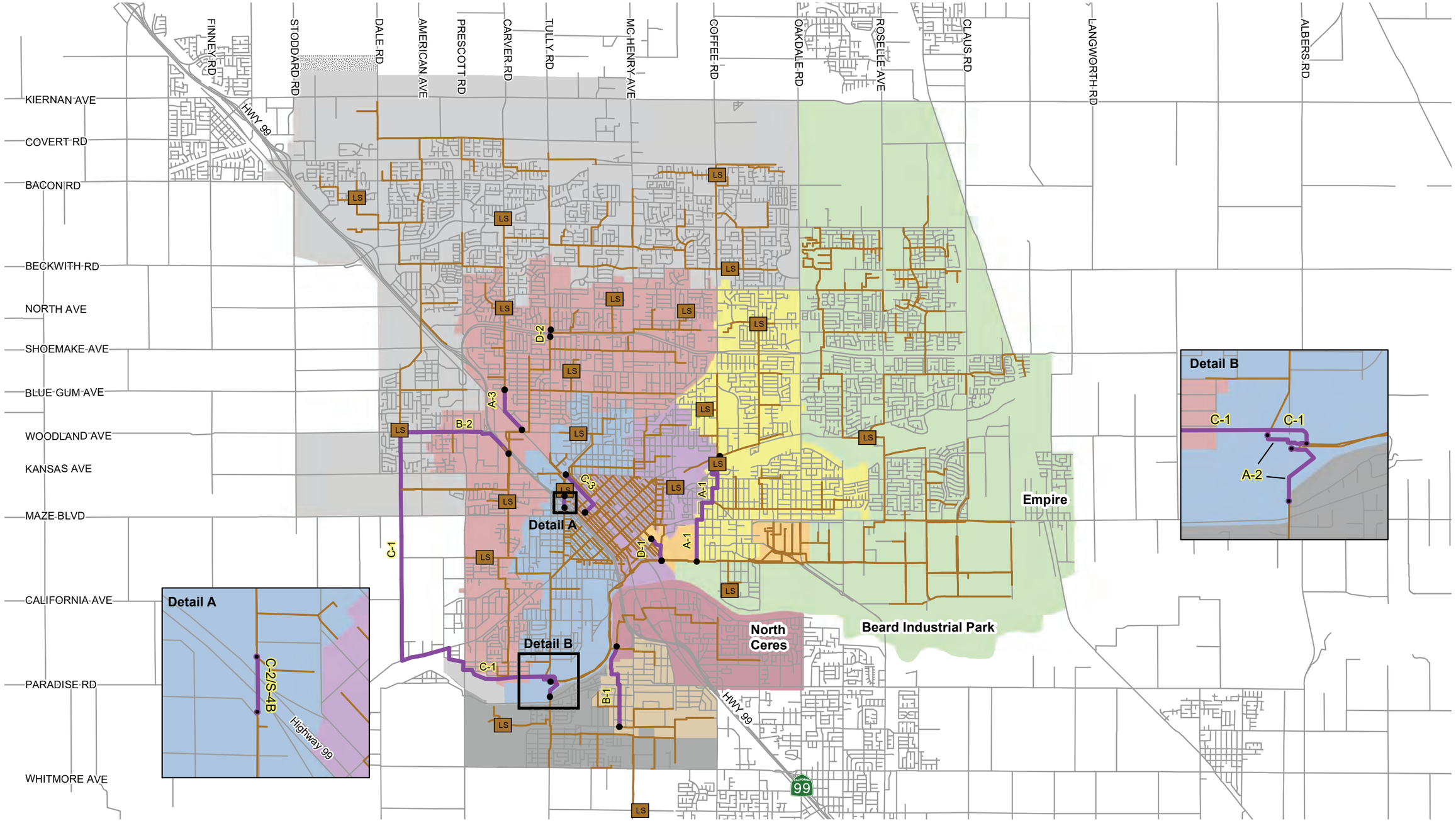

Source: Carollo 2016b

Prepared by: Horizon Water and Environment

Legend

- Structural Rehabilitation
- LS Lift Station
- Sewer Main

Tributary Areas

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Area 7
- Area 8/Northern Ceres
- Area 9
- Area 10

N

4000 2000 0 4000

Feet

Figure 2-7.
Proposed Sewer Rehabilitation Improvements

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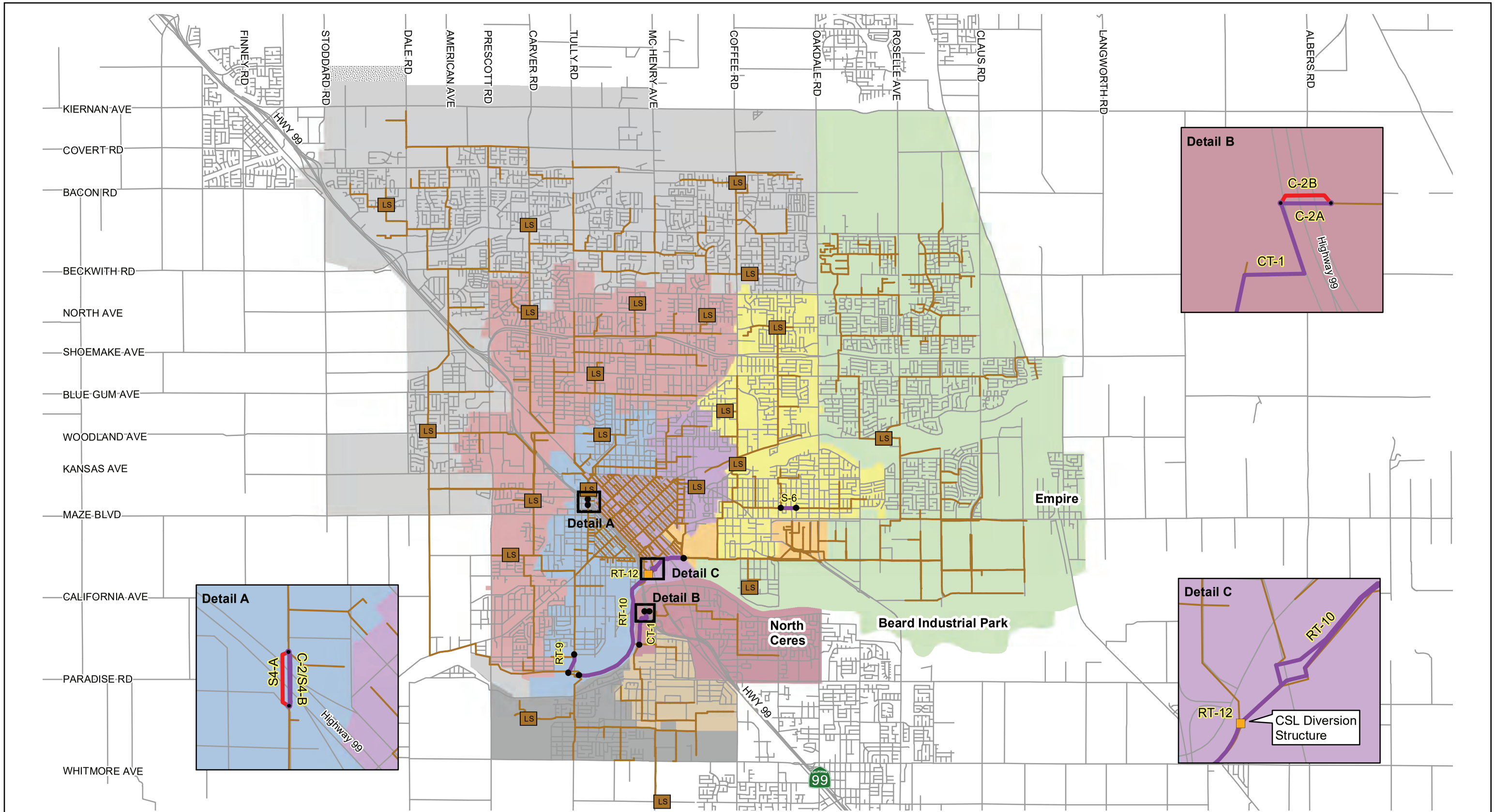

Source: Carollo 2016b

Legend

- Structural Rehabilitation
- Reliability
- CSL Diversion Structure
- LS Lift Station
- Sewer Main

Tributary Areas

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Area 7
- Area 8/Northern Ceres
- Area 9
- Area 10

N

4000 2000 0 4000

Feet

Prepared by: Horizon Water and Environment

Figure 2-8.
Proposed Sewer Rehabilitation and Reliability Improvements

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Wastewater Master Plan EIR

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Lift Stations

The Proposed Program includes constructing 7 new lift stations and upgrading 4 existing lift stations. Upgrades of existing lift stations may include the replacement of undersized pumps, installation of new or larger emergency electrical generators, and elimination of overflows. If necessary, the lift station structure may need to be enlarged to accommodate proposed upgrades. Figure 2-6 shows the locations of the lift stations in need of upgrades and the new lift stations. As described in Chapter 1, the majority of the City's lift station elements are belowground; aboveground elements typically include one or more control panels, a small radio antenna (up to 25 feet tall), and some may have a storage structure and restroom facility. The impervious surface area of each lift station is generally less than 1 acre. A concrete masonry unit wall or security gates consisting of wrought iron or steel tube would also be constructed around the perimeter of each lift station site. Depending on site conditions, landscaping may also be installed in front of a lift station. **Table 2-6** summarizes the location, description, and key objective of each lift station component.

Table 2-6. Summary of Proposed Lift Station Capacity Expansions

Project No.	Lift Station	General Location	Description	Key Objective
LS #29 – Rose & Celeste	Rose-Celeste	Rose Ave. and Celeste Dr.	Replace existing pump station	Increase capacity
LS #3 - Benson	Benson	Hillside and Trenary	Replace existing pump station	Increase capacity
LS #64	Dakota	Dakota Rd. & Beckwith Ct. to serve future CPD	New pump station	Growth
LS #63	Kansas	Kansas Ave. & Altamont Ct.	New pump station	Growth
LS #60	Chapman	North of Chapman Dr.	Replace existing lift station at new location	Growth
LS #67	Litt Rd.	Along future Lakewood Trunk	New pump station	Growth
LS #59	Pelandale Rd.	Pelandale Ave. at Virginia Corridor	New pump station	Growth & existing development
LS #61	Wood Sorrel	Sylvan Ave. at Wood Sorrel Dr.	New pump station	Existing development and growth
LS #62	Whitmore/Carpenter	Along future Whitmore alignment between Ustick and Carpenter	New pump station	Growth
LS # 65	Kiernan Ave.	North of Kiernan Ave. around Carver Rd.	New pump station	Growth and some existing development
LS# 30	Rumble	Rumble Rd. near Bay Ln.	Replace existing pump station	Increase capacity
LS # 39	Woodland	Woodland Ave. & Poust Rd.	Improve	Increase capacity

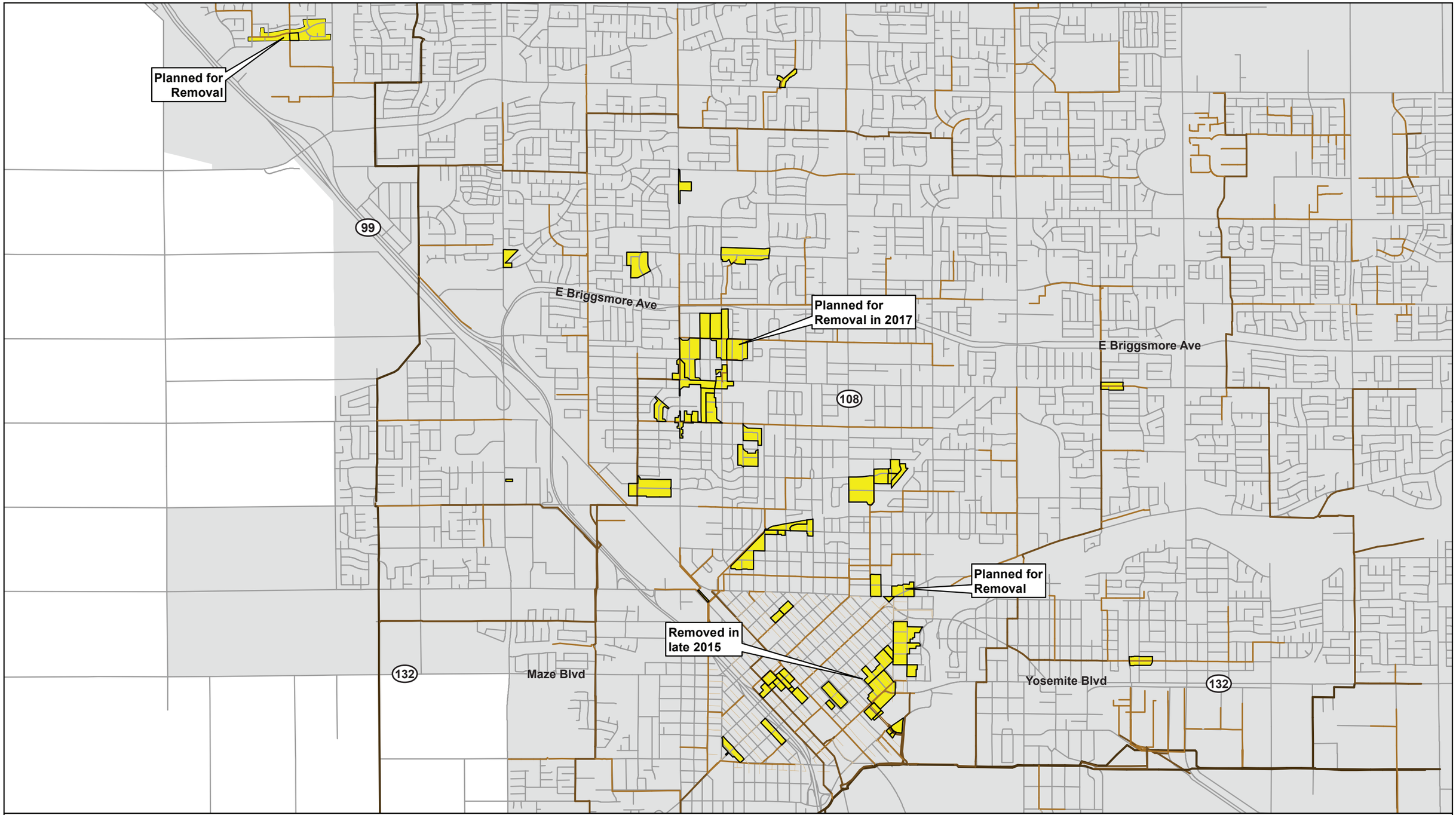
Stormwater/Sanitary Sewer Cross-Connect Disconnections

Another component of the Proposed Program focuses on decreasing peak flows in the sanitary system by disconnecting up to 60 interconnections between the storm sewers and sanitary sewers. **Figure 2-9** shows the general locations of the sanitary sewer disconnections. After storm events, these cross-connections typically increase substantially with peak flows. Improvements may include installing new storm drainage pipes, detention basins and various underground storage and percolation methods. Other improvements may include:

- Removal of piping connecting storm drainage and sanitary systems;
- Installation of storm drainage pipelines (typically 24 to 36 inches in diameter) to convey storm water runoff to existing drainage facilities;
- Installation of storm drainage pipeline (42 to 78 inches in diameter) to provide interim underground storage;
- Installation of underground horizontal drainage systems to provide interim underground storage; or
- Installation of more rockwells to provide short-term holding capacity and percolation.

Small Pipeline Rehabilitation and Replacement Projects

Aside from the City-wide storm drain disconnection improvements, the City proposes other improvements to the overall collection system. The new City-wide program would focus on small pipeline rehabilitation and replacement (R&R) projects as identified by relatively recent closed-circuit television (CCTV) footage. These projects would be conducted outside of the WWMP scope of work, and focus on the City's 6-inch and 8-inch sewer mains. This effort also includes some larger pipelines; however, the specific locations of the pipelines that require rehabilitation and repair have not yet been identified or prioritized yet. However, based on CCTV data collected, there was enough evidence to create a program to address these smaller mains on an annual basis. It is anticipated that most of these pipeline rehabilitation and replacement projects are in the older parts of the City including portions of downtown Modesto. Throughout this DEIR, this CIP is referred to as "R&R."



Source: Carollo 2016b

Prepared by: Horizon WATER and ENVIRONMENT

Legend

Sewer Main

- 8" or Less
- 9" to 18"
- 20" to 36"
- Larger than 36"
- Storm Drain Cross Connection Subcatchments
- Study Area Boundary

N

2,500 1,250 0 2,500

Feet

Figure 2-9.
Storm Drain Cross-Connections

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2.5.3 Treatment Plant Components

Several of the primary treatment facilities at the Sutter Plant are aging and require major upgrades to maintain long-term and reliable service. In addition, as previously described, the Sutter Plant is vulnerable to flooding due to its proximity to the Tuolumne River. As such, a major component of the Proposed Program involves decommissioning critical primary treatment and solids handling facilities at the Sutter Plant and constructing those facilities at the Jennings Plant. Specific details about proposed components at each treatment plant are provided below.

Sutter Plant Components

The following primary treatment facilities are near or exceeding their useful life and are vulnerable to flooding as they are located within the 100-year floodplain: the primary clarifiers, anaerobic digesters, and sludge drying beds. Under the Proposed Program, these facilities would be decommissioned after the new primary treatment and solids handling components at the Jennings Plant are complete. Similar to existing condition, the Sutter Plant would continue to provide influent pumping, screening, and grit removal. Some capacity upgrades to the Sutter Plant facilities are needed to accommodate future growth. The following components at the Sutter Plant are planned:

- **Influent Pump Station Improvements (SP-1)**: Under this CIP, the influent pump station would remain at the current location and a fifth pump would be installed to provide sufficient capacity anticipated by 2035. The pump would provide capacity of approximately 27 mgd, to allow for a firm capacity of 108 mgd and a total capacity of 135 mgd. The new pump would be installed within the existing facility footprint and is currently anticipated to be constructed in 2027.

- **Primary Effluent Pump Station Replacement (SP-3)**: The existing Primary Effluent Pump Station, which conveys primary effluent to the Primary Effluent Outfall, does not have adequate capacity to handle future PWWF. As such, the pump station would be replaced with a new effluent pump station that is designed to accommodate the projected PWWF and a dry PWWF of 48.6 mgd. The new pump station would be located at the southern end of the plant (refer to no. 37 on **Figure 2-10**). The facility would be designed to withstand a 100-year flood and is expected to include odor control provisions, though such provisions have not been determined at this time (Pers. Comm. Eve 2017b). This CIP is anticipated to be constructed between 2023 and 2024.

- **Demolition of Sutter Treatment Facilities (SP-4):** After the new primary treatment facilities at the Jennings Plant are constructed and fully operating, several primary treatment facilities at the Sutter Plant would be decommissioned and demolished in 2027-2028. As shown in Figure 2-10, the following facilities would be decommissioned and demolished:
  - Anaerobic Digester Nos. 1 through 5
  - Polymer Mixing Building
  - Primary clarifier Nos. 1 and 2
  - Aeration Basin/Holding Basin
  - Emergency Generator No. 2
  - Solid waste storage
  - Existing Primary Effluent Pump Station (including electrical support system)

- **Flood Protection Improvements (SP-5):** Many of the Sutter Plant facilities are located within the 100-year floodplain and are not floodproofed. Therefore, the City would conduct flood protection improvements for wastewater treatment facilities that are expected to remain at the Sutter Plant and are not currently designed to withstand a 100-year flood. The following facilities would be floodproofed:

    - Administration and laboratory building
    - Crane storage building
    - Septic receiving station
    - Electric Sub-stations 1 and 2
    - Emergency Generator No.1
    - Portions of the Headworks (Dryden box, grit chambers, and odor control blowers)
    - Odor Control biofilter
    - Vac Con Dump site
    - Pumping Plant No. 3

    In addition, the City may need to seal or raise manholes and other appurtenances onsite. These flood protection improvements would be conducted on a case-by-case basis and will be prioritized based on a more detailed evaluation.

Plant improvements may require on-site exterior lighting. New lighting at these facilities would be consistent with outdoor lighting currently used at the two wastewater treatment plants. New lighting at these facilities would be directed inward to avoid glare or spillover effects and may be motion-activated where beneficial and effective. Exterior coating of new pump stations at the Sutter Plant would appear similar to similar structures seen throughout Modesto, and that earth tones with non-reflective finishes would be used to coat aboveground components at lift stations and pump station sites.

Outfall Pipelines

Under the Proposed Program, the City would conduct three major outfall improvement projects to accommodate increased capacity and improve reliability of the existing outfall pipelines. These projects are described below.

New Tuolumne River Crossings (OP-1.1)

The existing river crossings for the Cannery Segregation Line Outfall and Primary Effluent Outfall are presumed to be in poor condition from corrosion and were constructed in such a way that the alignment configurations are not conducive to lining. Therefore, the pipelines are unable to be loaded under pressure necessary to convey increased flow. The existing pipe crossings under the Tuolumne River would be replaced with new pipe crossings that would allow the pipes to operate under pressure to increase the outfall's flow capacities. In addition, a new river crossing for the new primary effluent outfall (described below) would also be constructed under this CIP. This project is planned to be constructed in the next 5 years.

Facilities Retained
1. Collection Storage Yard
2. Collection and Electrical
3. Admin and Lab Building
4. Water Well 15A
5. Overflow Parking
6. Crane Storage Building
7. Septic Receiving Station
13. Electrical Sub-Station 1
14. Ferric Chloride Station
15. Maintenance (Staff Building)
16. Maintenance (Shop Building)
17. Emergency Generator #1
18. Electrical Sub-Station 2
19. Pumping Plant No. 3
20. Headworks
21. Air Handling Building
22. Odor Control Building
23. Sludge Thickener No. 1 (abandoned)
24. Sludge Thickener No. 2 (abandoned)
25. Gravity Belt Thickener Building
26. Polymer Mixing
30. Collection Storage Yard
31. Vac Con Dump Site
32. Water Well 15B
35. Outfall Control Building
39. Emergency Holding Basin
40. Sludge Drying Beds

Facilities To Be Demolished
8. Digester 1
9. Digester 2
10. Digester 3
11. Digester 4
12. Digester 5
27. Primary Clarifier 1
28. Primary Clarifier 2
29. Sludge Handling Building
33. Aeration Basin/Holding Basin
34. Emergency Generator #2
36 Solid Waste Storage
37. Outfall Pump Station
38. Outfall Control Valves

Third Outfall

Outfall Pump Station

Not Part of Site Decomissioning

Existing Domestic Outfall

HAMMOND ST

HAYS ST

JOHN ST

SUTTER AVE

CARTWRIGHT CT

CRATER AVE

W HATCH RD

N

0 250 500 1,000
Feet

Facilities to be Demolished
New Structure
New Pipeline
Retained Facilities
Existing Pipeline
Third Outfall

Figure 2-10
Facilities Proposed for Demolition at Sutter Plant

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Horizon WATER and ENVIRONMENT

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Constructing the pipeline crossings would entail trenchless methods including horizontal directional drilling (HDD), microtunneling, or pipe bursting. These methods are described in more detail in Section 2.4.4, below. **Figure 2-11** shows a preliminary site plan for the new Tuolumne River crossings including the approximate locations of the jacking pits, junction structures, and force main alignments. As shown in Figure 2-11, the northern jacking pit would be west of the Sutter Plant drying beds and just north of the Tuolumne River; the southern jacking pit and junction structure would be at the southwest corner of the Hatch Road and Monticello Lane intersection. It is anticipated that each force main would be 48 inches in diameter and would be approximately 550 feet long. Two of these force mains would connect with the existing Primary Effluent Outfall and the Cannery Segregation Line Outfall at the upstream and downstream ends of the crossings. Approximately 1,450 feet of force main would be installed at the upstream side and 1,200 of force main would be installed at the downstream end of the crossings. In addition, four pipeline junction structures would be installed: two at the upstream side of the crossing and two at the downstream end of the crossing. Approximately 2,300 feet of the existing outfall pipelines, including 500 feet of the existing river crossing, would be abandoned.

New Primary Effluent Outfall Pipeline (OP-1.2)

A new primary effluent outfall pipeline would be constructed to convey primary effluent flows from the Sutter Plant to the new primary treatment facilities at the Jennings Plant. Figure 2-11 and **Figure 2-12** show the preliminary alignment of the new primary effluent outfall. The new pipeline would be approximately 9 miles long and 54 inches in diameter. From the Tuolumne River crossing, the new outfall pipeline would continue south on Carpenter Road, west on Keyes Road, south on Jennings Road, and then continue west and terminate at the Jennings Plant.

This CIP is needed to accommodate increased capacity for domestic flows. The new outfall pipeline would accommodate the projected 2035 PWWF of 85 mgd. Currently, Pumping Plant No. 3, which conveys Cannery Segregation flows around the Sutter Plant and to the Cannery Segregation Line Outfall, is undergoing improvements to allow for year-round diversion. Once upgrades to Pumping Plant No. 3 are complete, the Cannery Segregation Line Outfall will no longer be able to convey domestic flows during peak flow events (which currently operates in this fashion). The third outfall pipeline would also provide redundancy for Cannery Segregation flows. For example, in the event that one of the two existing outfalls fails, the City would need to combine domestic and Cannery Segregation flows into one pipeline and require that all Cannery Segregation flows be treated at the Jennings Plant, which has a treatment capacity of 2 mgd. Incoming Cannery Segregation flows greater than 2 mgd would overwhelm the treatment process at the Jennings Plant and could result in a discharge violation.

Slip Lining of a Portion of the Cannery Segregation Line Outfall (OP-3)

In the long-term (2027 to 2028), the City anticipates that improvements to the existing Cannery Segregation Line Outfall would be needed. Although the condition of the Cannery Segregation Line's interior is unknown and is primarily used to convey cannery process water flows, the outfall was used to convey domestic flows before 1999 and is currently used to convey domestic flows during the wet weather season. As such, some pipe deterioration may have occurred over the years. In the future, a condition assessment of the Cannery Segregation Line may be needed to confirm whether lining is necessary. The City currently

anticipates that lining would be needed for half of the pipeline's length. This effort would involve slip-lining the existing outfall pipeline with a plastic liner to improve its condition and reliability.

Jennings Plant Components

CIPs proposed at the Jennings Plant include various modifications to the secondary and tertiary treatment facilities and construction of new primary treatment and solids processing facilities including digesters and drying beds. These Program improvements would accommodate planned growth for domestic and commercial wastewater flows through 2035. Figure 1-4 shows the existing site plan of the Jennings Plant. Such improvements would increase the impermeable surface area of the Jennings Plant by approximately 27 acres. Additional detail about each CIP is provided below.

Biological Nutrient Removal/Tertiary Phase 3 Expansion

Biological Nutrient Removal (BNR)/Tertiary Phase 3 Expansion (JP-1.1) The City plans to expand tertiary treatment facilities by 2027 to reliably meet BOD loading limits and to increase tertiary effluent. In June 2017, the Central Valley RWQCB issued a renewed NPDES permit (Order R5-2017-0064, NPDES No. CA0079103) that allows tertiary treated wastewater discharge to the San Joaquin River. Currently, the NPDES permit allows discharges of up to 14.9 mgd, and upon completion of the Phase 3 upgrades, the City will be permitted to discharge up to 19.1 mgd year-round. In the near future, the Central Valley RWQCB is expected to issue a new waste discharge requirement (WDR) that decreases the secondary effluent BOD limit for land application from 300 to 40 milligrams per liter (mg/L). The tertiary facilities were designed to be expanded in three phases (Phases 3-5). The first of these phases, the proposed Phase 3 expansion, would be required within the planning period. **Figure 2-13** shows the general location of the expanded tertiary treatment facilities.

Secondary Treatment Modifications

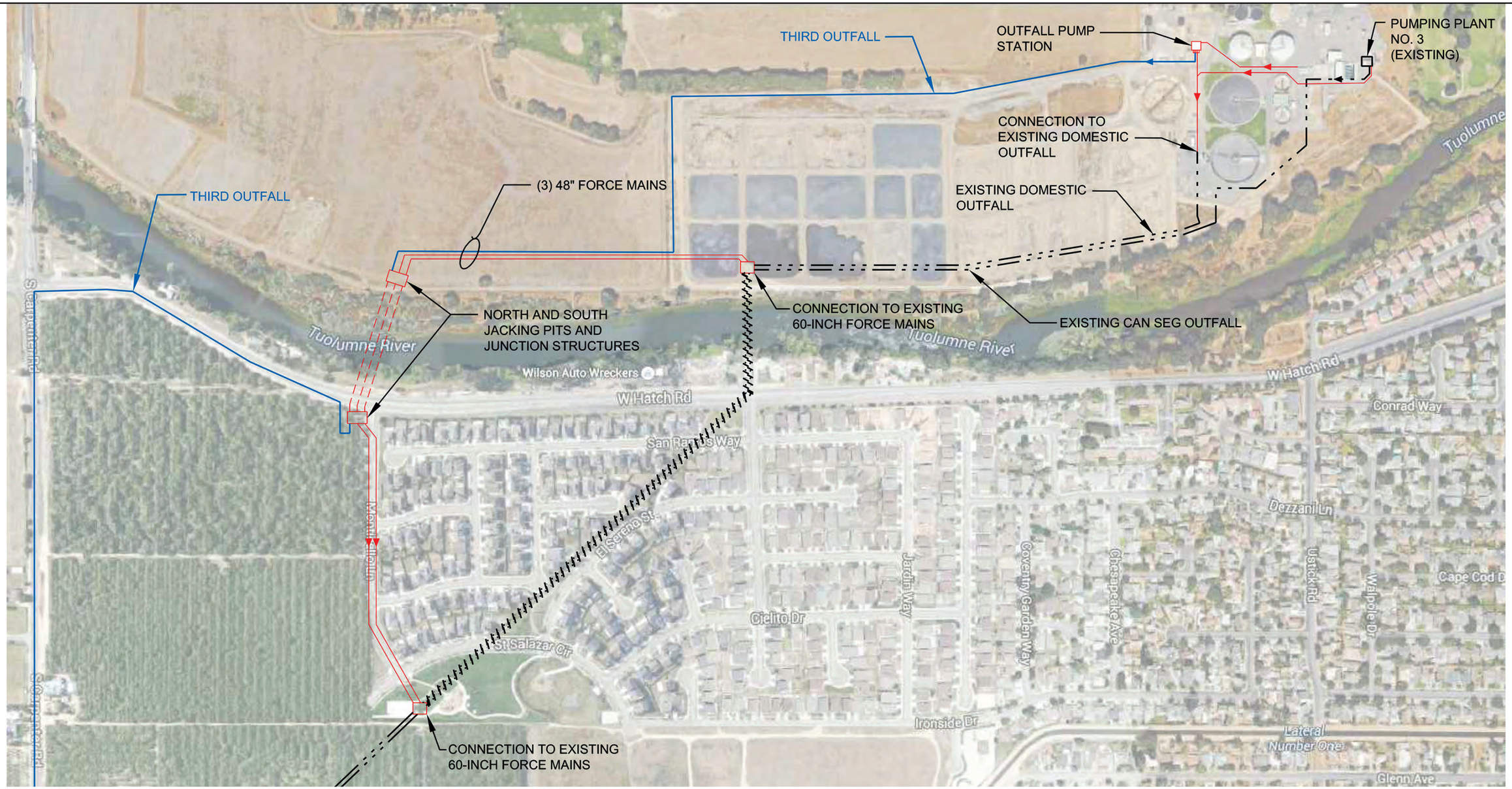
Within the next 5 years, the City plans to complete the following modifications at the Jennings secondary treatment plant facilities:

- **Fixed Film Reactor (FFR) Rehabilitation (JP-2.1)**. This CIP involves replacing the damaged portion of the existing FFR media as well as the rotary distributor, and air supply fans to increase the FFRs' performance. The pumps in the FFR pump station would be replaced with variable frequency drives to meet minimum hydraulic loading requirements. In addition, the FFR Effluent Box would be expanded and a new connection piping would be installed.

- **Dredging (JP-2.2)**. The digestion pits of the facultative ponds are currently full. Dredging of the digestion pits in Facultative Pond No. 3 would be required to restore treatment capacity. Approximately 2,100 dry tons of solids would be removed from this pond. The solids would be dewatered and disposed off-site at an appropriate facility.

- **Dissolved Air Flotation Piping (JP-2.3)**. Under this CIP, the City would modify DAF effluent piping to convey flow to the Irrigation Forebay, which is used for Ranch Land irrigation. The DAFs remove algae and suspended solids from the pond effluent.

These modifications are also shown in **Figure 2-14**.



Source: Carollo 2016a

Figure 2-11.
Site Plan for Proposed Tuolumne River Pipeline Crossings

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City of Modesto
Wastewater Master Plan EIR

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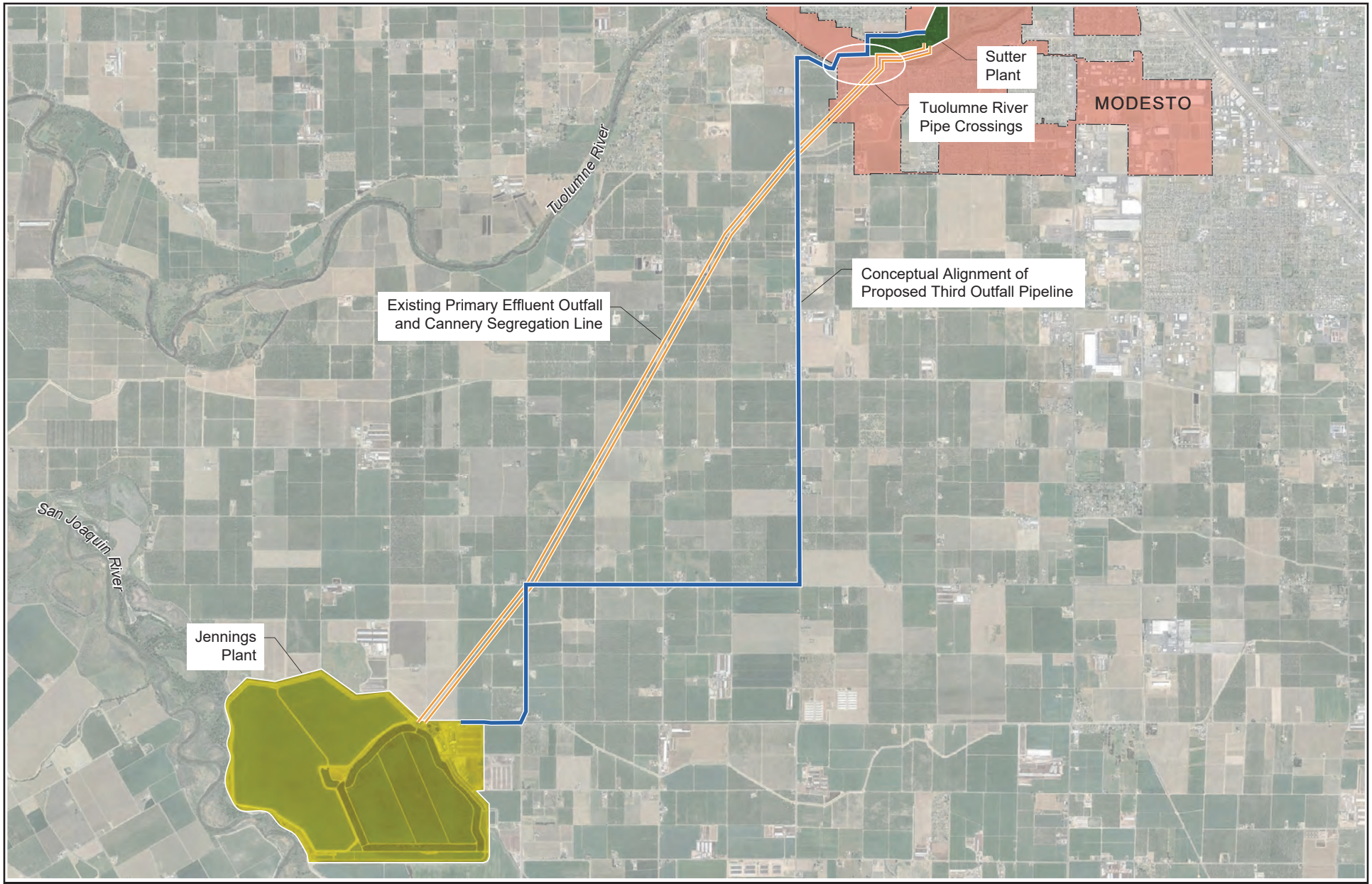

Source: Carollo 2016a

LEGEND

- Route for Third Outfall
- Existing Route

N

4000 2000 0 4000

Feet

Prepared by:

Horizon WATER and ENVIRONMENT

Figure 2-12. Proposed Alignment for Third Outfall Pipeline

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Source: Carollo 2016a

Figure 2-13. Proposed Primary Treatment and Solids Handling Facilities at Jennings Plant

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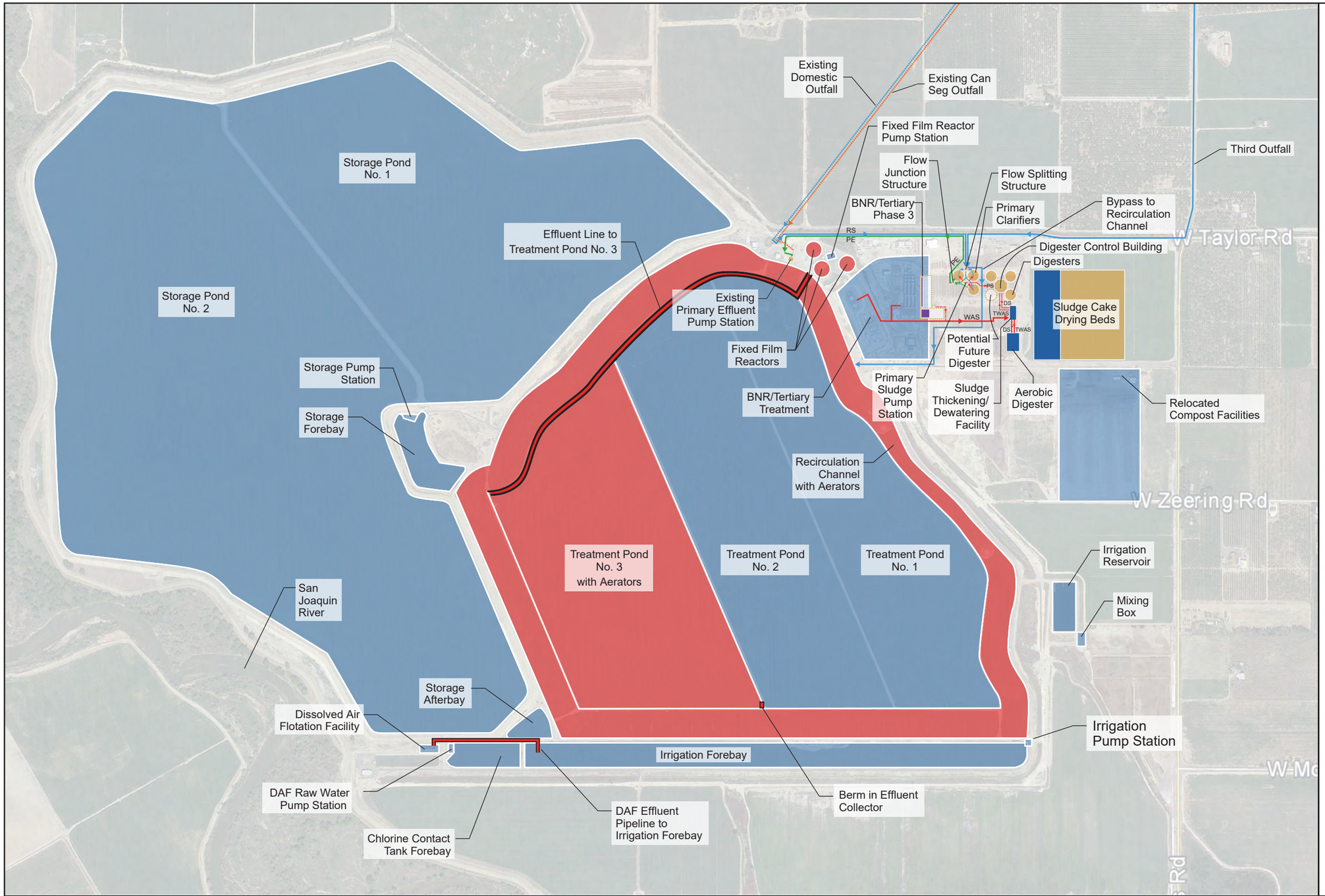

Source: Carollo 2016b

Figure 2-14. Overview of New/Modified Facilities at Jennings Plant

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City of Modesto
Wastewater Master Plan EIR

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Cannery Segregation Treatment Facilities Upgrade

The City may begin accepting additional cannery segregation flow from the canneries during the canning season. Up to approximately 25 percent of the current peak canning season flows and loads are anticipated; this is equivalent to an additional 5 mgd. To allow for new discharges to the cannery segregation system or enable the system to reduce BOD loading, several upgrades are necessary. A portion of the existing secondary treatment infrastructure would be upgraded and designated for treating the additional flow.

- **Aerators in Recirculation Channel (JP-3.1)**. Approximately sixty 50-horsepower (hp) surface mechanical aerators, or another aeration system, would be installed in the Recirculation Channel to increase treatment capacity. A new electrical system, including transformers, motor control centers, and new ductbanks, would replace the mostly abandoned existing electrical service.

- **Nutrient Feed System (JP-3.2).** This would consist of installing new chemical feed pumps and storage tanks.**Effluent Channel Berm and FFR Effluent Pipeline (JP-3.3).** A berm in the existing effluent channel would be added to keep effluent from the designated domestic pond (Facultative Treatment Pond No. 3) separate from the designated Cannery Segregation ponds (Facultative Treatment Ponds No. 1 and 2). The recirculation channel would be designated for cannery segregation flow and therefore, a new FFR effluent pipeline to Facultative Pond No. 3 would also be installed.

- **Dredging (JP-3.4).** The digestion pits of the facultative ponds are currently full. The Recirculation Channel also has large amounts of biosolids accumulated on the bottom of the channel. Dredging of the digestion pits of Facultative Ponds No. 1 and 2 and the Recirculation Channel would be required to restore treatment capacity. Approximately 16,000 dry tons of solids would be removed from these facilities. Dredging and dewatering work would be performed by another party and solids disposal would occur offsite.

- **Pond Aerators (JP-3.5)**. Under this project, twelve new 50-hp surface mechanical aerators would be installed to meet the BOD loading limit. As part of this effort, new electrical systems, transformers, and motor controls would be installed to support the aerators. Existing electrical hardware would be either abandoned or removed.

Interim Waste Activated Sludge Handling Facilities

Within the next five years, the City plans to install interim WAS handling facilities to treat WAS prior to the primary treatment and solids handling facilities relocation to the Jennings Plant. Figure 2-13 shows the location of the proposed interim WAS handling facilities.

- **Aerobic Digester (JP-4.1)**. A 2-MG aerobic digester would stabilize WAS from the Phases 1 and 2 BNR/tertiary treatment processes. Eight fifty-horsepower surface aerators and the associated electrical system would provide mixing and oxygen to the process.

- **Solids Processing Building (JP-4.2)**. Under this, the biosolids dewatering and WAS thickening equipment would be constructed and enclosed in a new solids processing building. Two sieve drum concentrators, which are used to thicken and reduce the

WAS volume before and after the digester, would be installed in the building. One would thicken WAS before anaerobic digestion, while the other would thicken digested sludge prior to dewatering. The sludge would then be directed to a belt filter press or similar process equipment to dewater the digested sludge.

- **Sludge Cake Drying Beds (JP- 4.3)**. Sludge cake, which is dewatered digested sludge, would be solar-dried in new drying beds to reduce its volume and weight and to treat it to Class B[1] standards for land application at the City's approximately 2,500-acre ranch lands. The new drying beds would be constructed on City-owned land that was formerly used as a composting facility to the east of the BNR/tertiary treatment facilities. Five acres of drying beds would be required for WAS treatment. The drying beds would consist of an asphalt-paved area with concrete containment walls and piping for drainage and decant return to the existing tailwater pump station. To accommodate additional flows, the tailwater pump station would be rehabilitated as the drying bed facilities are constructed. Once the biosolids have dried and treated to Class B standards, they would be applied to the City's ranch lands; no additional land would need to be acquired.

Primary Treatment and Solids Handling Facilities Relocation

Figure 2-13 shows the locations of proposed primary treatment and solids handling facilities to be constructed at the Jennings Plant. These facilities would replace the aging facilities at the Sutter Plant and would be constructed just east of the existing Jennings Plant facilities. The City currently plans to construct these components between 2023 and 2025.

- **New Primary Treatment Facilities (JP-5.1)**. Three 110-foot diameter clarifiers and primary sludge and scum pumping equipment would be installed.

- **Yard Piping Structures (JP-5.2)**. This CIP includes installing new yard piping to connect new primary treatment and solids handling facilities to the existing secondary treatment facilities. Flow splitting structures would also be installed.

- **Anaerobic Digesters (JP-5.3)**. Under this CIP, three new anaerobic digesters and a Digester Control Building would be constructed. The digesters would be 115 feet in diameter and have a 31-foot side-water depth, and would treat WAS and primary sludge from the new clarifiers and new Digester Control Building. The building would include electrical, mechanical, instrumentation and controls, digester mixing, and heating equipment.

- **Solids Processing Building (JP-5.4)**. The two existing sieve drum concentrators would thicken WAS before it is sent to the digesters. Afterward, four belt filter presses, three new and one existing from the interim WAS handling project, or another process, would dewater the digested sludge before it is sent to the sludge cake drying beds. The WAS thickening and biosolids dewatering equipment would be located in an enclosed building constructed during interim WAS handling project.

[1] The disposal of biosolids is regulated by the federal biosolids rule (40 Code of Federal Regulations Part 503), which identifies allowed uses for Class A biosolids (contain no detectible levels of pathogens) and Class B biosolids (treated but contain higher levels of detectible pathogens than Class A biosolids). Class B biosolids are currently produced at the Sutter Plant.

- **Sludge Drying Beds (JP-5.5)**. The 5-acre drying beds constructed as part of component JP-4.3, described above, would be expanded to 18.6 acres. Dewatered digested sludge would be solar-dried in new beds just east of the new primary plant. The drying beds would be asphalt-paved areas with concrete containment walls and piping for drainage and decant return to the existing tailwater pump station. Dried sludge would meet Class B standards and would eventually be applied to City's ranch land.

Lighting and Landscaping

Jennings Plant improvements may require on-site exterior lighting. New lighting at this facility would be consistent with outdoor lighting currently used at the two wastewater treatment plants. New lighting at the Jennings Plant would be directed inward to avoid glare or spillover effects, and may be motion-activated where beneficial and effective.

2.5.4 Construction Methods

Construction of proposed improvements to the City's collection system and treatment facilities would involve several types of activities: site preparation; demolition and removal of some existing facilities; earthwork (grading and excavation); pipeline installation; and facility construction. These activities are described below. As indicated in Section 2.4.5, Construction Schedule and Phasing, construction would occur throughout the Program planning period and within the construction period for each component, there would be periods of more intensive activity and associated peaks in construction traffic, typically during ground-disturbing activities, followed by longer periods of reduced activity.

Site Preparation and Demolition

Site preparation would include clearing and grubbing at each CIP site. Clearing and grubbing would be conducted using standard excavators, bulldozers, and hand labor. Depending on the CIP project, other site preparation work may involve demolition of existing facilities/structures, excavation, import, and placement of fill, and compaction. Demolition of primary treatment facilities at the Sutter Plant (e.g., primary clarifiers and digesters) would involve removal and proper disposal of all mechanical and electrical equipment, and demolition of above- and below-ground structures. An estimated 14,000 cubic yards of building material would be demolished at the Sutter Plant. Demolition waste would consist of concrete, steel, and other miscellaneous building materials. Some or all of the waste would require disposal at a landfill or hazardous waste facility. An estimated 12,000 cubic yards of material would be excavated, and approximately 48,000 cubic yards of material would be backfilled at the Sutter Plant. Once these facilities have been demolished, the site would be leveled so that the site could be used for future facilities.

To the extent feasible, excavated soil would be reused on-site. If required, fill would be delivered to the project sites by conventional haul trucks with a capacity of up to 20 cubic yards (cy) per load. Fill material would be placed with an excavator and compacted with a compactor/roller.

Pipeline Construction

Pipeline construction activities would take place using either open trench or trenchless methods. These activities are described below. In general, typical equipment utilized during pipeline installation includes excavators and backhoes, loaders, tractor trailer trucks for

hauling equipment, concrete trucks, graders, asphalt pavers and rollers, compaction equipment, and various smaller service vehicles.

Open Trench. For new pipelines that would be installed beneath existing streets, the general process for pipeline installation involves digging a trench, installing the pipe, and backfilling the trench ("cut and cover"). In existing streets, the cut-and-cover method involves removing the asphalt, roadway base, and underlying soil; all materials are replaced at the completion of the program. The depth and width of the trenches would vary depending upon the size of the pipe and take into consideration the presence of other existing utility lines. For the new effluent outfall pipeline, the width of the trench would be approximately 8 feet wide and approximately 11 feet deep. Depending on the time of year and soils underlying the CIP site, groundwater dewatering work may be required.

In general, the maximum length of an open trench would be the distance necessary to accommodate the amount of pipe that can be laid in one day. For new sewer pipelines, typically 200 to 400 feet can be laid with one crew working. A typical crew size includes 5 workers. In the event that multiple crews are working on a particular pipeline project, more than 400 feet of new pipeline can be installed. For the new outfall pipeline, average pipeline construction would progress at a rate of 100 feet per day.

To the extent feasible, pipeline construction activities would occur within the limits of the City or County right-of-way boundaries, City utility easement, and/or construction easement. The width of the construction area varies both on the extent of applicable easements and pipeline diameter. For the purposes of the EIR analysis, the approximate width of the construction areas would be 20 feet. Depending on the project location, construction crews may close one lane of traffic temporarily during pipe installation.

Trenchless Methods. Where new or replacement sewer pipelines and outfall pipelines would cross creeks (e.g., Dry Creek and Tuolumne River) or where open trench methods would be problematic due to the presence of underground utilities, railroad crossings, or other right-of-way issues; the City would use trenchless pipeline installation methods including HDD, microtunneling, or pipe bursting. New sewer pipeline construction may also entail slip-lining or CIPP methods. In addition, pile drivers would be used for horizontal drilling. These methods are summarized below.

- HDD involves the use of a drill rig that is tilted at the top at an angle of 10-15 degrees from the surface. A small pilot hole is drilled along a pre-determined horizontal and vertical alignment from the entry pit to exit pit. A slurry consisting of water clay is then drilled via a drill string; the pressure along with the rotating drill bit excavates the material. The excavated material is transported back to the entry pit along the outside of the drill string.

- Microtunneling requires the construction of insertion pits, pipe jacking (pipes pushed behind the small tunneling machine), and application of a lubricant to maintain pressure and prevent the shafts and the tunnel from collapsing. The tunneling machine is controlled by a computer and is typically accurate. The construction crews first establish the launch pit and a receiving pit on either side of the waterway or utility crossing. Temporary dewatering may be needed at the pits.

- Pipe bursting is another trenchless method in which an insertion pit and receiving pit are established on both sides of the waterway and/or utility or road crossing. Temporary groundwater dewatering may be needed at the pit excavation areas. A mechanically applied bursting tool is used to apply force on the existing pipe which breaks either by brittle fracture or by splitting. At the same time, a new pipe is pulled in to replace the existing pipe and the back end of the bursting head connects with the new pipe. The front end is connected to a cable or pulling rod that is pulled from the receiving pit. The bursting head is pulled through the existing pipe debris and creates a temporary cavity.

- CIPP lining is a trenchless method used to rehabilitate cracked, broken or failed sewer pipes. A resin-saturated felt tube consisting of polyester, fiberglass cloth or another substance for resin impregnation, is inverted or pulled into a damaged pipe typically from the upstream side. The liner and resin is pressed into cracks, joints, and lateral connection flares to lock the liner into place.

- Sliplining is conducting by installing a smaller (referred to as a "carrier pipe") into a larger ('host pipe'), grouting the annular space between the two pipes, and sealing the ends.

Construction of Lift Stations and Other Aboveground Facilities

Most of the lift station upgrades would be constructed within the existing footprint of lift station structures. For new lift stations, construction activities would generally involve excavation, shoring, and possible groundwater dewatering. Other new aboveground facilities to be constructed such as primary clarifiers and anaerobic digesters, would entail excavation for foundations of the structures and conventional concrete and steel methods. Construction may also include sheeting and shoring work for necessary piping and underground utility connections. Other activities would likely include connecting mechanical, structural, and electrical instruments.

River Trunk Realignment Project Construction

Construction of the River Trunk Realignment Project would occur in three different phases.

- **Dry Creek Crossing and Pipeline to River Trunk Pump Station (Phase 1)**: The first phase of the project includes constructing a new 48-inch-diameter pipeline crossing at Dry Creek, the River Trunk Pump Station at Morton Boulevard, a new gravity pipeline along B street that connects to the River Trunk Pump Station, and a portion of the new River Trunk force main. Currently, the City is considering two different approaches for establishing a dry and stable work area for the River Trunk Pump Station: (1) designing the temporary shoring system to be part of the permanent pump station, or (2) design a temporary shoring system to create a dry and stable work area and construct permanent structural walls for the pump station separately (Carollo Engineers 2016c). Pile drivers would be used during the horizontal drilling process and during construction of the wet well.

- **Gravity Pipelines (Phase 2)**: The second phase of the project includes constructing the Tuolumne and Neece junction structure and gravity pipelines beneath Tuolumne Boulevard, Colorado Avenue, and across the Dryden Golf Course. This phase also includes constructing the force main from the River Trunk Pump Station to the Tuolumne and Neece junction structure.

- **Shackelford Pump Station and Pipeline (Phase 3)**: The third phase of the project includes constructing the new Shackelford Pump Station located west of Crows Landing Road and east of the Tuolumne River. This pump station will pump flows through a new force main under Tuolumne River using recently constructed inverted siphons. From the Tuolumne River crossing, a new force main would be installed through the Dryden Park Golf Course, continue west, and terminate at a manhole in Roselawn Avenue where the flow would be conveyed by gravity to the new River Trunk line at Colorado Avenue and Pelton Avenue. Pile driving would be required during construction of the wet well and pump station.

During the first phase of the project, both open trench and trenchless pipeline installation methods would be used. Open trench methods would mostly be employed for pipeline segments planned within the road right-of-way. Trenchless construction methods would be used to install the 48-inch pipeline beneath Dry Creek and the two pipeline crossings at 7th Street and the Southern Pacific Railroad crossing. Trenchless methods would also be used to install the overflow structure at the River Trunk Pump Station site. The Gallo Winery parking lot would be used as a staging area and another potential staging area would be located on a vacant lot located between Tuolumne Boulevard and South 7th Street. **Table 2-7** summarizes work areas associated with Phase 1 of the River Trunk Realignment Project.

Table 2-7. Summary of Construction Work Areas for River Trunk Realignment Project (Phase 1)

River Trunk Realignment Project – Phase 1 Work Areas	Approximate Area (square feet)
River Trunk Pump Station	57,000
Insertion Pits Near Tuolumne Blvd.	1,000
Insertion Pits Located South of Potential Staging Area	1,000
Potential Staging Area Near Tuolumne Blvd.	13,600
Gallo Staging Area	28,600

Pipeline construction activities are estimated to require excavation of approximately 102,400 cubic yards of soil and the pump stations would require roughly excavation of 15,900 cubic yards of soil. While much of this material would be reused as backfill, approximately 45,500 cubic yards of soil would require off-site disposal. Approximately 19,555 cubic yards of soil would be imported. Table B-1 in **Appendix B** (which contains air quality modeling results) summarizes key construction characteristics (e.g., cut and fill quantities, depth of excavation, construction equipment, and duration) of each element for the River Trunk Realignment Project.

2.5.5 Construction Schedule and Phasing

Construction of the overall Proposed Program is anticipated to last for up to approximately 25 years, beginning in 2019 and completed in 2030 to 2035. **Figure 2-15** presents the proposed schedule and phasing for construction of the Program components.

Figure 2-15. Modesto WWMP Construction Phasing

Project No.	Facility Name	Construction Timeframe/Phasing																			
		Phase 1					Phase 2					Phase 3					Phase 4				
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
River Trunk Realignment Project																					
1	Dry Creek Crossing and Pipeline to River Trunk Pump Station																				
2	Gravity Lines																				
3	Shackelford Pump Station and Force Main																				
Collection System Improvements																					
New and Upgraded Sewer Pipelines																					
W-1	West Trunk																				
W-3	West Trunk																				
W-4	West Trunk																				
W-6	West Trunk																				
W-7	West Trunk																				
D-1, D-3, D-4, and D	Dale Trunk																				
R-1	Rumble Trunk																				
R-2	Rumble Trunk																				
S-1	Sutter Trunk																				
DT-1	J Street Trunk																				
DT-2	Kimble Street																				
SR-4	Santa Rosa Trunk																				
EM-4	Empire Trunk																				
EM-3	Empire Trunk																				
SO-1 thru SO-3	Sonoma Trunk																				
SO-4	Sonoma Trunk																				
L-1 thru L-4	Lakewood Trunk																				
L-5	Lakewood Trunk																				
L-6	Lakewood Trunk																				
U-1 thru U-4	Ustick Trunk																				
N-1 and N-2	North Trunk																				
N-3 thru N-5	North Trunk																				
N-6	North Trunk																				
N-7 thru N-9	North Trunk																				
Sewer Rehabilitation Improvements																					
A-3	Carver Trunk																				
C-1	West Trunk																				
B-2	Woodland Trunk																				
D-2	Emerald Trunk																				
A-2	Sutter Trunk																				
S-4b/C-2	Sutter Trunk and South Trunk																				
C-3	Downtown Tributary																				
D-1	Downtown Tributary																				
A-1	Rose Celeste/Santa Rosa																				
B-1	Crows Landing Trunk																				
RT-9	River Trunk																				
RT-10	River Trunk																				
RT-11	River Trunk & CSL																				
RT-12	CSL Diversion Structures																				
SR-6	Santa Rosa Trunk																				
Lift Station Improvements																					
LS #29 - Rose & Cel	Rose-Celeste																				
LS #3 - Benson	Benson																				
LS #64	Dakota																				
LS #63	Kansas																				
LS #60	Chapman																				
LS #67	Litt Rd																				
LS # 59	Pelandale Rd																				
LS #61	Wood Sorrel																				
LS #62	Whitmore/Carpenter																				
LS #65	Kiernan Ave																				
LS #30	Rumble																				
LS #39	Woodland																				
Treatment Plant Improvements																					
Sutter Plant Modifications																					
SP-1	Influent Pump Station Improvements																				
SP-3	Primary Effluent Pump Station Replacement																				
SP-4	Demolition of Sutter Treatment Facilities																				
SP-5	Flood Protection Improvements																				
Outfall Pipelines																					
OP-1.1	New Tuolumne River Crossings																				
OP-1.2	New Primary Effluent Outfall																				
OP-3	Slip-lining a Portion of the Cannery Segregation Line																				
Jennings Plant Improvements																					
JP-1.1	Phase 3 of Tertiary Treatment Facility																				
JP-2.1	Fixed Film Reactors Rehabilitation																				
JP-2.2	Dredging																				
JP-2.3	Dissolved Air Flotation Piping																				
JP-3.1	Aerators in Recirculation Channel																				
JP-3.2	Nutrient Feed System																				
JP-3.3	Effluent Channel Berm and Effluent Pipeline																				
JP-3.4	Dredging																				
JP-3.5	Pond Aerators																				
JP-4.1	Aerobic Digester																				
JP-4.2	Solids Processing Building (WAS thickening and biosolids dewatering facilities)																				
JP-4.3	Sludge Cake Drying Beds																				
JP-5.1	Primary Treatment Facilities																				
JP-5.2	Yard Piping and Structures																				
JP-5.3	Anaerobic Digesters																				
JP-5.4	Solids Processing Building (WAS thickening and biosolids dewatering facilities)																				
JP-5.5	Sludge Cake Drying Beds																				

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River Trunk Realignment Construction Schedule

As described above, construction of the River Trunk Realignment Project would be completed in three phases. Phase 1 of the project, which involves construction of the pump station and pipeline crossing at Dry Creek, would occur over a 30-month period. The second phase of the project, which involves construction of the gravity pipelines, would occur over a 12-month period. The third phase, which entails construction of the Shackelford Pump Station and force main, would take place over an 18-month period.

Construction Schedule for Other Program-level Components

The City would construct the program-level components in several phases and are referred to as Phases 1, 2, 3, and 4. The CIPs are scheduled based on priority such that critical components are planned in the near-term.

In the near-term (between 2019 and 2020), the City plans to upgrade and rehabilitate several sewer trunk lines including the Crows Landing Trunk, Woodland Trunk, River Trunk, and others. The City also plans to construct the third phase expansion of the tertiary treatment facilities and secondary treatment plant components at the Jennings Plant within the next 5 years.

As shown in Figure 2-15 many CIPs are anticipated to occur in Phase 2 (between 2021 and 2025). Note that the bars presented in Figure 2-15 represent the general construction timeframe in which a particular CIP would take place (not the actual construction duration). Several sewer trunk pipelines would be replaced and upgraded including the Ustick Trunk, North Trunk, and Rumble Trunk. In addition, the City plans to complete five lift station projects, the Primary Effluent Pump Station Replacement, the new Primary Effluent Outfall pipeline, and the new primary treatment facilities at the Jennings Plant.

Under Phase 3 (2026-2030), the City anticipates completing three sewer upgrade projects and three lift station projects. Within this timeframe, the City would complete improvements to the Influent Pump Station, demolish several facilities at the Sutter Plant, and conduct flood protection improvements for facilities that would remain at the plant. A portion of the Cannery Segregation Line would also be slip-lined within this timeframe.

Lastly, Phase 4 (2031-2035) would primarily include sewer line and lift station upgrades that are necessary for accommodating future growth areas.

Construction activities would generally occur Monday through Friday between 7:00 a.m. and 5:00 p.m., excluding City-observed holidays. However, it is possible that some construction activities may need to occur on weekends or outside of the hours indicated above (after 5pm or before 7am).

2.5.6 Project Operations

Operation of the Proposed Program would primarily involve inspection and maintenance of the City-wide wastewater system. Following implementation of the Proposed Program, standard operating procedures and treatment methods currently performed at the Sutter Plant would be relocated to the Jennings Plant. All wastewater sanitation activities would be centralized and conducted at the Jennings Plant but in a manner similar to existing operations. Compared to existing conditions, systemwide electricity use at the Jennings Plant

would increase to operate the new primary treatment and solids handling facilities, secondary treatment modifications, and tertiary treatment upgrades,

Approximately 60 current staff working at the Sutter Plant are expected to relocate to the Jennings Plant. All other current Collection Systems staffing positions are expected to remain at the Sutter Plant, and would utilizing the existing buildings and space for wastewater collections operations and maintenance needs. The majority of staff relocating to the Jennings Plant would be responsible for operating the newly constructed plant facilities. In general, operation and maintenance activities would increase at the Jennings Plant due to construction of new BNR/Tertiary Phase 3 facilities, modifications to the secondary treatment facilities, and new primary treatment and solids handling facilities. Operation and maintenance activities at the Jennings Plant would result in greater commute trips and chemical deliveries to and from the plant, and less commuter and chemical delivery trips to and from the Sutter Plant. Because the new drying beds would be situated at the Jennings Plant, the truck trip length to and from the City's ranch lands would be substantially shorter compared to existing conditions as biosolids are currently hauled from the Sutter Plant to the ranch lands near the Jennings Plant.

2.6 Permits and Approvals

Table 2-8 below summarizes permits and approvals anticipated to be needed for implementation of the River Trunk Realignment Project.

Table 2-8. Anticipated Permit and Regulatory Requirements for the River Trunk Realignment Project

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
California Department of Fish and Wildlife	Fish and Game Code Section 1602	Applies to activities that will substantially modify a river, steam, or lake; includes reasonable conditions necessary to protect those resources	Streambed Alteration Agreement
California Department of Transportation (Caltrans)	Section 660 of the California Streets and Highways Code	Applies to pipeline construction activities that occur beneath Caltrans right-of-way	Encroachment permit
California State Lands Commission	General Lease-Public Agency Use	Required for forcemain crossing the Tuolumne River	Approval of improvements under General Lease
Central Valley Flood Protection Board	Water Code 8710, California Code of Regulations Title 23	Required for Dry Creek pipeline crossing and forcemain crossing the Tuolumne River	Encroachment Permit

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
San Joaquin Valley Air Pollution Control District	Rule 8021	Limit fugitive dust emissions from construction	Construction Notification Form
Union Pacific Railroad	N/A	Required for pipeline crossing beneath Union Pacific Railroad	License Agreement

With respect to other components of the Proposed Program, the EIR may be used by various regulatory agencies issuing permits or other approvals, or conducting consultations for individual Proposed Program components. Many of these agencies are similar to those described above for the River Trunk Realignment Project; agencies that may use the EIR as part of their decision-making process for the larger Proposed Program include the following:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- State Water Resources Control Board
- Central Valley Regional Water Quality Control Board
- California Department of Fish and Wildlife
- California Department of Transportation
- California State Lands Commission
- Central Valley Flood Protection Board
- Stanislaus County
- San Joaquin Valley Air Pollution Control District
- Modesto Irrigation District
- Turlock Irrigation District

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Chapter 3
INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

3.1 OVERVIEW

Chapters 4 through 18 of this DEIR describe the potentially affected environmental resources and potential environmental impacts (and applicable mitigation measures) of the Proposed Program. The regulatory setting discussion in each chapter identifies applicable federal, state, and local plans, policies, and regulations.[1] Each chapter also describes the existing environmental setting and background information on the resource topics to help the reader understand the conditions that could be affected by the Proposed Program. In addition, each chapter includes a discussion of the methodology and criteria used in determining the significance levels of the Proposed Program's environmental impacts. Finally, for identified significant impacts, where feasible, mitigation measures are proposed to reduce the adverse effects of significant impacts.

This chapter summarizes the EIR study area, describes the DEIR's consideration of baseline conditions, describes terminology used throughout this DEIR, clarifies how program-level versus project level-analyses are presented in this DEIR, defines who is responsible for implementing proposed mitigation measures, and describes resource sections that have been eliminated from further consideration in the DEIR.

3.2 EIR STUDY AREA AND PROGRAM AREA

The study area for this DEIR encompasses the sewer service area for the WWMP that would be addressed by the various CIPs, including the limits of the City of Modesto, a portion of north Ceres, Beard Industrial Park District, and the unincorporated community of Empire. The study area also includes areas within the City's sphere of influence, the proposed alignment of the third outfall, the Jennings Plant, and the approximately 2,500 acres of City-owned ranch lands south of the Jennings Plant.

As noted in Chapter 2, the term "Program area" refers to areas where proposed CIPs would be constructed, including the City proper and unincorporated Stanislaus County. All proposed CIPs are within the jurisdictional limits of the City of Modesto or unincorporated Stanislaus County. No CIPs are planned in north Ceres or other communities in the City's sewer service area.

3.3 CHARACTERIZATION OF BASELINE CONDITIONS

Under CEQA, the environmental setting, or "baseline," serves as a gauge to assess changes to existing physical conditions that would occur as a result of a Proposed Program. In

[1] State CEQA Guidelines Section 15125 requires an EIR to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans. This discussion is included in Chapter 13, *Land Use and Planning*.

accordance with State CEQA Guidelines (14 CCR Section 15125), for purposes of this EIR, the environmental setting is generally the existing physical conditions in and around each CIP site as those conditions exist at the time the NOP was published (2016).

3.4 SIGNIFICANCE OF ENVIRONMENTAL IMPACTS

According to CEQA, an EIR should define the threshold of significance and explain the criteria used to determine whether an impact is above or below that threshold. Significance criteria are identified for each environmental resource topic to determine whether implementation of the Program would result in a significant environmental impact when evaluated against the baseline conditions as described in the environmental setting. The significance criteria vary depending on the environmental resource topic. In general, effects can be either significant (above threshold) or less than significant (below threshold). In some cases, a significant impact will be identified as significant and unavoidable if no feasible mitigation measure(s) is/are available to reduce the impact to a less-than-significant level. If the Program is subsequently adopted despite identified significant impacts that would result from the Program, CEQA requires the lead agency to prepare and adopt a statement of overriding considerations describing the social, economic, and other reasons for moving forward with the program despite its significant impact(s). (See generally State CEQA Guidelines Sections 15092, 15093, 15126.2)

3.4.1 TERMINOLOGY USED IN IMPACT ANALYSES

This DEIR uses the following terminology to describe environmental effects of the Proposed Program:

- A finding of *no impact* is made when the analysis concludes that the Program would not affect the particular environmental resource or issue.
- An impact is considered *less than significant* if the analysis concludes that there would be no substantial adverse change in the environment and that no mitigation is needed.
- An impact is considered *significant* if the analysis concludes that there could be a substantial adverse effect on the environment.
- An impact is considered *less than significant with mitigation* if the analysis concludes that there would be no substantial adverse change in the environment with the inclusion of the mitigation measures described.
- An impact is considered *significant and unavoidable* if the analysis concludes that there could be a substantial adverse effect on the environment and no feasible mitigation measures are available to reduce the impact to a less than significant level.
- *Mitigation* refers to specific measures or activities adopted to avoid, minimize, rectify, reduce, eliminate, or compensate for an impact.
- A *cumulative impact* can result when a change in the environment results from the incremental impact of a project when added to other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts may result

from individually minor but collectively significant projects. The cumulative impacts analysis in this DEIR focuses on whether the Proposed Program's incremental contribution to other significant cumulative impacts caused by past, present, or probable future projects is cumulatively considerable (i.e., significant).

- Because the term "significant" has a specific usage in evaluating impacts under CEQA, it is used only to describe the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" have been used when not discussing the significance of an environmental impact.

3.4.2 PROGRAM-LEVEL ANALYSIS

As described in Chapter 2, *Program Description,* the DEIR impact analysis considers most Proposed Program components at a program level of detail, with one individual component considered at a project-specific level of detail. Table 2-1 provides an overview of all projects considered throughout the DEIR. Each resource chapter includes an impact summary table that clearly identifies the impact significance by project or program component.

The Proposed Program includes a number of components for each of the sewer service areas which would be designed and implemented over the 20-year planning period. These are discussed at a more general, program level of detail in this DEIR, and many would likely require additional environmental review prior to approval, as described below. Where appropriate, environmental impacts of program-level components are discussed under the following subheadings for each impact statement:

- ***Collection System Components*** – new and upgraded sewer lines, sewer rehabilitation, lift stations, stormwater/sanitary sewer disconnections, and other small pipeline rehabilitation and replacement projects.

- ***Outfall Pipelines*** – new Tuolumne River pipeline crossings for the Cannery Segregation Line and Primary Effluent Outfall (OP-1.1), new primary effluent outfall pipeline extending from the Sutter Plant to the Jennings Plant (OP-1.2), and slip lining a portion of the Cannery Segregation Line (OP-1.3).

- ***Sutter Plant Components*** – influent pump station components (SP-1), primary effluent pump station replacement (SP-3), demolition of Sutter Treatment facilities (SP-4), and flood protection components (SP-5).

- ***Jennings Plant Components*** – modifications to the tertiary treatment facilities, secondary treatment facility modifications, Cannery Segmentation Line facilities upgrades, interim WAS handling facilities, and new primary treatment facilities.

For some resource sections, the impact analyses are discussed collectively and no subheading is shown. In other sections, additional subheadings have been established for sub-categories of collection system components.

Potential Need for Additional Future Analysis

As described in Section 2.5, "Proposed Program Characteristics," in Chapter 2, *Program Description*, program-level components are projects that the City would likely construct in the future, but the design of these components has not been advanced to a level at which a

detailed evaluation can be completed. As the planning process for a specific component reaches a more defined stage, the City will review the component's consistency with this EIR to determine whether substantial changes to the program-level component, the circumstances under which the program component is being undertaken, or new information have been identified that require additional environmental review (Pub. Res. Code Section 21166; State CEQA Guidelines Section 15162). Depending on the level and nature of new impacts, the City would then undertake the appropriate level of analysis under CEQA.

3.4.3 PROJECT-LEVEL ANALYSIS

The DEIR evaluates one near-term component, the River Trunk Realignment Project, at a project level of detail. This component is discussed under the following subheading:

- ***River Trunk Realignment Project*** – This project is typically discussed individually. However, in some resource sections, the impact analysis for the River Trunk Realignment Project has been combined with the evaluation of program-level components.

3.4.4 OVERALL CONCLUSION

At the end of each impact analysis in which discussions are organized by the different WWMP components, a summary of the conclusions has been provided under the following subheading:

- ***Overall Conclusion*** – This section considers the impacts of all the various WWMP components as a whole; in general, the overall conclusion reflects the greatest level of impact identified for the various components.

3.5 MITIGATION MEASURES

As lead agency, the City will be responsible for ensuring that mitigation measures identified in this DEIR and adopted by the City are fully implemented as part of the Proposed Program. Mitigation measures would be incorporated into contract specifications to be implemented by either contractors or City staff, and monitored by the City. A mitigation monitoring and reporting program (MMRP) will be developed which identifies the responsible parties for carrying out requirements specified in the mitigation measures throughout the design, construction, and operation phases of the Program. The MMRP will be adopted by City Council with certification of the Final EIR.

3.6 RESOURCE AREAS ELIMINATED FROM FURTHER ANALYSIS

The following CEQA checklist resource topics have been eliminated from further analysis based on the nature and scope of the Proposed Program activities. A brief summary and description of these resource topics are below.

3.6.1 FORESTRY RESOURCES

The Proposed Program would not result in the loss of forest lands or the conversion of forestland to non-forest use. Stanislaus County does not have lands zoned for forestland/ timberland, as indicated in its General Plan DEIR (ICF International 2016). For this reason,

the Proposed Program would not impact forest lands and would not conflict with lands zoned for forest land or timberland uses.

3.6.2 MINERAL RESOURCES

Based on review of the *Stanislaus County General Plan* (2016) and California Department of Conservation (CDOC) Surface Mining and Reclamation Act Mineral Lands Classification mapping (CDOC 2016), there are no known mineral resource zones, historic or active mines or quarries within the study area. In addition, construction and operation of the proposed components would not directly affect mineral production sites or prevent future availability of mineral resources. As a result, the Proposed Program would have no impact on mineral resources.

3.6.3 PUBLIC SERVICES

Public services include police, fire, schools and parks serving the study area. The Proposed Program involves upgrades to the City's wastewater collection and treatment system and would accommodate growth projected within the City's sewer service areas, including that projected in the City's General Plan (2008). During construction, incidents could require law enforcement, fire protection, or emergency services; however, many proposed components are located within the urban area of Modesto, which is currently served by existing public services like police and fire protection, schools and parks. The Jennings Plant and ranch lands in unincorporated Stanislaus County receive police and fire protection services from Stanislaus County Sheriff's Department, California Highway Patrol, and two fire protection districts (Mountain View and Westport). No CIPs are planned in north Ceres or other communities in the City's sewer service area. The potential temporary increase in such incidents would not be substantial and would not result in the need to construct new or physically altered governmental facilities to maintain acceptable service ratios or response times or meet performance objectives. Operation and maintenance activities described in Chapter 2, *Program Description,* would be substantially the same in nature as existing maintenance and operation activities, while additional facilities would be constructed that would require operations and maintenance, this would only require a small number of additional staff and would not be expected to result in a substantial increase in service calls for police or fire protection, etc. Therefore, operation of the Proposed Program would not substantially change the demand for public services in a manner which would create a need for new or physically altered governmental facilities to maintain acceptable service ratios or response times or meet performance objectives of public service providers. Construction and operation of the Proposed Program would therefore have a less than significant impact on public services.

3.6.4 RECREATION

The Proposed Program would not directly generate increased demand for recreational facilities. Increased demand for parks or recreation facilities due to population growth are addressed in Chapter 15, *Population and Housing*. Construction of the new outfall pipeline crossings (component no. OP-1.1) would involve construction at St. Salazar Park, where the new force mains would connect with the existing Primary Effluent Outfall and Cannery Segregation Line. Some stormwater/sanitary sewer cross-connect disconnection improvements would occur in open space areas and could temporarily affect park amenities such as J.M. Pike Park and Catherine Everett Park. Any park amenities affected by

construction would be replaced after construction is completed. The temporary closure of any of these facilities could result in a short-term increase in use of other nearby parks and recreational facilities. Given the number of other parks and recreational facilities in Modesto that would be accessible while the few above-mentioned parks are temporarily unavailable, the Proposed Program would not substantially increase the use of any existing parks or recreational facilities such that physical deterioration of those facilities would occur or be accelerated. No CIPs are planned in north Ceres or other communities in the City's sewer service area. In addition, the Proposed Program does not include recreational facilities and would not directly require the construction or expansion of any such facilities. Therefore, based on the above discussion, there would be a less-than-significant impact on recreational uses or facilities.

3.6.5 WILDFIRE

The Proposed Program is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The California Department of Forestry and Fire (CAL FIRE) has determined that there are no very high fire hazard severity zones in local responsibility areas. The Program area is an urban and agricultural setting. As stated above in Section 3.6.1, the County does not have any forestland or timberland. As such, the Proposed Program would have no wildfire effects.

Chapter 4
AESTHETICS AND VISUAL RESOURCES

4.1 OVERVIEW

This chapter describes the existing aesthetic resources within the study area and pertinent federal, state, and local plans and policies regarding the protection of visual and scenic resources. The impacts on scenic resources, public views of scenic vistas, visual character of the study area, and nighttime views from construction and operation of the Proposed Program are evaluated, and mitigation is proposed to address the impacts found to be significant.

The term "aesthetics" refers to visual resources and the quality of what can be seen or overall visual perception of the environment, and may include such characteristics as building scale and mass, design character, and landscaping. Visual impacts are analyzed through an examination of views and/or viewsheds. Views refer to visual access and obstruction of prominent visual features, including both specific visual landmarks and panoramic vistas. Viewsheds refer to the visual qualities of a geographic area. The geographic area is defined by the horizon, topography, and other natural features that give an area visual boundary and context. Viewshed impacts are typically characterized by the loss and/or obstruction of existing scenic vistas or other major views in the area of the Program area that are available to the general public. Sensitive viewers are individuals or groups who are particularly affected by changes to the aesthetics of the surrounding area. View analysis is based upon relative visibility with regard to viewing location and proposed on-site development.

4.2 REGULATORY SETTING

4.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

Other than the National Historic Preservation Act, which is discussed in Chapter 8, *Cultural and Paleontological Resources*, there are no federal regulations pertaining to visual resources that would affect this Program.

4.2.2 STATE LAWS, REGULATIONS, AND POLICIES

California Scenic Highway Program

The California Scenic Highway Program was established in 1963 under Sections 260–263 of the Streets and Highways Code. The Scenic Highway Program includes a list of highways that are either designated or eligible for designation as scenic highways (California Department of Transportation [Caltrans] 2017a). In Stanislaus County, the only designated scenic highway is Interstate 5 (Caltrans 2017b). There are no highways near the study area that are eligible for designation as scenic highways or have been officially designated.

4.2.3 LOCAL LAWS, REGULATIONS, AND POLICIES

Stanislaus County General Plan

The *Stanislaus County General Plan's* Conservation/Open Space Element encourages the protection and preservation of natural and scenic areas throughout the County (Stanislaus County 2016). Although the Conservation/Open Space Element does not identify specific policies concerning the preservation of scenic views of aesthetic resources, the following goal and policy apply to the Proposed Program:

Goal One. Encourage the protection and preservation of natural and scenic areas throughout the County.

Policy One. Maintain the natural environment in areas dedicated as parks and open space.

City of Modesto Urban Area General Plan

Chapter VII of the *City of Modesto Urban Area General Plan* (City of Modesto 2019a), "Environmental Resources, Open Space and Conservation," establishes policies which are intended to guide development within the City's Planning Districts. The pertinent aesthetic and visual resource policies from the general plan are listed below.

Policy VII-B.7[a]. Visual corridors of the river will be protected and enhanced.

Policy VII-B.7[b]. Visual corridors and access points on the riverfront will be recreated through development.

Policy VII-B.7[q]. The scenic resources of Public Trust lands and resources shall be considered as protected as a resource of public importance. Permitted development shall be cited and designed to protect scenic views associated with Public Trust lands and resources.

Additionally, the City's inventory of Landmark Preservation Sites (listed in Section V-8 of the General Plan Master EIR [City of Modesto 2019b] and further discussed in Chapter 8, *Cultural, Paleontological, and Tribal Cultural Resources,* of this DEIR) includes not only historic structures, but also several landmark trees.

Tuolumne River Regional Park Master Plan

A joint powers authority comprised of the City, the City of Ceres, and Stanislaus County (the County) adopted the Tuolumne River Regional Park (TRRP) Master Plan in December 2001 (EDAW 2001a). This plan is intended to shape development of active- and passive-use parkland along the river corridor, including its span through Modesto. The TRRP Master Plan EIR (EDAW 2001b) refers to the Tuolumne River as "a significant natural landscape feature" that has unique trees and rock outcroppings. The plan further states:

The visual experience of the river corridor includes areas that are of high visual quality, and other areas where the visual environment has been degraded by urban development. Along the river corridor, the area with the highest existing visual

quality is the eastern-most portion of the park, which supports a majestic, mature oak woodland on the north bank.

Public visual access to the river, parks, and enhanced/restored riparian areas is and will be provided throughout the regional park. The 185-acre Carpenter Road Area is envisioned to include a regional sports field to the north of the Sutter Plant and a network of trails weaving through meadows and riparian terraces to the west of the plant. Under this Plan, visual access would be provided from a river overlook and a canoe and kayak launch area would be established south of the Sutter Plant along the Tuolumne River. The plan describes the possibility of expanding the riparian corridor south of the Sutter Plant.

In addition, the plan envisions a new paved pedestrian and bicycle path (referred to as "Riverwalk"), which would be established along the entire right-bank of the Tuolumne River. The proposed Shackelford force main alignment would overlap geographically with a portion of the future Riverwalk path.

The TRRP Master Plan specifically designates several land-based "vista points" within proposed park development and enhancement areas, but the plan does not specify policies in relationship to these features. Specifically, one vista point is designated at the corner of B Street and South Morton Boulevard, just west of the proposed River Trunk Pump Station. Another vista point is designated on the west bank of Dry Creek near the River Trunk Realignment project. The TRRP Master Plan also identifies several "river overlooks" within the park-enhancement areas. Proposed WWMP components would not be located in proximity to these river overlooks.

4.3 ENVIRONMENTAL SETTING

4.3.1 REGIONAL AND LOCAL

Modesto is located in the Central Valley, a broad and generally flat area bordered by the Sierra Nevada mountain range to the east and the Coast Ranges to the west. Due to the region's flat topography and openness, extensive views are accessible across the valley. Modesto is rural in nature, characterized by its predominantly agricultural lands and associated infrastructure. Features that contribute to the rural and agricultural character of the area include orchards, row crops, vineyards, cleared fields, hay bales, farm structures, farming and ranching equipment (such as tractors), and farmhouses. Pockets of urban development bordering the agricultural areas provide contrast to this rural character. Agricultural and residential/urban areas in the Modesto region have abrupt boundaries, lacking transition and beginning where the other ends. The City's visual quality is low-to-moderate because of the general lack of visual continuity and coherence. Modesto's historic downtown is one square mile and has a historic-style main street at the city center, surrounded by old, established neighborhoods and mature trees and landscaping.

Agriculture and industrial buildings, such as silos, warehouses, and factory buildings, remain visually prominent and contribute to the overall visual quality of the region. Recent development, including big-box and chain commercial shopping areas, is commonly seen on the outskirts of Modesto.

The Tuolumne River runs along the southern edge of Modesto, and the Stanislaus River runs roughly parallel to the northern boundary of the Modesto urban area. Dry Creek drains into the Tuolumne River from the northeast in the southeastern portion of Modesto.

4.3.2 PROGRAM VICINITY

Sutter Plant

The Sutter Plant is located near the southern end of Modesto along the northern bank of the Tuolumne River. Lands immediately north and west of the Plant are vacant and flat. These parcels are dedicated and planned to be developed as part of the Tuolumne River Regional Park (described above in the Regulatory Setting). Bellenita Park is located northwest of the Plant's sludge drying beds. The Sutter Plant and vacant lands give this area a quasi-utilitarian and rural visual character.

Primary viewers of the Sutter Plant include residents and motorists on John Street, as well as recreationists at Bellenita Park. While views of the Plant are accessible from this park and John Street across the undeveloped land, mature trees along the Plant's western drying beds partially screen views of the Plant from this area. Near the intersection of John Street and Hays Street, motorists and residents have clearer views of the Plant. From this vantage point (see **Figure 4-1,** Photo 1), views of the circular digesters (up to 32 feet tall, and approximately 60 to 104 feet wide in diameter) and other Plant facilities across the vacant land are accessible. No views of the Tuolumne River are accessible from these public roads. Due to the presence of wastewater infrastructure and vacant ruderal lands with some mature trees, the visual quality is considered low-moderate. As some views of the Plant are partially screened by mature trees and due because vacant land provides a buffer between nearby roads and the Plant itself, the visual sensitivity is moderate.

South of the Sutter Plant and Tuolumne River, land uses predominantly include residential uses and an auto wrecking company. As the Tuolumne River sites about 15-20 feet lower in elevation, views looking toward the Plant from Hatch Road and residences are screened by riparian vegetation and trees.

Other viewers of the Sutter Plant include on-water recreationists such as kayakers and boaters that use the Tuolumne River.

Photo 1. Southeast facing view of the Sutter Plant from the corner of John Street and Hayes Street.

Photo 2. West facing view of the River Trunk Realignment Project at the intersection of Tuolumne Boulevard and Colorado Avenue.

Figure 4-1. Representative Views of the Program Area

Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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Photo 3. West facing view of the River Trunk Pump Station site at 9th Street and South Morton Boulevard.

Figure 4-1. Representative Views of the Program Area

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River Trunk Realignment

The proposed River Trunk Realignment begins at a parking lot at the Gallo Winery property located east of Dry Creek, continues west across Dry Creek and vacant lands between the creek and 9th Street, and jogs northwest to the triangular parcel at B Street and South Morton Boulevard where the River Trunk Pump Station site is located. From the pump station, two pipelines would continue westward: (1) a gravity line that follows B Street, which becomes Tuolumne Boulevard; and (2) a force main that extends south and across a vacant parcel currently being developed as part of the Tuolumne River Regional Park, across the Union Pacific Railroad (UPRR) tracks, and eventually Tuolumne Boulevard. The gravity system would continue west on Tuolumne Boulevard to Paradise Avenue, and extend south on Colorado Avenue to the Dryden Golf Course, eventually terminating at the Sutter Plant. The Shackelford Pump Station site is on a vacant parcel located east of the Tuolumne River and west of Zeff Road and Crows Landing Road. The Shackelford force main system would traverse the Dryden Golf Course and connect with another gravity system that extends from Neece Drive, crosses the golf course parking lot, continues south on Roselawn Avenue, west on Pelton Avenue and connects with the gravity line on Colorado Avenue. The following paragraphs describe the visual character, visual quality, and visual sensitivity of the River Trunk project site by its phasing.

Dry Creek Crossing and Alignment from Gallo Winery to River Trunk Pump Station Site. The northeastern segment of the alignment is surrounded by industrial facilities including warehouses, storage facilities, and parking lots. Beard Brook Park is located just north of the eastern portion of the alignment. Viewer groups in this portion of the project alignment include motorists and workers at the industrial facilities themselves. Motorists have short duration views of the area and workers have longer duration views, though are accustomed to the industrial setting. Due to the industrial and working character of the eastern portion of the alignment, the visual quality is relatively low and the visual sensitivity is also low.

Gravity Pipelines. The gravity pipeline system along Tuolumne Boulevard, Colorado Avenue, Neece Drive, Roselawn Drive, and Pelton Avenue is surrounded by residential uses. Primary viewers of this section of the project include mostly residents, motorists, recreationists at the Modesto Municipal Golf Course. Modesto High School's sports fields are situated near the alignment at Tuolumne Boulevard and Colorado Avenue. High school athletes and recreationists using those fields have partial views of the alignment as well. Residential views along the gravity pipeline alignment typically include views of other residences, landscaping and trees lining the road, electric power lines, and cars. A typical view from the perspective of a motorist traveling on Tuolumne Boulevard is shown in Figure 4-1, Photo 2. The visual quality is characteristic of the surrounding residential uses and is considered moderate. Since residents tend to have longer duration views of their immediate surroundings, the visual sensitivity is moderate to high.

Shackelford Force Main Alignment. Viewer groups in the vicinity of the Shackelford force main alignment include recreational golfers at the Dryden Golf Course. Recreationists at Dryden Golf Course have a higher expectation for quality views; existing views from the golf course consist of a manicured greenway and mature trees. For this reason, the visual quality is high and the visual sensitivity for golfers is high.

Shackelford Pump Station Site. The Shackelford pump station site is a vacant parcel located east of the Tuolumne River and accessible from Zeff Road and Crows Landing Road from the east. Surrounding land uses include auto sale centers to the north and east. Existing views looking toward the site include ruderal vegetation on the site and riparian vegetation lining the river in the distance. Viewer groups of the site include motorists traveling on Zeff Road and Crows Landing Road and workers at the auto sale centers. Typical views include auto shops, other commercial uses, vacant lands to the west of Crows Landing Road, electric lines and distant views of riparian vegetation along the river. The visual quality is low-moderate and the visual sensitivity is also low-moderate.

Jennings Plant and Surrounding Lands

The following section describes the visual setting of the Jennings Plant and land uses along the proposed primary effluent outfall pipeline alignment. Jennings Plant is located approximately 7 miles southwest of the Sutter Plant, and is accessible from Jennings Road to the east. From the Tuolumne River crossing, the new primary effluent outfall pipeline alignment would extend south along Carpenter Road, west on Keyes Road, south on Jennings Road, west and terminate at the Jennings Plant.

Both the Jennings Plant and the new primary effluent outfall pipeline alignment are surrounded by agricultural lands and this area's visual character is defined by the flat and openness of the rural region. The numerous orchards, row crops, electric distribution lines, and alternating roads create a rectilinear grid-like pattern. This pattern offers expansive views across the valley floor and open lands. Residences, agricultural buildings, and mature trees are scattered along public roads. While the San Joaquin River is not visible from most of the Jennings Plant, the riparian trees and vegetation along the river banks can be seen from a distance at certain vantage points along Jennings Road.

The Jennings Plant facilities are not visible from the nearest public roads in the area including Jennings Road to the east and Keyes Road to the north. Plant facilities like the clarifiers and pump stations are located at the interior of the Plant and are approximately 0.5 mile away from Jennings Road or more. From these distances, the Plant structures are hardly noticeable. Therefore, the visual sensitivity of this area is low.

4.4 IMPACT ANALYSIS

4.4.1 METHODOLOGY

The visual impact analysis evaluates the visual changes that would occur from construction and operation of the Proposed Program, using the standards of quality, consistency, and symmetry typically used for a visual assessment. The evaluation is based on a review of the local plans and policies discussed in Section 4.2.3, as well as maps, site photographs, and aerial photographs.

Visual effects were assessed based on the Program's potential to substantially alter scenic resources or to degrade the visual character of the site. The evaluation of temporary or short-term visual impacts considers whether construction activities could substantially degrade the existing visual character or quality of the site or surrounding area, as well as the duration over which any such changes would occur. Because of their short-term nature, construction activities occurring in an area for less than one year are typically considered to have a less-

than-significant effect on visual quality. However, construction activities occurring in an area for over one year have been evaluated for potentially significant visual impacts.

Proposed activities with long-term visual effects, such as constructing new or altered structures, grading roads, removing trees, and introducing new sources of light and glare can permanently alter the landscape in a manner that could affect the existing visual character or quality of the area, depending on the perspective of the viewer. In determining impact potential, the assessment considers the visual sensitivity of the project area. Since damage to scenic resources such as trees, rock outcroppings, and other features of the built or natural environment would typically constitute a long-term effect, the potential for project implementation to damage scenic resources is evaluated solely as a long-term effect and is not included in the analysis of construction-related impacts.

4.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings; or
- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

4.4.3 Environmental Impacts

Impact AES-1: Adverse Effects on Scenic Vistas (Less than Significant)

No designated scenic vistas or viewpoints exist in the study area. However, some components including the River Trunk Pipeline Realignment and River Trunk Pump Station would be visible from vista points and the planned Riverwalk pathway identified in the TRRP Master Plan. While not all of those vista points and recreational trails have been developed, some are publicly accessible, including the vista point planned on the parcel south of B Street just southwest of the proposed River Trunk Pump Station and the vista point planned west of Dry Creek in Beard Brook Park near the River Trunk Pipeline Realignment. From the future vista point along B Street, most viewers would be facing southward toward the Tuolumne River. While the pump station would be visible from this future viewpoint, such views would not be adversely affected because views are anticipated to be focused southward (away from the pump station). In addition, the majority of the pump station would be below ground, and aboveground components associated with the pump station would be similar in character to other industrial facilities in the vicinity. From the future vista points near Dry Creek, recreationists may have temporary views of pipeline construction activities. Once construction is completed, however, the pipelines would not be visible since they would be below ground, and construction in any given area is anticipated to be short term (less than one year). For these reasons, impacts on existing scenic vistas would be **less than significant**.

Impact AES-2: Damage to Scenic Resources (Less than Significant)

As noted in Section 4.2.2, the only state-designated scenic highway in Stanislaus County is Interstate 5 which is over 6 miles away from the Proposed Program components including those at the Jennings Plant. As such, the various Proposed Program components would not be located in proximity to or visible from a scenic highway and there would be no impact on scenic resources located along a scenic highway. Furthermore, based on information available for the Proposed Program, there would be no work in proximity to any of the trees listed in the City's Landmark Preservation Sites inventory. This impact would be **less than significant**.

Impact AES-3: Degradation of Visual Character or Quality of Site and Surroundings During Construction (Less than Significant with Mitigation)

Collection System Components, Sutter Plant Components, and Outfall Pipelines

Construction of proposed collection system and Sutter Plant components, and outfall pipelines would be visible to various receptors near the construction work areas. For the various collection system components, nearby residents, patrons at nearby businesses, motorists, and recreationists using public roads would have temporary views of construction activities including heavy equipment operation, materials stockpiling, earth movement associated with trenching and grading, and pipeline and other associated materials. Views of these operations may be perceived as a degradation of the City's visual character. While such activities would be temporary and effects on the area's visual character would cease after construction is complete for a given CIP, disturbance could be significant for individual projects particularly if construction extends for over a year in a given area. Therefore, this impact would be significant. Implementation of **Mitigation Measure AES-1 (Locate Staging Areas Away from Public Areas and Install Screening)**, which requires that staging areas be sited away from public areas and that work areas are maintained as clean as practical, would reduce this impact to **less than significant with mitigation**.

Jennings Plant Components

No sensitive viewers are located in the vicinity of the Jennings Plant, as the closest public road is approximately 0.5 mile away and access to the plant is restricted to plant staff. Some distant and occasional views of construction activities may be available from public roads. Therefore, construction of the proposed tertiary, secondary and primary treatment components would hardly be visible and would not substantially degrade the visual character or visual quality of the surrounding area. Construction-related effects on the Jennings Plant and surrounding area's visual character or visual quality would be **less than significant**.

River Trunk Realignment Project

As shown in Figure 2-1, the River Trunk Realignment Project includes construction of gravity pipelines, force mains, and two new pump stations. Staging and work areas have been established on a vacant parcel between Tuolumne Boulevard and 7th Street, the River Trunk Pump Station site, and the parking lot on the Gallo property just east of Dry Creek. Pipeline construction activities would be mostly visible from public roadways including South Morton Boulevard, B Street, Tuolumne Boulevard, Colorado Avenue, Pelton Avenue, Roselawn Avenue, and Neece Drive. Construction of the River Trunk Pump Station would be visible from B Street and 9th Street, and construction of the Shackelford Pump Station would be visible from Crow's Landing Road. Pipeline construction activities would generally progress

at a rate of 100 feet per day. For the gravity system, staging areas would be sited within the construction zone or the staging areas shown in Figure 2-1.

Project construction would be temporarily visible to adjacent residents, motorists, patrons at nearby businesses, golfers at Dryden Golf Course and Modesto Municipal Golf Course, and recreationists using the sports fields at Modesto High School. These viewer groups would have views of trenching and excavation, staging and stockpiling of construction materials and equipment, pipeline installation, and other construction activities associated with the new pump stations over the construction duration (approximately 30 months).

Existing residences located along the gravity pipeline alignment, motorists using nearby roads, and golfers at Dryden Golf Course would have close-up views of pipeline construction activities and equipment. Motorists would have fleeting views due to the speed of travel. For residents, views of pipeline construction activities would generally be of short duration since construction equipment would advance onto the next segment and areas affected by pipeline installation work would be restored to pre-construction conditions. Of the viewer groups, golfers at the Dryden Golf Course have a higher expectation of scenic views and would have close-up views of pipeline construction activities that occur on the golf course.

Motorists traveling on 9th Street and B Street would have short duration views of construction activities at the River Trunk Pump Station, and motorists and business patrons along Crow's Landing Road would have fleeting views of construction work at the Shackelford Pump Station.

While such activities would be temporary and effects on the area's visual character would cease after construction is complete, given the project's overall duration of approximately 30 months, visual disturbance at Dryden Golf Course and along public roads could be substantial. This impact is considered significant. Implementation of Mitigation Measure AES-1 would reduce this impact to **less than significant with mitigation**.

Overall Conclusion

Considering the various WWMP components as a whole, construction-related impacts to visual character and quality would be significant. With implementation of Mitigation Measure AES-1 for the applicable Program components, impacts would be **less than significant with mitigation.**

Mitigation Measure AES-1: Locate Staging Areas Away from Public Areas and Install Screening.

Applies to Collection System Components, Sutter Plant Components, Outfall Pipelines, and River Trunk Realignment Project

For components located in residential areas and near public parks, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. With the exception of designated staging areas for the River Trunk Realignment Project, to the extent practicable, staging areas for Program components shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another

neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials.

Impact AES-4: Degradation of Visual Character or Quality of Site and Surroundings During Program Operation (Less than Significant)

Collection System Components and Outfall Pipelines

Once constructed, all proposed pipeline components including replaced sewer lines, rehabilitated sewer lines, stormwater/sanitary sewer disconnections, and outfall pipeline components would be underground and would not be visible. Underground components would therefore have no impacts on the visual character of the surrounding area.

Upgraded or replaced lift stations would appear similar to existing lift stations. As described in Chapter 1, *Introduction,* all of the City's existing lift stations are underground with the exception of ancillary facilities including control panel boxes, small radio antenna, back-up generators, and security fencing surrounding the site. Upgraded or replaced lift stations would also be underground. Minor modifications associated with upsizing the lift station or pump station would be limited to the existing footprint of existing lift station sites. Aboveground elements would consist of one or more control panels, a small radio antenna (up to 25 feet tall), and some facilities would include a single restroom or wash station and back-up generators. The control panels would be comprised of metal boxes approximately 5 feet tall, 3 feet wide, and 1 foot thick. All lift station sites would be surrounded by either a concrete masonry unit wall or security fencing consisting of wrought iron or steel poles, and possibly some landscaping. New and upgraded lift stations would be sited in residential or agricultural areas. In agricultural areas, these facilities would not be substantially noticeable and would not significantly degrade the existing visual character of the area. In addition, given the small size of these facilities and because these are commonly seen throughout the City already, introduction of new lift stations in residential areas would not substantially alter the visual character or quality of an individual site. Therefore, this impact would be **less than significant**.

Sutter Plant Components

At the Sutter Plant, once demolition of primary treatment facilities such as the digesters and clarifiers is complete, those facilities would no longer be visible from the residential area to the northwest of the plant and could thereby improve the visual character and quality of this area. Upgrades to the existing influent pump station and replacement of the effluent pump station would not be noticeable from any public viewpoints, other than occasional on-water recreationists from the Tuolumne River. Since the facility upgrades would appear similar to the existing pump stations, these components would not substantially alter the visual character or quality of the area. The impact would be **less than significant**.

Jennings Plant Components

For the same reasons provided in Impact AES-3, proposed CIPs at the Jennings Plant would not substantially change the appearance of the existing plant because, in general, no public views of the plant are available. While there is a possibility that distant or partial views of the new plant facilities could be accessible from nearby public roads, this would not be considered a significant impact because the appearance of the plant would not be

substantially changed. Impacts on the visual character of the surrounding area would be **less than significant**.

River Trunk Realignment Project

Similar to the impact discussion provided above, once construction of the River Trunk Realignment Project is complete, all pipelines would be below ground and would not be visible. The River Trunk Pump Station and Shackelford Pump Station would introduce a new quasi-industrial structure to the Program area. Figure 2-4 shows a rendering of the aboveground layout of the River Trunk Pump Station. As shown in this figure, aboveground features would include the staircase structure, make-up air units, the 36-inch force main and five air valves, an exhaust louver structure, and monorail structure where access vehicles can enter and exit the facility. Motorists traveling on Morton Street, B Street, and 9th Street would have fleeting views of the facility.

At the Shackelford Pump Station, aboveground elements include the electrical building (approximately 15.5 feet tall) and generator (approximately 8 feet tall). The surrounding fence and/or gate would be about 8 feet tall and the retaining wall would be about 6 feet tall. Motorists on Zeff Road and Crow's Landing Road would have short duration views of the Shackelford Pump Station. Introduction of the two pump stations would be located in industrial areas and would not substantially degrade the visual character or quality of the sites, particularly since the visual quality is low to low-moderate at these sites. In addition, similar to lift stations seen throughout the City, unobtrusive earth tones with matte finishes would be used to coat aboveground features. For these reasons, this impact would be **less than significant**.

Overall Conclusion

Considering the WWMP components as a whole, impacts of the constructed facilities on visual character and quality would not be substantial. Impacts would be **less than significant.**

Impact AES-5: Permanent Source of Substantial Light or Glare (Less than Significant)

Collection System Components and Outfall Pipelines

As described above under Impact AES-4, once constructed, all pipelines and sewer disconnection projects would be underground and would therefore not result in a new source of substantial light or glare. Similar to other existing lift stations, aboveground elements of these facilities would be painted by non-reflective paint and would not include features that generate daytime glare. Outdoor lighting at new lift stations would be directed inward to avoid glare or spillover effects. Depending on the types of land uses surrounding lift stations, some lighting would be motion activated. In areas where there are less sensitive receptors, lighting may be left on continually. These design features would ensure that this impact would be **less than significant**.

Sutter Plant Components, Jennings Plant Components, and River Trunk Realignment Project

Plant improvements and the new River Trunk and Shackelford pump stations may require on-site exterior lighting. New lighting at these facilities would be consistent with outdoor lighting currently used at the two wastewater treatment plants. New lighting at these facilities would be directed inward to avoid glare or spillover effects. Depending on adjacent receptors, some lights would be on continually and some lights may be motion activated. Exterior coating of new pump stations would appear similar to similar structures seen throughout Modesto, and that earth tones with non-reflective finishes would be used to coat aboveground components at lift stations and pump station sites. These design features/approaches would ensure that permanent light and glare impacts would be **less than significant**.

Overall Conclusion

Considering the WWMP components as a whole, and the design approaches that will be used to minimize effects related to lighting and glare, impacts would be **less than significant.**

Chapter 5
AGRICULTURAL RESOURCES

5.1 OVERVIEW

This chapter describes the regulatory setting and environmental setting, and impacts of the Proposed Program related to agricultural resources.

The regulatory and environmental settings and impact analysis for agricultural resources were developed through a review of:

- The California Department of Conservation's (CDOC's) *Stanislaus County Important Farmland Map* (2017a) and Williamson Act Lands GIS data for Stanislaus County (2016a);
- The *Stanislaus County General Plan* (2016);
- The *City of Modesto Urban Area General Plan* (2019);
- The City of Modesto *Wastewater Treatment Master Plan Final Draft* (Carollo Engineers 2016);
- The Stanislaus Local Agency Formation Commission Policies and Procedures (Stanislaus County Local Agency Formation Commission [LAFCO] 2015); and
- Other regulations and planning documents for outlying communities.

5.2 REGULATORY SETTING

5.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

U.S. Environmental Protection Agency – 40 CFR Part 503

The federal standards for Use and Disposal of Sewage Sludge (40 Code of Federal Regulations [CFR] Part 503, Subpart B – Land Application) includes regulations for bulk sewage sludge application to agricultural land. These standards are intended to ensure that agricultural resources of value are not adversely affected by the application of metals and other contaminants that could impose long-term effects on the land. While these regulations do not explicitly address any loss of agricultural lands, they describe and regulate the application, concentration, location and rate of bulk sewage sludge and septage that the U.S. Environmental Protection Agency (USEPA) categorizes as pollutants (USEPA 1999). These regulations establish ceiling concentrations for metals and pathogen and vector attraction reduction standards; management criteria for the protection of water quality and public health; and annual and cumulative discharge limitations of persistent pollutants such as

heavy metals. These regulations are intended to protect livestock, crop and human health and water quality protection.

5.2.2 STATE LAWS, REGULATIONS, AND POLICIES

California Department of Conservation – Farmland Mapping and Monitoring Program

Developed by the California Department of Conservation, the Farmland Mapping and Monitoring Program (FMMP) provides consistent, timely and accurate data for use in assessing agricultural land resource status in California. The program utilizes a combination of geographic information systems (GIS), aerial imagery, local agency comments, and other relevant information to combine soil quality data and current land use information to produce Important Farmland Maps.

The FMMP maps out five different farmland categories as well as urban, nonagricultural and natural vegetation, semi-agricultural and rural commercial land, rural residential land. These five categories are listed below (CDOC 2004):

- Prime Farmland – lands with the best combination of physical and chemical features able to sustain long-term production of crops. The land must be cropped and supported by a developed irrigation water supply that is dependable and of adequate quality during the grow season. It must also have been used for production during the previous four years.

- Farmland of Statewide Importance – lands similar to Prime Farmland but with minor shortcomings such as greater slope or less ability to store moisture.

- Unique Farmland – soils of lower quality that are used for producing California's leading agricultural crops. These lands are usually irrigated but may include non-irrigated orchards or vineyards.

- Farmland of Local Importance – lands such as dryland grains and irrigated pastures that are not considered Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

- Grazing Land – land on which the existing vegetation is suited to the grazing of livestock

California Land Conservation Act (Williamson Act)

The California Land Conservation Act, more commonly referred to as the Williamson Act, was passed in 1965 as a means to preserve agricultural and open space lands by discouraging "premature and unnecessary conversion to urban uses" (Government Code Section 51220[c]). Through this act, local governments and landowners may choose to forgo the possibility of developing their lands, or convert their property into nonagricultural or non-open space use for a set amount of time determined in a contract. In return, they would receive lower property taxes. Contracts have an initial term of ten years with renewal occurring automatically each year after that. Local governments are permitted to negotiate longer initial contract terms that exceed ten years (CDOC 2014).

According to the 2015 Stanislaus County Agricultural Report, 575,549 acres of the County are registered under Williamson Act contracts. This accounts for approximately 60 percent of the total amount of acres within the county (Stanislaus County 2015). The following land classifications are found either within or around the planned locations of the Proposed Program components:

- Williamson Act – Prime Agricultural Land
- Williamson Act – Non-Renewal
- Non-Williamson Act – Urban and Built-Up Land

Williamson Act lands designated as "non-renewal" are lands in which either the local government or landowner have initiated the nonrenewal process.

State Water Resources Control Board – Water Quality Order No. 2004-0012-DWQ

The State Water Resources Control Board issued Water Quality Order No. 2004-0012-DWQ, which establishes general waste discharge requirements for biosolids use as soil amendment in agricultural, horticultural, or other land reclamation activities. These biosolids are differentiated by two classes. Class A biosolids are defined as meeting the vector attraction and also the pollution concentration limits specified in 40 CFR Part 503 and pathogen reduction standards (40 CFR Part 503.32(a)). This class of biosolids generally must be reduced virtually non-detectible levels of pathogens and must comply with the strictest standards for vector attraction an, odors and other standards pertaining to metals. Class B biosolids are defined as meeting the vector attraction and meeting pollution concentration limits specified in 40 CFR Part 503 as well as pathogen reduction standards specified in 40 CFR Part 503.32(b). Class B biosolids must be treated but contain higher levels of detectible pathogens than Class A biosolids. The General Order establishes biosolid pollutant discharge limits for constituents including arsenic, cadmium, lead, mercury, molybdenum, nickel, selenium, and zinc. The General Order also contains various land application constraints. For example, after biosolids have been applied in a field, for at least 12 months after, public access is restricted and grazing of milking animals (used for producing unpasteurized milk for human consumption) is prevented. restricting the timeframe in which lands can be grazed or used for growing and harvesting food crops. The General Order also establishes staging and application guidelines whereby applied biosolids must be at least 10 feet away from property lines, 500 feet away from domestic water supply wells, 50 feet from public roads and occupied residences, 100 feet from surface waters, wetlands or creeks, and other buffer restrictions.

5.2.3 LOCAL LAWS, REGULATIONS, AND POLICIES

Stanislaus County Local Agency Formation Commission (LAFCO)

The Stanislaus County Local Agency Formation Commission's (LAFCO's) mission is to "discourage urban sprawl, preserve open space and prime agricultural lands, promote the efficient provision of government services and encourage the orderly formation of local agencies" (LAFCO 2012). In order to achieve their mission as well as to meet Government Code Section 56668(e) requirements, which requires LAFCO to consider the effect of a proposal on the maintenance of the physical and economic integrity of agricultural lands, they

adopted the Agricultural Preservation Policy on September 26, 2012. The amended policy, adopted in 2015, contains the following goals (LAFCO 2015):

- Guide development away from agricultural lands where possible and encourage efficient development of existing vacant lands and infill properties within an agency's boundaries prior to conversion of additional lands;
- Fully consider the impacts a proposal will have on existing agricultural lands;
- Minimize the conversion of agricultural land to other uses; and
- Promote preservation of agricultural lands for continued agricultural uses while balancing the need for planned, orderly development and the efficient provision of services.

On March 25, 2015, LAFCO amended the policy to include specific regulations regarding the use of in-lieu fees for acquiring and managing agricultural conservation easements (LAFCO 2015). LAFCO shall consider this policy, in addition to its existing goals and policies, as an evaluation standard for review of any proposals that could reasonably be expected to induce, facilitate, or lead to the conversion of agricultural land (LAFCO 2015). As required by the policy, a plan for agricultural preservation must be provided with any application for a sphere of influence expansion or annexation to a city or special district ("agency") providing one or more urban services (i.e. potable water, sewer services) that includes agricultural lands. Once the plan is provided, LAFCO will then evaluate it based on specific criteria that must be met (LAFCO 2015). The following applications or proposals are considered exempt from LAFCO's requirement for a plan for agricultural preservation: (1) proposals that include lands owned by a city or special district and currently used by that agency for public uses; and (2) proposals which have been shown to have no significant impact to agricultural lands including those in which lands are substantially developed with urban uses and proposals intended to provide irrigation water to agricultural lands (LAFCO 2015).

Stanislaus County General Plan

The *Stanislaus County General Plan*'s Land Use and Agricultural Elements (2016) includes goals and policies that are intended to promote and protect local agricultural resources. The main goals of the Agricultural Element are to strengthen the agricultural sector of the local economy, conserve the county's agricultural lands for agricultural uses, and protect the natural resources that sustain agriculture in Stanislaus County. The following goal and policies related to agricultural land include:

Land Use Element

Policy 16. Agriculture, as the primary industry of the County, shall be promoted and protected.

Agricultural Element

Goal 1. Strengthen the agricultural sector of our economy.

Policy 1.10. The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations.

Implementation Measure 1: The County shall require buffers and setbacks for all discretionary projects introducing or expanding non-agricultural uses in or adjacent to an agricultural area consistent with the guidelines presented in Appendix "A" of the Agricultural Element.

Goal 2. Conserve our agricultural lands for agricultural uses.

Policy 2.5. To the greatest extent possible, development shall be directed away from the County's most productive agricultural areas.

Policy 2.14. When the County determines that the proposed conversion of agricultural land to non-agricultural uses could have a significant effect on the environment, the County shall fully evaluate on a project- specific basis the direct and indirect effects, as well as the cumulative effects of the conversion.

Policy 2.15. In order to mitigate the conversion of agricultural land resulting from a discretionary project requiring a General Plan or Community Plan amendment from "Agriculture" to a residential land use designation, the County shall require the replacement of agricultural land at a 1:1 ratio with agricultural land of equal quality located in Stanislaus County.

Buffer and Setback Guidelines

Appendix A of the *Stanislaus County General Plan* includes buffer and setback guidelines that are intended to physically avoid conflicts between agricultural and non-agricultural uses (Stanislaus County 2016). While these guidelines do not necessarily apply to the Proposed Program since the City owns the Jennings Plant and the approximately 2,500 acres of agricultural lands south of the plant, the guidelines include the following:

- All projects shall incorporate a minimum 150-foot wide buffer. All buffers shall incorporate a solid wall and vegetative screen consistent with the following standards:
- Fencing: A 6-foot high wall of uniform construction shall be installed along any portion of a buffer where the project site and the adjoining agricultural operation share a common parcel line.
- Permitted uses within a buffer area shall include: public roadways, utilities, drainage facilities, landscaping, parking lots and similar low human intensity uses. Walking and bike trails shall be allowed within buffers provided they are designed without rest areas.
- Landscaping within a buffer setback shall be designed to exclude turf areas which could induce activities and add to overall maintenance costs and water usage.
- A landowner's association or other appropriate entity shall be required to maintain buffers to control litter, fire hazards, pests, and other maintenance problems when a

project consists of multiple parcels which may be held, or have the potential to be held, under separate ownership.

- The Board of Supervisors may authorize the abandonment and reuse of buffer areas if agricultural uses on all adjacent parcels within a 150-foot radius of the project site have permanently ceased.

Stanislaus County Farmland Mitigation Program

Stanislaus County has established a Farmland Mitigation Program (FMP) as Appendix B of its general plan (Stanislaus County 2016). The purpose of the FMP is to aid in mitigating the loss of farmland resulting from residential development in the unincorporated areas of Stanislaus County by requiring the permanent protection of farmland based on a 1:1 ratio to the amount of farmland converted. The FMP is designed to utilize agricultural conservation easements granted in perpetuity as a means of minimizing the loss of farmland. These guidelines apply to any development project requiring a General Plan or Community Plan amendment from Agriculture to a residential land use designation of the Stanislaus County General Plan. As such, the Proposed Program would not be subject to the FMP.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (2019) contains the following agricultural resources policies that are relevant to the Proposed Program:

> **Policy VII-D.3[a].** If a subsequent project is within the Baseline Developed Area or Downtown Area as identified on the General Plan Growth Strategy Diagram (Figure II-1), consider the project to have minimal effect on the conversion of agricultural lands, and no mitigation for that impact will be required.
>
> **Policy VII-D.4[a].** Do not annex agricultural land unless urban development consistent with the General Plan has been approved by the City.
>
> **Policy VII-D.4[b].** Support the continuation of agricultural uses on lands designated for urban uses until urban development is imminent.
>
> **Policy VII-D.4[d].** Where necessary to promote planned City growth, encourage development of those agricultural lands that are already compromised by adjacent urban development or contain property required for the extension of infrastructure or other public facilities, before considering urban development on agricultural lands that are not subject to such urban pressures.
>
> **Policy VII-D.4[e].** For any subsequent project that is adjacent to an existing agricultural use, the project proponent may incorporate measures to reduce the potential for conflicts with the agricultural use. Potential measures to be implemented may include the following:
>
> (1) Include a buffer zone of sufficient width between proposed residences and the agricultural use.
>
> (2) Inform residents about the possible exposure to agricultural chemicals. (City of Modesto 2019)

5.3 ENVIRONMENTAL SETTING

Stanislaus County consists of a flat topography, good-to-excellent soil quality, favorable climate, and availability of natural water (City of Modesto 2019). Agriculture has become the County's leading industry, generating over $3.88 billion in agricultural commodities in 2015 alone (Stanislaus County 2016). Approximately 768,046 acres of land throughout the County is categorized as farmland, with approximately 4,143 farms in operation. The County's leading commodities are currently almond crops and milk (Stanislaus County 2015). Modesto is at the center of Stanislaus County's rich agricultural landscape. As the largest city in the County, Modesto is comprised of mostly urban and built-up land with its contiguous areas comprised of agricultural lands (CDOC 2017a).

Based on the most recent CDOC FMMP report, Stanislaus County has 249,967 acres of Prime Farmland, 33,172 acres of Farmland of Statewide Importance, 116,210 acres of Unique Farmland, and 26,029 acres of Farmland of Local Importance (CDOC 2016b). **Figure 5-1** shows Farmland in the Program vicinity. While the majority of proposed components would be located in urban and built-up areas of Modesto or along existing roadways, new lift stations along with some pipeline segments would be constructed on land classified as Farmland, as shown on Figure 5-1.

The proposed Tuolumne River Pipeline crossings would be constructed on land classified as Vacant or Disturbed Land. A portion of the new outfall pipeline alignment from the south jacking pit and junction structure to the 60-inch force main connection would be constructed along an existing roadway (Monticello Lane) with Prime Farmland directly to the west (CDOC 2016a). The new outfall pipeline would be installed within road-rights-of-way but would be surrounded by designated Prime Farmland that is under Williamson Act contracts. A small portion of the outfall pipeline alignment would also traverse through non-enrolled land (CDOC 2011).

5.4 IMPACT ANALYSIS

5.4.1 METHODOLOGY

Impacts to agricultural resources from the Proposed Program components were assessed by reviewing the *2015 Stanislaus County Agricultural Report,* the General Plan policies of Stanislaus County and the City of Modesto, Williamson Act maps, FMMP maps, and relevant federal and state regulations.

Improvements in the Proposed Program include replacement or upgrade of existing facilities and construction of new facilities such as sewer lines, lift stations, treatment plant improvements at the Sutter and Jennings Plants. Existing facilities are considered developed and are not expected to have agricultural resources impacts since construction would occur within the existing footprint of existing facilities. New facilities in the Proposed Program may be in developed areas, or within the public right-of-way, which are not expected to have agricultural resource impacts. However, new facilities proposed in non-developed areas will require the analysis outlined in the following sections. The effects of construction, operation, and maintenance of the proposed facilities on existing agricultural resources was evaluated according to the significance criteria below.

5.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

The Proposed Program would result in a significant impact on agricultural resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

5.4.3 ENVIRONMENTAL IMPACTS

Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use (Significant and Unavoidable)

Figure 5-1 shows Farmland and the general location of pipeline alignments and locations of future facilities associated with the Proposed Program (e.g., lift stations). Program components were planned to serve future developed areas. However, these locations are preliminary and the exact alignments and locations of Program facilities are dependent upon County- and City-approved development plans and land ownership and/or easement agreements. Future roads and land uses would be refined as part of the development planning process and would identify future rights-of-way to be used for utility alignments and facilities, including Program components. In addition, some areas may be converted from Farmland to developed areas prior to construction of Program components. For the purpose of this analysis, Program components preliminarily located in or near Farmland areas were evaluated as if they would be located in Farmland, despite the potential for changes in their actual location or land use designation. Therefore, the evaluated impact area and potential impacts discussed below may overstate the Proposed Program's actual impact.

In addition, Program components located within the Baseline Developed Area or Downtown Area as identified in the *City of Modesto Urban Area General Plan* (2019), are considered to have minimal effect on agricultural lands and do not require mitigation for conversion of Farmland (City of Modesto 2019).

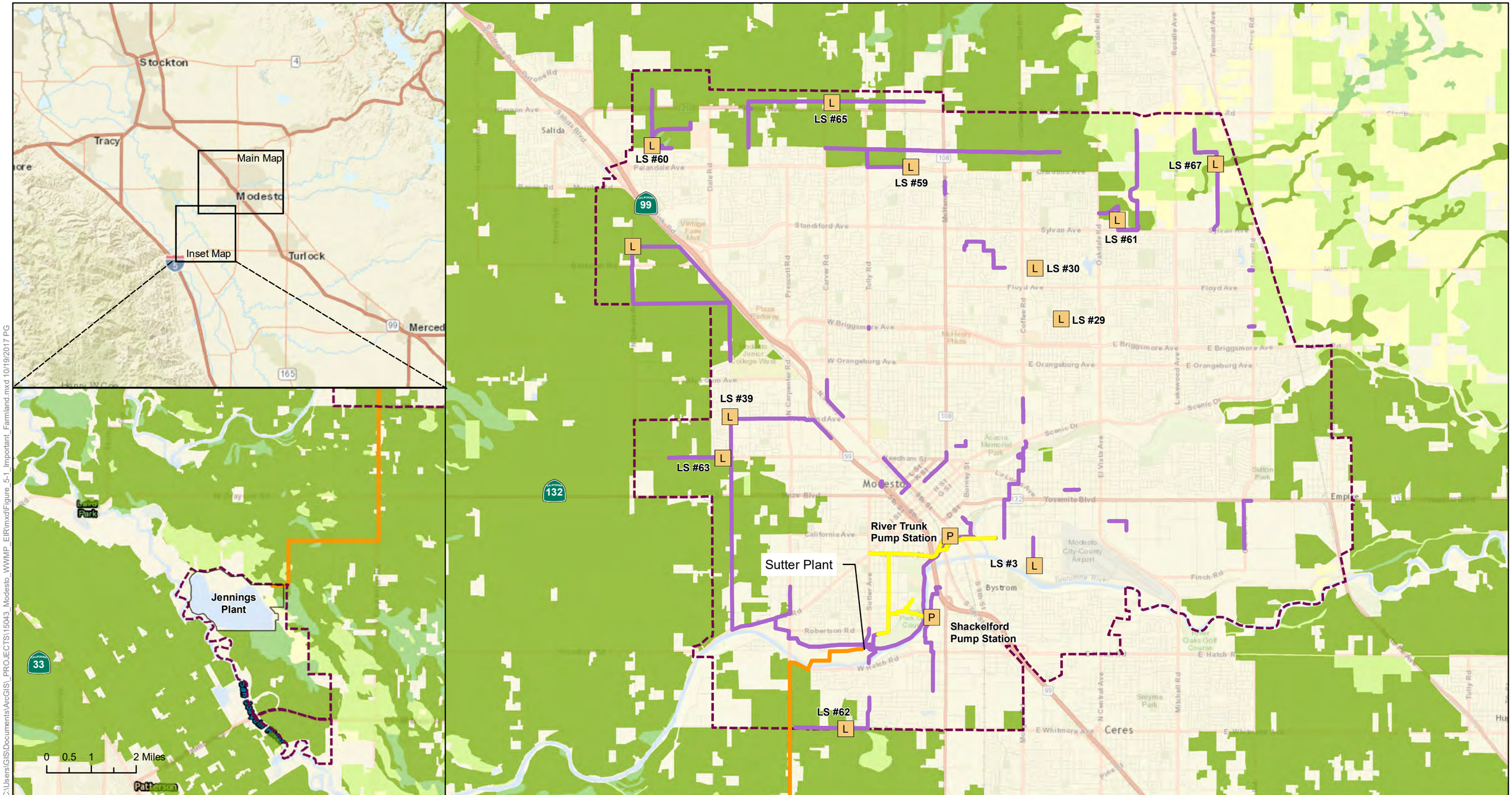

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Figure 5-1
Farmland Designations

City of Modesto
Wastewater Master Plan EIR

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Collection System Components

While the majority of proposed sewer pipelines would be constructed within existing roadways, some pipeline improvements would extend beyond roadways and onto land that is designated Farmland, as shown on Figure 5-1. All pipeline improvements would be installed to serve areas anticipated for growth and would involve open trench methods. Ground disturbing activities associated with pipeline improvements would be temporary and agricultural lands would be restored to pre-construction conditions following project completion. Thus, installation and operation of new pipeline segments associated with the Proposed Program would not permanently impact existing agricultural land, and this impact would be less than significant.

Upgrades or replacement of existing lift station components would occur on urban and built-up land area or other types of non-agricultural use lands. Under current conditions, construction of new stations (i.e., LS #60, LS #61, LS #62, LS #63, LS #65, and LS #67) would take place either adjacent to or on land that is designated as Farmland, as shown on Figure 5-1 (CDOC 2016a). Given that these lift stations would serve future growth areas, the locations of these facilities are preliminary and may change. In addition, lift stations would be constructed in existing or planned development areas and likely located along roadways. However, due to proximity of Farmland and because the exact location of these lift stations has not yet been determined, it is conservatively assumed that these CIPs could result in the permanent conversion of up to 1 acre of Farmland. This impact would be significant.

Considering LAFCO's Agricultural Preservation Policy (2015) and pursuant to Policy 2.15 in the *Stanislaus County General Plan,* the County policy requires that agricultural land converted to residential use be replaced at a 1:1 ratio with agricultural land of equal quality in Stanislaus County. However, since the Proposed Program is not a residential project, these policies do not apply to the Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing agricultural easements, the City has determined that this program is infeasible for the following reasons: (1) Stanislaus County policy is to mitigate the loss of and preserve Prime Farmland through the County's Farmland Mitigation Program, which is designed to address loss of farmland resulting from impacts of residential development, and the County policy is not to burden and increase the cost of new and improved public infrastructure that is needed by the community; and (2) the purchase of an agricultural conservation easement over other off-site agricultural land would not ultimately avoid or reduce the impact of converting Prime Farmland to non-agricultural uses caused by the Proposed Program because there still would be a net reduction in the total amount of Prime Farmland and therefore the easement over other land would not reduce the impact to a level of insignificance. No other feasible mitigation measures, such as restoration of Prime Farmland that has been previously converted or participation in another agricultural conservation easement program, have been identified to further reduce this impact. Therefore, this impact would be **significant and unavoidable**.

Outfall Pipelines

The proposed Tuolumne River Pipeline Crossings would be constructed and operated on land that is designated as Vacant or Disturbed Land. The preliminary alignment of the southern trenchless pit occurs on land designated as Farmland. Similar to the discussion above, ground-disturbing activities associated with pipeline installation would be temporary and agricultural lands would be restored to pre-construction conditions following the completion

of pipeline installation, resulting in no permanent impacts to Farmland. Therefore, this impact would be considered less than significant.

With the exception of a small portion of the pipeline extending from the southern jacking pit to West Hatch Road, the third outfall pipeline would be mostly installed within existing County roads using the open trench method. A large portion of the alignment is bordered by Farmland. This new outfall pipeline would require an excavated trench with an approximate width and depth of 8 feet and 11 feet. During pipeline construction, removal of topsoil using heavy equipment would have potential to adversely affect long-term soil characteristics and productivity of adjacent Farmland through compaction and removal of topsoil. However, since the new outfall pipeline would be underground and disturbance to topsoil on Farmland would be temporary, Farmland could be returned to pre-construction conditions after construction is complete, impacts to Farmland would be **less than significant**.

Sutter Plant Components

All proposed components associated with the Sutter Treatment Plant would occur on land that is designated as Urban and Built-Up Land. Therefore, these components would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. There would be **no impact**.

Jennings Plant Components

The majority of the components associated with the Jennings Plant would occur on urban/built-up land, while the Phase 3-5 BNR/Tertiary, primary treatment and solids handling facilities would be built on Semi-Agricultural and Rural Commercial Land. Construction of new Sludge Cake Drying Beds (Component Nos. JP-4.3 and JP-5.5) would occur on Farmland located to the east of the Jennings Plant and future dewatering facility. The sludge drying beds would be constructed in two different phases. As described in Chapter 2, *Program Description,* the 5 acres of drying beds constructed to support the interim WAS facilities would be expanded to 18.6 acres. The drying beds would be asphalt-paved areas with concrete containment. Construction of these beds and their associated facilities would result in permanent conversion of approximately 18.6 acres of Farmland, which is considered a significant impact. As described above for collection system improvements, the County's Farmland Mitigation Program is infeasible because it was intended to provide a mechanism for residential development projects to mitigate impacts associated with loss of Prime Farmland, and the cost of purchasing an agricultural easement over other off-site agricultural land would not ultimately avoid or reduce impacts due to converting Prime Farmland to non-agricultural land. For these reasons, this impact would be **significant and unavoidable**.

River Trunk Realignment Project

The entire River Trunk Realignment Project would be constructed on land that is either designated as urban and built-up land, or as vacant land. The Shackelford Pump Station would be constructed on vacant land adjacent to the Dryden Golf Course, while the River Trunk Pump Station would be constructed primarily on urban and built-up land. Figure 5-1 provides a visual reference to where the Project would be built, as well as the land use designations for this particular area as established by the FMMP (CDOC 2016a). As a result, the River Trunk Realignment Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. **No impact** would occur.

Overall Conclusion

Considering all of the WWMP components as a whole, while construction-related impacts of several components would be temporary, some WWMP components would result in permanent conversion of Farmland. As described above, the Stanislaus County's Farmland Mitigation Program is infeasible because it was intended to provide a mechanism for residential projects (not public infrastructures projects) to mitigate impacts associated with loss of Prime Farmland. No further feasible mitigation has been identified that could further reduce the Proposed Program's impacts related to permanent conversion of Farmland. Restoration and/or recovery of Farmland from existing urban uses to offset the loss of Farmland could mitigate the loss caused by the Proposed Program. However, such a measure would be unreasonably costly and inefficient and would, therefore, be infeasible. Therefore, the Proposed Program's overall impact would be **significant and unavoidable.**

Proposed Program Impact AG-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract (Less than Significant)

Collection System Components and Jennings Plant Components

Most collection system components would take place within developed (non-agricultural) areas of Modesto and would not conflict with lands zoned for agricultural use or a Williamson Act contract. However, some pipeline segments would be located on lands designated as non-enrolled Williamson Act lands and zoned for agricultural uses (Stanislaus County 2017). Ground disturbing activities associated with pipeline improvements would be temporary and likely along roadways or other developed areas. Additionally, ground disturbance to land zoned for agricultural use or a Williamson Act would be restored following project construction activities. Therefore, there would be no permanent impacts to agricultural lands or Williamson Act contracts from pipeline installation.

Some lift stations intended to serve future growth areas on the outskirts of Modesto would occur on land zoned for agricultural use or subject to a Williamson Act contract, as shown in the California Department of Conservation's Williamson Act Lands map (CDOC 2011) and **Figure 5-2**. Construction of new lift stations (LS #63, LS #64, LS #65, and LS #67) would be built on General Agriculture 40-acre zoned land (Stanislaus County 2006) and LS #67 (at Litt Road) on land that also has a Williamson Act contract. However, these lift stations would be built along existing roadways and would therefore not conflict with surrounding existing agricultural zoning.

As for the Jennings Plant, a large portion of the existing plant is designated as urban and built-up land but the area planned for development of expanded tertiary treatment and primary treatment facilities would occur on land under non-enrolled Williamson Act land with potential for conflict with Williamson Act contracts. However, according to Stanislaus County Ordinance Section 21.20.030, a Tier Three conditional use permit can be obtained for new facility construction planned on lands zoned for agricultural uses, including those subject to a Williamson Act contract. Allowable uses include construction of public facilities. As such, the proposed Jennings Plant improvements would meet conditional uses stated under Tier Three of this ordinance. Note that the requirements associated with County zoning do not apply to actions undertaken by the City; regardless, the City's actions would be consistent with the County's existing zoning (considering that public facilities are a conditionally approved use).

For these reasons, the conflicts with Williamson Act lands and land zoned for agricultural uses from these Proposed Program components would be **less than significant**.

Sutter Plant Components

Construction of the Sutter Plant components would occur on land that is not zoned for agricultural use or under any Williamson Act contract. As a result, these components would have **no impact.**

Outfall Pipelines

The outfall pipeline crossings at Tuolumne River would be installed on lands designated as non-enrolled Williamson Act lands and zoned for agricultural uses. The new outfall pipeline would be approximately 9 miles in length and 54 inches in diameter. From the southern trenchless pit, this pipeline would be installed underground via open trench construction and would extend west on West Hatch Road, continue south along Carpenter Road, west on Keyes Road and south on Jennings Road, then continue west where it would terminate at the Jennings Plant. The pipeline alignment would be bordered by land that is zoned for General Agriculture, and the majority of land surrounding the pipeline is enrolled under Williamson Act contracts as Prime Farmland, although there are portions that are non-enrolled. Construction of the pipeline would mostly occur within the limits of County road right-of-way boundaries. Similar to the discussion above, pipeline installation would only result in temporary impacts and would not conflict with use of lands zoned for agricultural use or under a Williamson Act contract. Therefore, this impact would be **less than significant**.

River Trunk Realignment Project

The River Trunk Realignment Project would involve the construction of components on land predominantly zoned for low density residential uses and commercial – industrial uses. In addition, none of the lands traversed by the River Trunk Realignment Project are under a Williamson Act contract. Based on this information, this project would not conflict with land zoned for agricultural use, or land that is under a Williamson Act contract. There would be **no impact**.

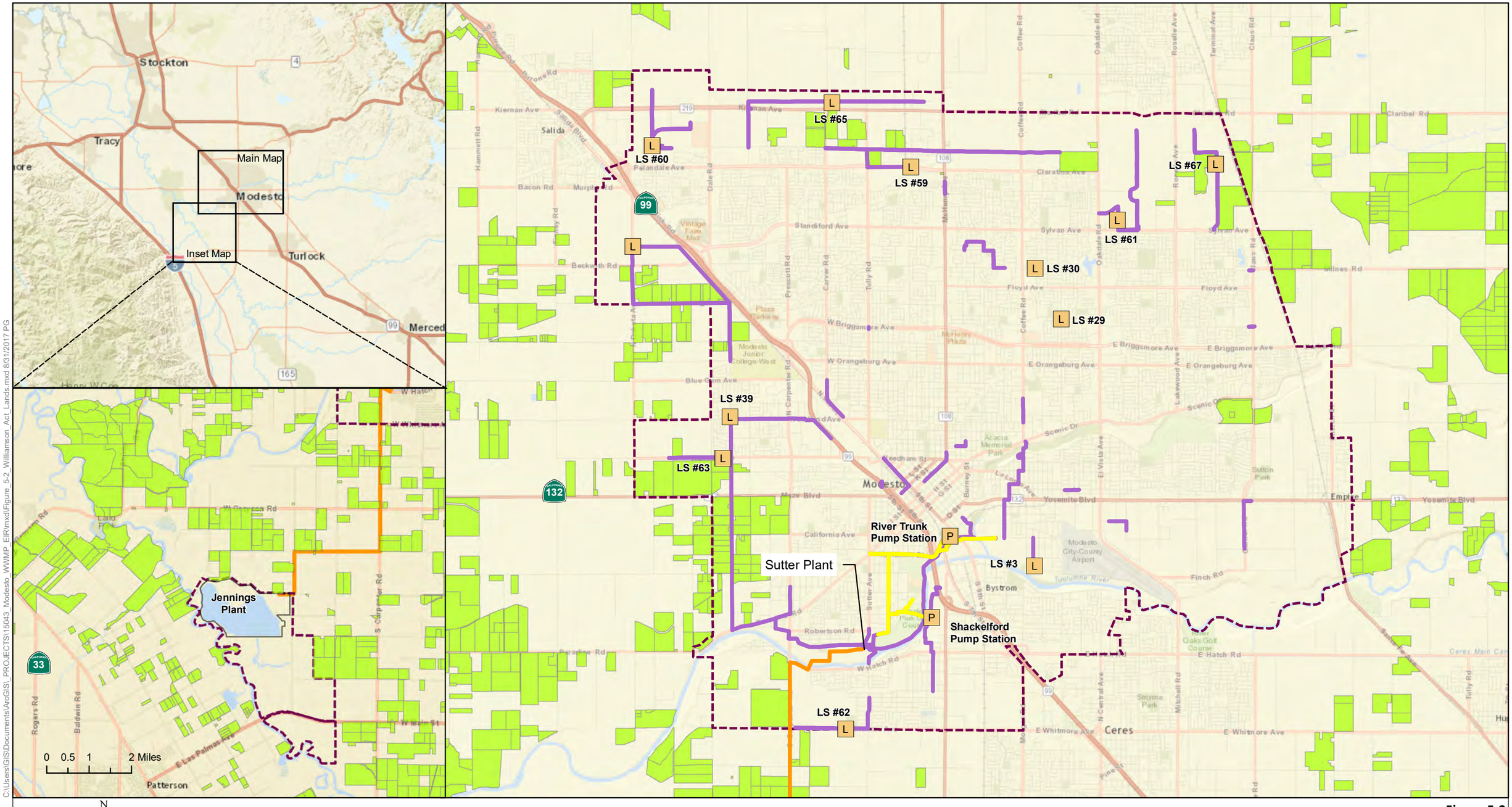

Figure 5-2
Williamson Act Contracts

City of Modesto
Wastewater Master Plan EIR

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Overall Conclusion

Considering the WWMP components as a whole, while some WWMP components have potential to conflict with Williamson Act contracts, the WWMP facilities would be conditionally allowable uses on County lands zoned for agricultural uses, including those subject to a Williamson Act. In conclusion, conflicts with lands zoned for agricultural uses and conflicts with Williamson Act lands would be **less than significant.**

Impact AG-3: Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use (Less than Significant)

The Proposed Program would not directly or indirectly induce substantial population growth during construction but could indirectly result in the conversion of farmland to non-agricultural uses as a result of land development which would be facilitated by the Proposed Program. The impacts of development of the urban area of Modesto have been previously considered in the City of Modesto's General Plan Master EIR. As described in Impact AG-1, the Stanislaus County's Farmland Mitigation Program is infeasible because the program was intended to provide a mechanism for residential development projects (not public infrastructure projects) to mitigate impacts associated with loss of Prime Farmland, and the purchase of an agricultural conservation easement over other off-site agricultural land would not ultimately avoid or reduce impacts of converting Prime Farmland to non-agricultural uses caused by the Proposed Program. In addition, the specifics regarding future development that may result in agricultural conversion are not known at this time.

This topic is discussed in more detail in Chapter 15, *Population and Housing,* under Impact PH-3.

While there is a potential for the Proposed Program to indirectly convert farmland to non-agricultural uses as a result of land development facilitated by the Proposed Program, the Proposed Program would benefit existing farmlands for the following reason. At WWMP build-out, the amount of biosolids produced at the Jennings Plant would increase to approximately 9,000 tons per year (Pers. Comm. Eve 2017). As described in Chapter 2, currently 3,000 to 4,000 tons per of biosolids are generated at the Sutter Plant so the Program would result in an increase of 5,000 to 6,000 tons/year of biosolids. Once dried out, the biosolids would be used as compost and applied on the ranch lands adjacent to the Jennings Plant similar to current conditions, which would have a beneficial effect on agricultural production. The Proposed Program would involve no other changes that could result in conversion of farmland to non-agricultural use.

Therefore, while the Proposed Program could indirectly result in the conversion of farmland to non-agricultural uses, provided that the Proposed Program would also benefit existing agricultural lands in the Program area due to the increased amount of biosolids generated at the Jennings Plant, on the whole, this impact would be **less than significant**.

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Chapter 6
AIR QUALITY

6.1 OVERVIEW

This chapter evaluates the Proposed Program's air quality impacts. The chapter first describes the air quality regulatory and environmental settings and then evaluates the Proposed Program's air quality impacts. The impact evaluation begins by describing the air quality significance criteria and the methodology used to evaluate significance, and then presents the impact evaluation. Mitigation measures are identified for impacts that are determined to be significant.

Air quality is descri20bed for a specific location as the concentration of various pollutants in the atmosphere. Air quality conditions at a particular location are a function of the type and amount of air pollutants emitted into the atmosphere, the size and topography of the regional air basin, and the prevailing meteorological conditions.

Key sources used in preparing this chapter are as follows:

- *Stanislaus County General Plan* Conservation/Open Space Element (Stanislaus County 2016a);
- *City of Modesto Urban Area General Plan* (City of Modesto 2019);
- San Joaquin Valley Air Pollution Control District (SJVAPCD) *Mitigation Measures* guidance document (SJVAPCD 2017a); and
- SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015a).

6.2 REGULATORY SETTING

6.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

The Clean Air Act is implemented by USEPA and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: carbon monoxide (CO), lead, nitrogen dioxide (NO_2), ground-level ozone, sulfur dioxide (SO_2), and particulate pollution which is subdivided into particulate matter of aerodynamic radius of 10 micrometers or less (PM_{10}) and particulate matter of aerodynamic radius of 2.5 micrometers or less ($PM_{2.5}$). Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health. **Table 6-1** shows the current attainment status for NAAQS.

Table 6-1. Attainment Status of the Federal and State Ambient Air Quality Standards

Contaminant	Averaging Time	Concentration	State Standards Attainment Status[1]	Federal Standards Attainment Status[2]
Ozone (O_3)	1-hour	0.09 ppm	N (Severe)	See footnote 3
	8-hour	0.070 ppm	N	
		0.075 ppm		N (Extreme)
Carbon Monoxide (CO)	1-hour	20 ppm	U/A	
		35 ppm		U/A
	8-hour	9.0 ppm	U/A	U/A
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm	A	
		0.100 ppm[5]		U/A
	Annual arithmetic mean	0.030 ppm	A	
		0.053 ppm		U/A
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	A	
		0.075 ppm		U/A
	24-hour	0.04 ppm	A	
		0.14 ppm		U/A
	Annual arithmetic mean	0.030 ppm		U/A
Particulate Matter (PM_{10})	24-hour	50 µg/m^3	N	
		150 µg/m^3		A
	Annual arithmetic mean	20 µg/m^3	N	
Fine Particulate Matter ($PM_{2.5}$)	24-hour	35 µg/m^3		N (Moderate)
	Annual arithmetic mean	12 µg/m^3	N	N (Moderate)
Sulfates	24-hour	25 µg/m^3	A	
Lead (Pb)[6]	30-day average	1.5 µg/m^3	A	
Hydrogen Sulfide (H_2S)	1-hour	0.03 ppm	U	
Vinyl Chloride[6] (chloroethene)	24-hour	0.010 ppm	A	
Visibility-Reducing Particles	8-hour (10:00 to 18:00 PST)	See footnote 4	U	

A – attainment
N – nonattainment
U – unclassified
ppm – parts per million
µg/m^3 – micrograms per cubic meter
PST – Pacific Standard Time
km – kilometer
PM_{10}- particulate matter of aerodynamic radius of 10 microns or less
$PM_{2.5}$- particulate matter of aerodynamic radius of 2.5 microns or less

Notes:

1. California standards for O_3, CO (except Lake Tahoe), SO_2 (1-hour and 24-hour averages), NO_2, PM_{10}, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe CO, Pb, H_2S, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for Pb and the $PM_{2.5}$ and PM_{10} annual standards), some measurements may be excluded. In particular, measurements are excluded that the California Air Resources Board (CARB) determines would occur an average of less than once per year.
2. National standards shown are the "primary standards" designed to protect public health. National air quality standards are set by the U.S. Environmental Protection Agency (USEPA) at levels determined to be protective of public health with an adequate margin of safety. National standards other than for O_3, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour O_3 standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is less than or equal to one. The 8-hour O_3 standard is attained when the 3-year average of the fourth highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the ninety-ninth percentile of monitored concentrations is less than 150 $\mu g/m^3$. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of ninety-eighth percentiles is less than 35 $\mu g/m^3$. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met by spatially averaging annual averages across officially designated clusters of sites and then determining whether the 3-year average of these annual averages falls below the standard.
3. The national 1-hour O_3 standard was revoked by USEPA on June 15, 2005. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. However, the attainment status has not yet been updated based on this revised 8-hour standard. It is likely that the region will remain in nonattainment.
4. Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per km when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment resulting from regional haze and is equivalent to a 10-mile nominal visual range.
5. To attain this standard, the 3-year average of the ninety-eighth percentile of the daily maximum 1-hour average at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).
6. CARB has identified Pb and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined.

Sources: SJVAPCD 2017b, CARB 2017a, USEPA 2017

USEPA and, in California, the California Air Resources Board (CARB) regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that might release criteria pollutants and/or toxic air contaminants (TACs), known at the federal level as hazardous air pollutants (HAPs). These regulations are 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAP). Large sources of emissions may be classified as major sources and are subject to the Clean Air Act Title V program. In addition, USEPA has regulations involving emission criteria for off-road sources, such as emergency generators, construction equipment, and vehicles as well as other releases of toxic chemicals.

6.2.2 State Laws, Regulations, and Policies

California Clean Air Act

CARB sets standards for criteria pollutants in California that are more stringent than NAAQS and includes the following additional contaminants: visibility-reducing particles, hydrogen sulfide (H_2S), sulfates, and vinyl chloride. The Proposed Program is located in the San Joaquin Valley Air Basin (SJVAB) and managed by SJVAPCD, which manages air quality in Stanislaus County for attainment and permitting purposes.

CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Statewide Truck and Bus Regulations

On December 12, 2008, CARB approved a regulation to substantially reduce emissions of diesel particulate matter (DPM), oxides of nitrogen (NO_X), and other pollutants from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance standards and requirements between 2011 and 2023. Affected vehicles included on-road, heavy-duty, diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds. The regulation was updated in 2011 and 2014 with revisions that provide more compliance flexibility and reflect the impact of the economic recession on vehicle activity and emissions. Heavy-duty trucks used during construction of Proposed Program components would be required to comply with this regulation.

In-use, Off-road Diesel Vehicle Regulation

In 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use, off-road, heavy-duty diesel vehicles in California. The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. In December 2011, major amendments were made to the regulation, including modifications to the compliance dates for performance standards and establishing requirements for compliance with verified diesel emission control strategy technologies that reduce PM and/or NO_X emissions.

Heavy-duty Vehicle Inspection Program

The heavy-duty vehicle inspection program requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering and for compliance with engine certification labels. Any heavy-duty vehicle (i.e., a vehicle with a gross vehicle weight rating greater than 6,000 pounds) traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, California Highway Patrol weigh stations, fleet facilities, and randomly selected roadside locations. Owners of trucks and buses found to be in violation are subject to penalties starting at $300 per violation. Heavy-duty trucks used during construction of Proposed Program components would be subject to the inspection program.

Heavy-duty On-board Diagnostic System Regulations

In 2004, CARB adopted regulations requiring on-board diagnostic (OBD) systems on all 2007 and later model year heavy-duty engines and vehicles (i.e., vehicles with a gross vehicle weight rating greater than 14,000 pounds) in California. CARB subsequently adopted a comprehensive OBD regulation for heavy-duty vehicles model years 2010 and beyond. The heavy-duty OBD regulations were updated in 2010, 2013, and 2016 with revisions to enforcement requirements, testing requirements, and implementation schedules. Heavy-duty trucks used during construction of proposed components would be required to comply with the heavy-duty OBD regulatory requirements.

California Standards for Diesel Fuel Regulations

State regulations require diesel fuel with sulfur content of 15 parts per million (ppm) or less (by weight) to be used for all diesel-fueled vehicles that are operated in California. The standard also applies to non-vehicular diesel fuels. The regulations also contain standards for the aromatic hydrocarbon content and lubricity of diesel fuels.

Airborne Toxic Control Measures

CARB regulates TACs by requiring implementation of various airborne toxic control measures (ATCMs), which are intended to reduce emissions associated with toxic substances. Relevant ATCMs to the Proposed Program are as follows:

- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines Standards for Nonvehicular Diesel Fuel
- ATCM for Stationary Compression Ignition Engines
- Asbestos ATCM for Construction, Grading, Quarrying and Surface Mining Operations

In addition to ATCMs, TACs are controlled under several regulations in California, including the Tanner Air Toxics Act, Air Toxics Hot Spots Information Act, and Assembly Bill (AB) 2588: Air Toxics "Hot Spots" Information and Assessment Act. In addition, Proposition 65 (the Safe Water and Toxic Enforcement Act of 1996) requires that the state publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. Proposition 65 requires businesses to notify Californians about substantial amounts of chemicals in the products they purchase or that are released into the environment.

6.2.3 LOCAL LAWS, REGULATIONS, AND POLICIES

At the local level, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality monitoring stations, overseeing agricultural burning permits, and reviewing air quality–related sections of environmental documents under CEQA. The air quality districts are also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws, as well as for ensuring that the NAAQS and California Ambient Air Quality Standards (CAAQS) are met.

Local governments are essential partners in the effort to reduce air pollutant emissions. The local governments have influence through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations.

San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Basin (SJVAB) is comprised of a single air district, the San Joaquin Valley Air Pollution Control District (SJVAPCD), and is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin portion of Kern. SJVAPCD has local air quality jurisdiction over the Proposed Program and in other counties under its jurisdiction. SJVAPCD's recommended CEQA thresholds are outlined in its *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015a). SJVAPCD has adopted attainment plans to address ozone and PM.

1-Hour Ozone

Although USEPA revoked its 1979 1-hour ozone standard in June 2005, many planning requirements remain in place, and the SJVAB must still attain this standard before CAA Section 185 fees (which are required when attainment is not reached) can be rescinded. SJVAPCD's most recent 1-hour ozone plan, the 2013 Plan for the Revoked 1-hour Ozone Standard (SJVAPCD 2013), demonstrated attainment of the 1-hour ozone standard by 2017. In July 2016, USEPA made a final determination that the SJVAB has attained the 1-hour ozone NAAQS based on the most recent 3-year data period (2012–2014) of sufficient, quality-assured, and certified data (SJVAPCD 2017c). For the SJVAB to be officially designated as an attainment area, SJVAPCD must verify that attainment is due to permanent and enforceable emission reductions and prepare a maintenance plan.

8-Hour Ozone

SJVAPCD's far-reaching 2007 Ozone Plan demonstrates attainment of USEPA's 1997 8-hour ozone standard by 2023. USEPA approved the 2007 Ozone Plan effective April 30, 2012. The district has prepared a 2016 Ozone Plan to address USEPA's 2008 8-hour ozone standard, which the SJVAB must attain by 2032 (SJVAPCD 2016a). This extremely stringent standard is nearing the SJVAB's naturally occurring background concentrations of ozone. The 2016 plan identifies that, without mobile sources transitioning to near-zero emission levels through the implementation of transformative measures such as ultra-low tailpipe emissions standards (which SJVAPCD does not have the authority to implement), attainment of the federal standards is not possible (SJVAPCD 2016a).

PM_{10}

PM is a complex mixture of extremely small particles and liquid droplets, made up of multiple components, including acids, organic chemicals, metals, and soil or dust particles. PM_{10} is typically found near roadways and around dusty industrial sites. Based on PM_{10} measurements from 2003-2006, USEPA found that the SJVAB has reached attainment of federal PM_{10} standards. On September 21, 2007, the SJVAPCD Governing Board adopted the 2007 *PM_{10} Maintenance Plan and Request for Redesignation*, which demonstrates that the SJVAB will continue to meet the PM_{10} standard. USEPA approved the document and, on September 25, 2008, the SJVAB was redesignated to attainment/maintenance (SJVAPCD 2017d). The District is in the process of developing the 2017 PM_{10} Maintenance Plan to demonstrate the maintenance of the standard for an additional ten-year period of 2020 through 2029 (SJVAPCD 2017d, 2017e).

$PM_{2.5}$

$PM_{2.5}$ is found in smoke and haze. Changes in the federal $PM_{2.5}$ air quality standard (in 1997, 2006, and 2012) and recent drought conditions in California have resulted in the development of multiple $PM_{2.5}$ air quality plans by SJVAPCD. The 2008 and 2015 $PM_{2.5}$ Plans have been prepared to achieve attainment of USEPA's first $PM_{2.5}$ standard, set in 1997. The attainment deadline for the 1997 standard has been delayed to 2020 (SJVAPCD 2015b).

USEPA lowered the $PM_{2.5}$ standard in 2006. Although SJVAPCD's 2012 $PM_{2.5}$ Plan showed attainment of this standard by 2019, USEPA reclassified SJVAPCD to serious nonattainment for the 2006 $PM_{2.5}$ standard in January 2015, and SJVAPCD must prepare a revised plan to address this nonattainment.

On September 15, 2016, SJVAPCD adopted the "2016 Moderate Area Plan for the 2012 PM2.5 standard" to address another $PM_{2.5}$ standard issued by USEPA in 2012 and USEPA's determination that the SJVAB is a moderate nonattainment area for the 2012 federal $PM_{2.5}$ standard. SJVAPCD continues to work with USEPA on issues surrounding these plans, including USEPA implementation updates and is in the process of developing an attainment strategy to address the multiple $PM_{2.5}$ standards (1997, 2006, and 2012) (SJVAPCD 2017d, 2017e).

SJVAPCD Rules

The Proposed Program may be subject to the following district rules. These rules have been adopted by SJVAPCD to reduce emissions throughout the SJVAB:

- **Rule 2010 – Permits Required**. This rule requires an applicant to obtain an Authority to Construct and Permit to Operate for certain types of stationary air pollution sources.

- **Rule 2201 – New and Modified Stationary-Source Review Rule** applies to all new stationary sources and all modifications to existing stationary sources subject to SJVAPCD permit requirements that, after construction, emit or may emit one or more pollutants regulated by the rule.

- **Rule 2280 – Portable Equipment Registration** applies to portable emissions units that may operate in participating districts throughout California. The rule requires applicable portable equipment to be registered.

- **Rule 2520 – Federally Mandated Operating Permits** describes which major sources must obtain a Title V operating permit. Generally, major sources are those stationary sources with the potential to emit greater than identified designated limits of criteria pollutants (i.e., 10 tons per year (tpy) of NOx or VOC, 100 tpy of CO, or 70 tpy of PM10 or Sox) and major toxic sources with the potential to emit greater than 10 tpy of any single hazardous air contaminant or 25 tpy of any combined hazardous air contaminants.

- **Rule 3135 – Dust Control Plan Fees** requires the applicant to submit a fee in addition to a dust control plan. The purpose of this rule is to recover SJVAPCD's cost for reviewing these plans and conducting compliance inspections.

- **Rule 4001 – New Source Performance Standards** applies to new or modified sources of air pollution that must comply with standards, criteria and requirements for the applicable sources. This incorporates by reference the federal NSPS.

- **Rule 4002 – National Emission Standards for Hazardous Air Pollutants** applies to sources of air pollution that must comply with standards, criteria and requirements for the applicable sources of TACs. This incorporates by reference the federal NESHAPs.

- **Rule 4101 – Visible Emissions** prohibits emissions of visible air contaminants into the atmosphere and applies to any source operation that emits or may emit air contaminants.

- **Rule 4102 – Nuisance** applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation of this rule and subject to SJVAPCD enforcement action.

- **Rule 4201 – Particulate Matter Concentration** applies to any source operation which emits or may emit dust, fumes, or total suspended particulate matter.

- **Rule 4202 – Particulate Matter - Emissions Rate** limits particulate matter emissions by establishing allowable emission rates.

- **Rule 4301 – Fuel Burning Equipment** limits the concentration of combustion contaminants and specifies maximum emission rates for sulfur dioxide, nitrogen oxide and combustion contaminant emissions.

- **Rule 4311 – Flares** This rule is to limit the emissions of volatile organic compounds (VOCs) and NO_X from the operation of flares.

- **Rule 4565 – Biosolids, Animal Manure, and Poultry Litter Operations** applies to facilities that generate these materials and operator who landfills, land applies, composts or co-composts these materials. Specific control requirements are applicable to these facilities.

- **Rule 4601 – Architectural Coatings.** The purpose of this rule is to limit volatile organic compound (VOC) emissions from architectural coatings.

- **Rule 4701 – Internal Combustion Engines—Phase 1** limits the emissions of NO_X, CO, and VOCs from internal combustion engines. These limits are not applicable to standby engines as long as they are used fewer than 200 hours per year (e.g., for testing during non-emergencies).

- **Rule 4702 – Internal Combustion Engines—Phase 2** limits the emissions of NO_X, CO, and VOCs from spark-ignited internal combustion engines.

- **Regulation VIII – Fugitive PM_{10} Prohibitions** is a series of rules (Rules 8011–8081) designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction, road construction, bulk materials storage, landfill operations, and other activities. This regulation is discussed in more detail below.

- **Rule 9410 – Employer-Based Trip Reduction** requires large employers to establish an Employer Trip Reduction Implementation Plan, which is a set of measures that encourages employees to use alternative transportation and ridesharing for their commutes.

- **Rule 9510 – Indirect Source Review** is intended to reduce a project's impact from indirect sources such as on-road and off-road vehicles on air quality through project design elements or mitigation by payments of applicable off-site mitigation fees. Compliance with Rule 9510 is designed to reduce construction exhaust NO_X and PM_{10} emissions by 20 percent and 45 percent, respectively. Compliance with Rule 9510 is designed to reduce operational emissions of NO_X and PM_{10} emissions by 33.3 percent and 50 percent, respectively. This rule is only applicable to certain development projects that exceed size requirements at buildout (e.g., 25,000 square feet of light industrial space).

Fugitive Dust Measures (Regulation VIII)

The Proposed Program would also be required to implement the mandatory control measures listed in Table 2 of the SJVAPCD's Mitigation Measures guidance document (SJVAPCD 2017a) to reduce fugitive dust emissions. These measures are not considered mitigation measures under CEQA because they are required by law.

The Regulation VIII requirements (some of which are not applicable to the Proposed Program) are listed below:

- All disturbed areas, including storage piles, which are not being actively used for construction purposes, will be effectively stabilized for dust emissions using water or a chemical stabilizer/suppressant, or covered with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized for dust emissions using water or a chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities will be effectively controlled of fugitive dust emissions by utilizing an application of water or by presoaking.

- With the demolition of buildings up to six stories in height, all exterior surfaces of the building will be wetted during demolition.

- All materials transported off site will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.

- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, piles will be effectively stabilized to prevent fugitive dust emissions utilizing sufficient water or a chemical stabilizer/suppressant.
- Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Any site with 150 or more vehicle trips per day will prevent carryout and trackout.

Stanislaus County General Plan 2015

The *Stanislaus County General Plan 2015* Conservation/Open Space Element (Stanislaus County 2016a) identifies air quality–related goals and policies. These are aimed at reducing criteria pollutant emissions and improving regional air quality by requiring all development projects to include reasonable air quality mitigation measures, reducing motor vehicle emissions, and increasing public awareness of air quality problems and solutions.

City of Modesto Urban Area General Plan

Chapter VII of the *City of Modesto Urban Area General Plan* (City of Modesto 2019), includes policies pertaining to air quality. The following are relevant to the Proposed Program:

Policy VII-H.2[h]. Consult with the SJVAPCD during CEQA review for discretionary projects with the potential for causing adverse air quality impacts.

Policy VII-H.2[m]. Implement measures to reduce the temporary, yet potentially significant, local air quality impacts from construction activities. Potential measures to be implemented may include those measures shown in Section V-2 of the Final Master Environmental Impact Report.

City of Ceres General Plan

The *City of Ceres General Plan's* Chapter 4, Agricultural and Natural Resources (2018) contains the following goals and policies related to air quality that may be relevant to the Proposed Project:

Goal 4.G: Protect and improve air quality in the Ceres area, and protect residents from harmful effects of air pollution.

Policy 4.G.4: Proposed Projects. Solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality, and submit development proposals to the San Joaquin Valley Air Pollution District for review and comment pursuant to CEQA prior to consideration by the City.

Policy 4.G.8: Noxious Odors. Do not permit new residential development within a half-mile radius of emitters of noxious odors. Require that any new potential odor source locating within project screening trigger levels of sensitive receptors, as established by the San Joaquin Valley Air Pollution District, undertake a detailed odor analysis.

Policy 4.G.9: Cumulative Impacts. Address impacts of new development projects that may individually have insignificant impacts on air quality, but which together with other projects in the Planning Area may be cumulatively significant by requiring mitigation at the plan level for area-wide plan development.

Policy 4.G.13: Thresholds of Significance. Use the San Joaquin Valley Air Pollution District's thresholds of significance for determining and mitigating project air quality impacts and related thresholds of significance for use in environmental documents.

Policy 4.G.14: Construction Mitigation. Require mitigation measures as a condition of obtaining permits to minimize dust and air emissions impacts from construction. Require contractors to implement dust suppression measures during excavation, grading, and site preparation activities. Techniques may include, but are not limited to:

- Site watering or application of dust suppressants;
- Phasing or extension of grading operations;
- Covering of stockpiles;
- Suspension of grading activities during high wind periods (typically winds greater than 25 miles per hour); and
- Revegetation of graded areas.

6.3 ENVIRONMENTAL SETTING

This section presents information on the existing physical environmental conditions in the Program vicinity related to air quality. This information will be used to determine impacts that could result from construction and operation of the Proposed Program, as presented in Section 6.4. Modesto is home to roughly 300,000 people and contains multiple busy roads and highways, railroads, and an airport. The Sutter and Jennings Plants and food processing plants operate in the study area and agricultural land uses are located around the edge of the City proper.

6.3.1 REGIONAL SETTING

San Joaquin Valley Air Basin

Modesto is located in the SJVAB, which forms the southern half of California's Central Valley and is approximately 250 miles long and averages 35 miles wide. The SJVAB is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, and the Tehachapi Mountains to the south. The SJVAB contains all of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties, as well as a portion of Kern County.

Climate and Topography

The Modesto area has an inland Mediterranean climate that is characterized by hot, dry summers and cool winters. Summer high temperatures average in the 90s and often exceed 100 degrees Fahrenheit (°F).

Although marine air generally flows into the basin from the Bay-Delta region, the surrounding mountain ranges restrict air movement through and out of the valley. Wind speed and direction influence the dispersion and transportation of pollutants; the greater the wind flow, the lower the accumulation. The vertical dispersion of air pollutants in the SJVAB is limited by the presence of persistent temperature inversion, leading to higher concentrations of emitted pollutants (SJVAPCD 2015a).

Precipitation and fog tend to reduce pollutant concentrations. Ozone is formed when chemical compounds such as VOCs and NO_X (collectively known as ozone precursors) react with sunlight. Clouds and fog block the solar radiation for the ozone-forming reaction. Annual precipitation in the San Joaquin Valley decreases from north to south, averaging approximately 20 inches in the north, 10 inches in the central portion, and less than 6 inches in the south (SJVAPCD 2002). In the Modesto area of the SJVAB, the average annual precipitation is approximately 12 inches (Western Regional Climate Center 2017).

6.3.2 EXISTING AIR QUALITY CONDITIONS

Air Monitoring Data

USEPA, CARB, and local air districts operate an extensive air monitoring network to measure maintenance of or progress toward attainment of NAAQS and CAAQS. **Table 6-2** shows the most recent three years of available data for PM_{10}, $PM_{2.5}$ and ozone.

Table 6-2. Air Monitoring Data for 2013–2015

Monitoring Station	Pollutant	Standard	2015		2014		2013	
			No. Exceed[1]	Maximum Concentration[1]	No. Exceed[1]	Maximum Concentration[1]	No. Exceed[1]	Maximum Concentration[1]
Stanislaus County Modesto-14th Street	PM_{10}	24-hour	31.1/0	85.6 µg/m^3	37.6/0	122.5 µg/m^3	57.7/0	73 µg/m^3
	$PM_{2.5}$	24-hour	*	44.0 µg/m^3	17.0	58.2 µg/m^3	37.6	83.2 µg/m^3
	Ozone	8-hour	24/16	0.093 ppm	24/12	0.090 ppm	13/2	0.082 ppm
	Ozone	1-hour	5/0	0.111 ppm	1/0	0.103 ppm	0/0	0.088 ppm

Notes:

CO = carbon monoxide; NO_2 = nitrogen dioxide; $PM_{2.5}$ = particulate matter of 2.5 micrometers or less; PM_{10} = particulate matter of 10 micrometers or less; SO_2 = sulfur dioxide; ppm = parts per million; µg/m^3 = micrograms per cubic meter; * = There was insufficient (or no) data available to determine the value.

1. Indicates the number of exceedance days recorded annually at this monitoring station for a particular constituent compared to that constituent's NAAQS and CAAQS. The first number is the state value and the second number is the federal value if they are different. Used National Maximum

Source: CARB 2017b

Existing Sources of Air Pollution and Odors

Existing sources of air pollution and odor in the Modesto area include: heavy duty trucks, passenger vehicles, farm equipment, off-road equipment, food processing plants, industrial facilities, waste management facilities, the county airport, and agricultural operations. Air pollution transported from the San Francisco Bay and Sacramento areas may account for roughly a quarter of the pollution in the Modesto area (SJVAPCD 2017e).

Existing Emissions from City's Collection System and Wastewater Treatment Facilities

Monitoring data or comprehensive estimates of existing emissions of criteria pollutants or TACs from the City's collection system and treatment facilities is not available. The types of emissions associated with the wastewater collection and treatment facilities include the following:

- Fugitive emissions of volatile organic compounds and odors from sewer pipes where such emissions can escape to the surface through pipe breaks, cross connections to the storm drain, malfunctioning catch basins, or similar escape routes. Wastewater may contain small amounts of volatile toxic air contaminants (particularly from industrial waste discharge) that can escape into the air.

- Criteria pollutant and TAC emissions from burning diesel fuel to run emergency generators at lift stations and treatment plants.

- Criteria pollutant and TAC emissions from burning natural gas or digester waste gas for boilers to heat the anaerobic digesters.

- Criteria pollutant and TAC emissions from burning waste gas from anaerobic digesters at the Primary Plant using the flare. Unburned hydrocarbons may be emitted. Hydrogen sulfide in the digester gas has been reduced by addition of ferrous chloride to the flow, but some hydrogen sulfide remains. It produces sulfur dioxide when burned.

- Odors from the headworks of the Sutter Plant, in the event that the biofilters on the headworks do not function properly or odors otherwise escape the building

- Odors from biosolids handling (including sludge drying) at the Sutter Plant.

- Potential fugitive emissions of criteria pollutants, ozone precursors, or volatile TACs from wastewater as it goes through treatment.

- Routine emissions of chlorine and sulfur dioxide as a result of the chlorination and dechlorination processes at the Jennings Plant for treated effluent that is discarded to the San Joaquin River.

- Potential accidental releases of chlorine and sulfur dioxide at the Jennings Plant.

The wastewater facilities are a potential source of odors. Sources of odors include headworks, anaerobic digestion, sludge handling, and other miscellaneous operations. SJVAPCD was contacted to obtain a list of all odor complaints received in the past 3 years associated with the Sutter Plant. **Table 6-3** summarizes the odor complaints.

Table 6-3. Sutter Plant Odor Complaints for 2014-2017

Complaint Date	Unconfirmed	Confirmed	Summary of Cause	Corrective Action Taken
10/9/2016	X			
10/7/2016	X			
10/6/2016	X			
10/5/2016	X			
9/15/2016		X	WWTP Operations	SWRCB Notified
7/27/2016	X			
5/4/2016		X	WWTP Operations	
5/4/2016		X	WWTP Operations	
4/28/2016		X	WWTP Operations	SWRCB Notified
4/19/2016	X			WWTP Facility Notified
2/29/2016	X			WWTP Facility Notified
10/23/2015	X			
9/23/2015	X			
9/11/2015	X			
7/29/2015		X	WWTP Operations	
3/27/2015	X			
3/13/2015	X			
1/28/2015		X	WWTP Operations	WWTP Facility Notified
1/10/2015	X			
11/26/2014	X			
11/26/2014	X			
11/22/2014	X			
11/18/2014		X	WWTP Operations	
11/18/2014		X	WWTP Operations	
11/16/2014		X	WWTP Operations	
11/14/2014		X	WWTP Operations	
11/3/2014		X	WWTP Operations	Call between SJVAPCD & WWTP
10/31/2014	X			
10/23/2014		X	WWTP Operations	SWRCB Notified
10/23/2014		X	WWTP Operations	SWRCB Notified
10/19/2014	X			

Complaint Date	Unconfirmed	Confirmed	Summary of Cause	Corrective Action Taken
10/16/2014	X			
10/13/2014	X			
10/9/2014		X	WWTP Operations	SWRCB Notified
10/9/2014		X	WWTP Operations	SWRCB Notified
10/7/2014		X	WWTP Operations	
10/7/2014		X	WWTP Operations	
10/6/2014		X	WWTP Operations	Meeting with WWTP
10/6/2014		X	WWTP Operations	SWRCB Notified
10/3/2014		X	WWTP Operations	
10/2/2014	X			
9/11/2014	X			
9/11/2014	X			
7/28/2014		X	WWTP Operations	Cannery waste sent to Jennings Plant
7/23/2014		X	WWTP Operations	Delayed treatment of tomato waste

Notes: SWRCB = State Water Resources Control Board; WWTP = wastewater treatment plant

Source: SJVAPCD 2017g

6.3.3 AIR POLLUTANTS

Carbon Monoxide

CO is an odorless, colorless gas that is highly toxic. CO is formed by the incomplete combustion of fuels and is emitted directly into the air. Ambient CO concentrations normally are considered a localized effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic, forming pollutant hot spots. CO concentrations are also influenced by wind speed and atmospheric mixing. Under inversion conditions, CO concentrations can be distributed more uniformly over an area to some distance from vehicular sources. CO binds with hemoglobin, the oxygen-carrying protein in blood, and reduces the blood's capacity for carrying oxygen (O_2) to the heart, brain, and other parts of the body. At high concentrations, CO can cause heart difficulties in people with chronic diseases, impair mental abilities, and cause death.

Nitrogen Oxides

NO_X is a family of gaseous nitrogen (N) compounds and are precursors to the formation of ozone (O_3) and PM. Nitrogen dioxide (NO_2), the major component of NO_X, is a reddish-brown gas that is toxic at high concentrations. NO_X result primarily from the combustion of fossil fuels under high temperature and pressure. Fuel combustion, primarily from on-road and off-

road motor vehicles, and industrial sources are the major sources of this air pollutant (SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) (SJVAPCD 2015a).

Volatile Organic Compounds

VOCs are hydrocarbon compounds that exist in the ambient air. VOCs contribute to the formation of smog and/or might themselves be toxic. VOC emissions are a major precursor to the formation of O_3. VOCs are also commonly referred to as reactive organic gases (ROG) (SJVAPCD 2015a).

Ozone

O_3 is a reactive gas consisting of three oxygen atoms. In the stratosphere, O_3 exists naturally and shields the earth from harmful incoming ultraviolet radiation. In the troposphere (the lowest region of the atmosphere); however, it is a secondary pollutant that is formed when NO_X and VOCs react in the presence of sunlight. O_3 at the earth's surface causes numerous adverse health effects and is a pollutant regulated by state and federal air quality agencies. It is a major component of smog. High concentrations of ground-level O_3 can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments. O_3 also damages natural ecosystems, such as forests, foothill communities, and agricultural crops, as well as some human-made materials, such as rubber and plastics (SJVAPCD 2015a).

Particulate Matter

PM is a complex mixture of extremely small particles and liquid droplets. PM is made up of multiple components, including acids, organic chemicals, metals, and soil or dust particles. Particle size is directly linked to the potential for causing health problems. PM_{10} is of concern because these particles pass through the throat and nose and are deposited in the thoracic region of the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. PM_{10} is typically found near roadways and around dusty industrial sites. Fine particles ($PM_{2.5}$), which are found in smoke and haze, penetrate even more deeply into the thoracic and alveolar regions of the lungs (SJVAPCD 2015a).

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a "rotten egg" smell formed primarily by the combustion of sulfur-containing fossil fuels. Suspended SO_2 particles contribute to poor visibility and are a component of PM_{10} (SJVAPCD 2015a).

Lead

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Historically, the major sources of Pb emissions have been mobile and industrial activities. The health effects of Pb poisoning include loss of appetite, weakness, apathy, and miscarriage. Pb poisoning can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract (SJVAPCD 2015a).

In the past, gasoline-powered automobile engines were a major source of airborne Pb through the use of leaded fuels. Because the use of leaded fuel has been mostly phased out, ambient concentrations of Pb have dramatically decreased.

Hydrogen Sulfide

H_2S is associated with refining, geothermal activity, sewage treatment plants, oil and gas production, and confined animal feeding operations. H_2S is extremely hazardous in high concentrations and can cause death (SJVAPCD 2015a).

Sulfates

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds result primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates is comparatively rapid and complete in urban areas of California because of their regional meteorological features (SJVAPCD 2015a).

CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels that exceed the standard include decreased ventilatory function, aggravation of asthmatic symptoms, and increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility and, because they are usually acidic, can harm ecosystems and damage materials and property (SJVAPCD 2015a).

Vinyl Chloride

Vinyl chloride is a colorless gas that does not occur naturally; it is formed when substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make PVC, which is used in plastic products, such as pipes, wire and cable coatings, and packaging materials (SJVAPCD 2015a).

Toxic Air Contaminants

TACs are air pollutants that can lead to serious illness or increased mortality, even when present in relatively low concentrations. Hundreds of different types of TACs exist, with varying degrees of toxicity. Many TACs are confirmed or suspected carcinogens or are known or suspected to cause birth defects or neurological damage. For some chemicals, such as carcinogens, no threshold exists below which exposure can be considered risk free. Examples of TAC sources associated with the Proposed Program are fossil fuel combustion and chemicals used in the wastewater treatment areas.

TACs associated with wastewater facilities include various TACs that are contaminants in the wastewater received primarily from industrial sources. In addition, the wastewater generates hydrogen sulfide and uses chlorine in the disinfection process.

Sources of TACs include stationary sources, area-wide sources, and mobile sources. USEPA maintains a list of 187 TACs, identified federally as HAPs. These HAPs are included on CARB's list of TACs along with additional chemicals identified as TACs in California (CARB 2017c).

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), many researchers consider DPM to be a primary contributor to health risk from TACs because particles in the exhaust carry many harmful organics and metals, rather than being a single substance like other TACs. Unlike many TACs, outdoor DPM is not monitored by CARB because no routine measurement method exists; however, using the CARB emission inventory's PM10 database, ambient PM10 monitoring data, and results from several studies, CARB has made preliminary estimates of DPM concentrations throughout the state (California Office of Environmental Health Hazard Assessment [OEHHA] 2001).

Existing buildings might contain asbestos, which can become airborne during demolition activities. People exposed to low levels of airborne asbestos could be at an elevated risk (e.g., above background rates) for lung cancer and mesothelioma. The risk is proportional to the cumulative inhaled dose (quantity of fibers); the risk increases with the time since first exposure. Although various factors influence the disease-causing potency of the different forms of asbestos (such as fiber length and width, fiber type, and fiber chemistry), all forms are carcinogens. Existing regulations regarding demolition of asbestos-containing materials (described in Chapter 11, *Hazards and Hazardous Materials*) require prescriptive measures to ensure that public health is protected and exposure to asbestos is minimized.

6.3.4 SENSITIVE RECEPTORS

Sensitive receptors are those segments of the population most susceptible to the effects of poor air quality—children, the elderly, and individuals with preexisting serious health problems affected by air quality (e.g., asthma) (CARB 2005). Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds include play areas associated with parks or community centers.

Many, if not all, of these sensitive land uses can be found in the immediate vicinity of program-level components of the Proposed Program and the River Trunk Realignment Project. While specific sensitive receptors may change or move over the life of the Proposed Program, Figure 11-3 in Chapter 11, *Hazards and Hazardous Materials;* Figure 13-1 in Chapter 13, *Land Use and Planning*; and Figure 14-1 in Chapter 14, *Noise and Vibration,* show the locations of existing schools, zoned residential areas, and other existing sensitive receptors in the study area and River Trunk Realignment Project area. These figures provide a general context of the proximity of Proposed Program components to sensitive receptors.

River Trunk Realignment Project

The nearest sensitive receptors to the River Trunk Realignment Project include homes on Merced Avenue and Calaveras Avenue that are 170 and 250 feet, respectively, from the pipeline alignment. A church, school, and a daycare are located at the intersection of Calaveras Avenue and Tuolumne Boulevard, which are approximately 190, 280, and 260 feet from the pipeline alignment, respectively. Work on the gravity lines, particularly those along Tuolumne Blvd., Colorado Ave., and Pelton Ave. will take place in close proximity to numerous homes.

The nearest sensitive receptors to the pump station sites are residences on C Street and Pueblo Avenue, which are 800 feet and 1,100 feet from River Trunk Pump Station and Shackelford Pump Station, respectively. In addition, the planned Tuolumne River Regional Park, which will consist of over 500 acres of parkland along 7 miles of the Tuolumne River, would be located immediately south of the River Trunk Pump Station. For additional discussion regarding the Tuolumne River Regional Park planning effort, refer to Section 19.4, "Cumulative Impacts."

6.4 IMPACT ANALYSIS

6.4.1 METHODOLOGY

Construction and operation-related air quality impacts of program-level components within the SJVAB were evaluated qualitatively by considering the Proposed Program's sources of criteria pollutant, TACs, or odor emissions; proximity to sensitive receptors; and frequency and duration of emissions. In addition, the existing SJVAB's air quality attainment status and applicable air quality plans were reviewed and considered in the impact analysis. Where specific construction or operation-related details were lacking, impacts were conservatively judged to be significant, and prescriptive mitigation measures were developed to ensure significant impacts would be minimized. In addition, where applicable, specific guidance documents and tools used to analyze the River Trunk Realignment Project's air quality impacts, particularly those related to the qualitative assessment of TACs and odors, were used in the air quality analysis for program-level components.

As required by SJVAPCD, the California Emissions Estimator Model (CalEEMod) 2016.3.1, was used to quantify criteria pollutant emissions from the River Trunk Realignment's construction and operation activities. These emissions were then compared to the SJVAPCD's thresholds to determine the significance of impacts on air quality. For other elements of the Proposed Program, construction and operational impact significance were determined qualitatively by considering the project emission sources and duration since specific details of construction or operation for those program components have not yet been defined.

The SJVAPCD has established thresholds of significance for criteria pollutant emissions, which are based on SJVAPCD New Source Review offset requirements for stationary sources. As such, the impact analysis uses these thresholds of significance in the section below.

For TACs and odors associated with all of the Proposed Program components, impacts were evaluated qualitatively using SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) (SJVAPCD 2015a). The odor impact evaluation for WWMP construction and operation was conducted qualitatively based primarily on whether the existing operations had elicited any odor or nuisance complaints from SJVAPCD in the past 3 years. In addition, other pertinent information regarding TAC and odor sources (i.e., frequency of emissions, type of sources) and the proximity to sensitive receptors was considered.

6.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

The Proposed Program would result in a significant impact on air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

GAMAQI Thresholds

The SJVAPCD's recommended CEQA thresholds are outlined in its *GAMAQI* (SJVAPCD 2015a) and summarized in **Table 6-4**. SJVAPCD's thresholds for ROG and NO_X, which are ozone precursors, are 10 tons/year for each pollutant. Ozone precursor emissions are generated from both heavy- and light-duty vehicle use. The SJVAPCD has determined that projects with emissions below the thresholds of significance for criteria pollutants would be determined to be in compliance with the applicable SJVAPCD air quality plans (SJVAPCD 2015a).

According to SJVAPCD's guidance, impacts of operational and construction emissions are considered to be less than significant if fugitive dust (PM10 and PM2.5) emissions are below the significance levels listed in Table 6-4. In addition, SJVAPCD Regulation VIII requires all projects that involve earthmoving or travel on unpaved roads to implement fugitive dust control measures. Implementation of these control measures would be sufficient to reduce PM10 and PM2.5 impacts to a level considered less than significant.

These threshold limits apply to the annual emissions. These thresholds apply separately to construction, operational permitted sources and activities, and operational non-permitted activities. In other words, a project can emit up to 10 tons of NOX during construction, 10 tons of NOX from permitted activities, and an additional 10 tons of NO_X from non-permitted activities for a total of 30 tons of NO_X emissions and still be under the CEQA significance threshold and would be considered less than significant.

Table 6-4. Applicable SJVAPCD Construction and Operational Project-Level Significance Thresholds under CEQA

Pollutant	Construction Emissions Threshold (tons/year)	Operational Permitted Activities (tons/year)	Operational Non-permitted activities (tons/year)
Carbon monoxide (CO)	100	100	100
Oxides of nitrogen (NO_X; ozone precursor)	10	10	10
Reactive organic gases (ROG; ozone precursor)	10	10	10
Sulfur oxides (SO_X)	27	27	27
Particulate matter (PM_{10})	15	15	15
Fine particulate matter ($PM_{2.5}$)	15	15	15

Source: SJVAPCD 2015a

The following quantitative TAC thresholds of significance are identified in the *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015a), with implementation of the latest revisions to SJVAPCD's risk management policy (SJVAPCD 2015c) also serving as revisions to the CEQA thresholds:

- Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 20 in 1 million, or
- Ground-level concentrations of non-carcinogenic TACs result in a Hazard Index greater than 1 for the MEI.

Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary at any given location, especially considering the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or studies of workers with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (OEHHA 2017). Given that the construction period for each program-level component under the Proposed Program would vary and has not yet been defined, a qualitative analysis was determined to be the appropriate level of detail required to determine the impact of TAC emissions.

For operational TAC emissions, the Proposed Program's facilities are required to be below the health effects quantitative thresholds in order to obtain the required operating permits consistent with SJVAPCD regulations regarding permitted sources. For construction and operation, health risks from TACs were evaluated by identifying the Proposed Program's potential to generate TAC emissions and determining whether sensitive receptors could be affected by those emissions.

6.4.3 ENVIRONMENTAL IMPACTS

Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan (Significant and Unavoidable)

Stanislaus County and the City have planned for growth and adopted general plans for future development (City of Modesto 2019, Stanislaus County 2016b). The City is currently in the process of updating its general plan. The SJVAPCD develops its air quality plans to attain Federal and State AAQS which are in part based on the population and growth estimates provided by the local planning agencies, including the City and County. The SJVAPCD established mass emission thresholds of significance for criteria pollutant emissions to be consistent with levels required to be consistent with the SJVAPCD air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the applicable air quality plans provided there are no individual measures listed in the air quality plans that the project would conflict or obstruct.

The Proposed Program's purpose is to repair, replace, and install new wastewater infrastructure to support and accommodate new and existing development in the City's General Plan and SOI. The Proposed Program components would not directly add new housing or substantial sources of employment to the region. The River Trunk Realignment Project would involve facilities and operational uses consistent with and in support of the planned uses in the City's General Plan and SOI.

The Proposed Program, including the River Trunk Realignment Project, would follow all federal, state, and local regulations and policies related to sources of air pollutants, including applicable general plan policies. In addition, construction of the Proposed Program would follow local air district regulations for fugitive dust, VOCs, and NO_X emissions. As detailed in Impact AQ-2, the River Trunk Realignment Project's construction and operations would not result in NO_X emissions that exceed the 10 tons per year emission threshold. Thus, the River Trunk Realignment Project would not contribute to any conflicts with applicable air quality plans. Construction of various program-level CIPs may result in NO_X emissions that exceed the 10 tons per year emission threshold and could result in other criteria pollutant emissions that exceed SJVAPCD's thresholds; therefore, such components could obstruct implementation of applicable air quality plans, which would be a significant impact. It is also unknown at this time if the amount of operational emissions would exceed any significance threshold. Mitigation measures that would address construction emissions and operational emissions are discussed under Impact AQ-2. It is assumed that emissions from permitted sources would be addressed under the applicable permit process and any excess emissions would purchase offsets as required to obtain permits; however, this would not address construction or operational emissions which do not require permits.

For the reasons described above, the overall Proposed Program and the various CIPs could generate emissions greater than that accounted for in the applicable air quality plans. Therefore, the Proposed Program could obstruct or conflict with applicable air quality plans and would have a **significant and unavoidable** impact.

Impact AQ-2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation (Less than Significant with Mitigation)

The SJVAPCD considers PM_{10} emissions to be the greatest pollutant of concern when assessing construction-related air quality impacts. The SJVAPCD has determined that compliance with its Regulation VIII and the implementation of all feasible control measures specified in its GAMAQI (San Joaquin Valley Air Pollution Control District 2015a), constitute sufficient mitigation to reduce construction-related PM_{10} emissions to less-than-significant levels and to minimize adverse air quality effects. These mitigation measures are listed below under Mitigation Measures AQ-1 and AQ-2. All construction projects must abide by Regulation VIII. Consequently, this air quality analysis assumes that the City and its contractors will comply with Regulation VIII and that such compliance will be sufficient to eliminate any potentially significant air quality effects generated by construction activities. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to a less-than-significant level. In addition, Mitigation Measure AQ-3 would reduce emissions from exhaust, and SJVAPCD also recommends the measures listed below to reduce exhaust pollutant emissions from heavy construction equipment:

- Use aqueous diesel fuel in diesel equipment.
- Use diesel particulate filters on diesel equipment.
- Use cooled exhaust gas recirculation on diesel equipment.

Adherence to the mitigation measure and requirements above would reduce pollutant emissions below significance thresholds and would ensure that impacts would be less than significant.

The City does not consider cancer risk from diesel-fueled construction equipment to be an issue. The assessment of cancer risk is typically based on a 70-year exposure period. Construction activities are sporadic and short-term, and once construction activities have ceased, the emissions have ceased as well. Because the exposure period to construction diesel exhaust would be well below the 70-year exposure period, construction of the proposed program is not anticipated to result in an elevated cancer risk. This impact is considered less than-significant after implementation of Mitigation Measures AQ-1 and AQ-2.

All Program-level Components

Construction Impacts. The Proposed Program involves a range of new wastewater-related facilities and infrastructure components spread throughout the City of Modesto and in nearby surrounding communities and unincorporated County areas that are all within the SJVAB. Construction activities for individual components would generate emissions of criteria air pollutants via the use of heavy equipment, worker vehicle trips, and material hauling truck trips. The City would comply with all SJVAPCD rules and regulations, including Regulation VIII, Fugitive Dust Measures. With implementation of Mitigation Measures AQ-1 and AQ-2, construction-related impacts would be **less than significant with mitigation**.

Operational Impacts. Operation of the program-level components would include the operation, inspection, and maintenance of new pump stations, lift stations and wastewater

treatment plant facilities. These activities would result in the direct emission of criteria air pollutants through employee vehicle trips and infrequent use of backup generators primarily during emergencies or power outages, and emissions of VOCs and combustion products associated with wastewater treatment operations. This includes combustion of natural gas for boilers to heat aerators, combustion of digester waste gas in boilers or a flare, release of various VOCs during process operations, release of hydrogen sulfide or sulfur dioxide, and release of chlorine. Removal of waste material and land application of biosolids would generate fossil fuel combustion emissions from the vehicles used to transport the material and generate fugitive dust during biosolids land application. The increased number of employees required to support the Jennings Plant would be similar to those currently operating the Sutter Plant. The operation and maintenance of other program-level facilities would not require a substantial change in employees compared to existing conditions.

Emissions from the operation of emergency generator and other wastewater treatment plant sources would not be substantial since any new or modified emergency generators and wastewater treatment plant sources would go through the SJVAPCD permit process to ensure that project emissions are below the appropriate significance threshold for permitted sources and offsets provided if required. If the air quality thresholds of significance are expected to be exceeded, Mitigation Measure AQ-3 would be implemented to ensure equipment with best available control technology would be installed to minimize potential emissions. Thus, these operational impacts would be **less than significant with mitigation**.

River Trunk Realignment Project

Construction Impacts. Similar to the program-level components, construction of the River Trunk Realignment Project would result in construction-related emissions of fugitive dust and/or criteria air pollutants. The River Trunk Realignment Project's projected criteria air pollutant emissions during construction are shown in **Table 6-5**.

Table 6-5. Estimated Project Construction Emissions

Year	Emissions (tons per year)							
	CO	NO_X	ROG	SO_X	Exhaust PM_{10}	Fugitive PM_{10}	Exhaust $PM_{2.5}$	Fugitive $PM_{2.5}$
2018	4.9	8.2	1.1	0.014	0.29	0.13	0.27	0.035
2019	3.5	5.3	.51	0.0094	0.20	0.059	0.19	0.015
2020	1.6	2.3	0.24	0.0045	0.089	0.018	0.082	0.0047
2021	0.11	0.11	0.41	0.00023	0.0047	0.00078	0.0043	0.00021
SJVAPCD Significance Threshold (tons/year)	100	10	10	27	15		15	
Exceed Threshold?	No	No	No	No	No		No	

Source: Modeling conducted by Horizon Water and Environment in 2018 (Appendix B).

Based on comparison to the significance thresholds, all pollutants, would be well below the construction emission thresholds. As explained above, SJVAPCD has determined that those projects with mass emissions less than the thresholds of significance would not create additional violations of criteria pollutant emissions standards (SJVAPCD 2015a, SJVAPCD 2017f). In addition, because the River Trunk Realignment Project would be required to implement SJVAPCD dust control measures, fugitive dust emissions (PM_{10} and $PM_{2.5}$) would be less than significant. Compliance with SJVAPCD's required dust control measures would not be considered a mitigation measure under CEQA because implementation of these measures is required under Regulation VIII. Therefore, construction-related emissions would result in a **less-than-significant** impact.

Operational Impacts. The River Trunk Realignment Project's criteria air pollutant emissions during operation are shown in **Table 6-6**. Emissions were estimated assuming that the proposed pumps would be operating continuously year-round, which is a conservative assumption. The River Trunk Realignment Project's operational emissions would be below CEQA significance thresholds and would therefore result in a **less-than-significant** impact.

Table 6-6. Estimated Project Operation Emissions

	Emissions (tons per year)							
	CO	**NO_X**	**ROG**	**SO_X**	**Exhaust PM_{10}**	**Fugitive PM_{10}**	**Exhaust $PM_{2.5}$**	**Fugitive $PM_{2.5}$**
Total	0.40	0.45	0.41	0.0007	0.026	0.0013	0.03	0.00034
SJVAPCD Significance Threshold (tons/year)	100	10	10	27	15		15	
Exceed Threshold?	No	No	No	No	No		No	

Source: Modeling conducted by Horizon Water and Environment in 2018 (Appendix B).

Overall Conclusion

In conclusion, with implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the Proposed Program's overall impacts would be **less than significant with mitigation**.

Mitigation Measure AQ-1: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10}

The following controls are required to be implemented by the City or its contractor at all construction sites.

- All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant.
- All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of water during work or by presoaking.
- When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.
- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant.
- Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Any site with 150 or more vehicle trips per day will prevent carryout and trackout.

Mitigation Measure AQ-2: Implement Enhanced Control Measures for Construction Emissions of PM_{10}

The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM_{10} impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements).

1. Limit traffic speeds on unpaved roads to 15 mph.
2. Install sandbags or other erosion-control measures to prevent silt runoff.

The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason.

1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
2. Install wind breaks at windward sides of construction areas.
3. Suspend excavation and grading activity when winds exceed 20 miles per hour (mph).

4. Limit the area subject to excavation, grading, and other construction activity at any one time.

5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.

Mitigation Measure AQ-3: Implement Control Measures for Operation Emissions of PM_{10} and for Ozone Precursors (ROG and NO_x)

In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified wastewater system sites when required to mitigate significant PM_{10} and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.

Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard (Significant and Unavoidable)

As discussed earlier, program-level components and the River Trunk Realignment Project would be located in an area that is in non-attainment for federal and state ozone and $PM_{2.5}$ standards and state standards for PM_{10}. Thus, the combined emissions of past, present, and probable future projects would have a significant cumulative impact on air quality in the project area. No single CIP, however, would be sufficient in size, by itself, to cause nonattainment of the regional air quality standards. The River Trunk Realignment Project would result in emissions of ozone precursors (ROG, NOx,), and particulate matter ($PM_{2.5}$, PM_{10}) below the significance thresholds for project-level impacts established by SJVAPCD (2015a, 2017f). With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, none of the program-level components or the River Trunk Realignment Project would result in mass emissions above the significance threshold. However, because these measures would not completely avoid emissions, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain **significant and unavoidable**.

Impact AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations (Less than Significant with Mitigation)

During construction activities for the proposed improvements, construction emissions have the potential to affect sensitive receptors located at and near program-level component sites and River Trunk Realignment Project work areas. These sensitive receptors include single-family residential units and schools around proposed improvement sites. Therefore, nuisances associated with fugitive dust and construction activity emissions would affect adjacent residences. During operational activities, stationary emission sources would also emit pollutants. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the impact on sensitive receptors from fugitive dust and other pollutants would be **less than significant with mitigation**.

Impact AQ-5: Create Objectionable Odors Affecting a Substantial Number of People (Less than Significant)

All Program-level Components

Construction Impacts. Construction activities of program-level components would not generate permanent or long-term objectionable odors. The odors associated with the operation of diesel-powered equipment for construction activities may be detected by nearby sensitive receptors. These odors would be of relatively short duration in any given location and would be unlikely to affect a substantial number of people at a given time, given that construction of the various Proposed Program components would be spread out over time, as well as factors such as the migration of construction equipment along pipeline routes during construction. This impact would be **less than significant**.

Operational Impacts. The SJVAPCD's GAMAQI identifies common types of facilities that have been known to produce odors in the San Joaquin Valley and distances from these sources that have the potential to result in significant odor impacts. For wastewater treatment facilities, the screening level distance is 2 miles. Numerous residences and other sensitive receptors are located within two miles of the Sutter Plant. As described in Section 6.3.2 (Table 6-3), SJVAPCD has received and confirmed odor complaints associated with the City's Sutter Plant facilities in the last three years (SJVAPCD 2017g). Odors from lift stations are not expected to be a concern because equipment is enclosed and underground.

The Proposed Program would include the replacement and operation of wastewater facilities and equipment, which would generally have a beneficial effect on existing odor impacts by ensuring that the City's treatment and collection system is functioning more efficiently, correctly, and reliably. Some program-level components are specifically designed to improve and minimize past sources of odor by enhancing biofilters and moving to more advanced treatment options that are less odorous methods. As discussed in Chapter 2, *Program Description*, odor control provisions would be included at the Sutter Plant for the new outfall pump station (SP-3), though these controls have not been defined at this time, and existing odor control biofilters and blowers would be floodproofed. Furthermore, after new primary treatment facilities have been constructed and are fully operating at the Jennings Plant, primary treatment facilities at the Sutter Plant would be demolished. For these reasons, odor issues would be expected to be reduced compared to baseline conditions, and this impact is considered **less than significant**.

River Trunk Realignment Project

Construction Impacts. Similar to the program-level components, construction of the River Trunk Realignment Project would not generate permanent or long-term objectionable odors. While odors associated with operating diesel-powered equipment for construction activities may be detected by nearby sensitive receptors, such odors would be of short duration and would be unlikely to affect a substantial number of people. This impact would be **less than significant**.

Operational Impacts. As described in Chapter 2, *Project Description*, the River Trunk Realignment Project includes the construction of odor controlling equipment (biofilter and odor-controlling vents) to minimize the potential objectionable odors from the project's proposed facilities. The nearest sensitive receptors to the project's pump stations are residences within 800 feet and the proposed regional park. By operating the odor controlling

equipment, this particular project would reduce odor emissions and result in a **less-than-significant impact**.

Overall Conclusion

Considering the WWMP components as a whole, the River Trunk Realignment Project would have less than significant odor effects, and odor issues would improve at the Sutter and Jennings Plants in the long-term. Odor impacts of lift stations would not be substantial given that the facilities are largely below ground. The Proposed Program's overall impact would be **less than significant**.

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Chapter 7
BIOLOGICAL RESOURCES

7.1 OVERVIEW

This chapter presents the environmental setting and impacts of the Proposed Program related to biological resources. The biological resources include special-status plant and wildlife species; sensitive natural communities, including jurisdictional wetlands and other waters; and wildlife movement corridors.

7.2 REGULATORY SETTING

7.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Government Code [USC] Section 1531 et seq.; 50 CFR Parts 17 and 222) provides for the conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The USFWS and the National Oceanic and Atmospheric Administration's (NOAA's) NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species; NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 et seq.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take or the permanent or temporary possession, of a migratory bird constitute violations of the MBTA. The MBTA also prohibits the destruction of occupied nests. USFWS is responsible for overseeing compliance with MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668; 50 CFR Part 22) prohibits take of bald and golden eagles and their occupied and unoccupied nests. USFWS administers the Bald and Golden Eagle Protection Act.

Clean Water Act

The Clean Water Act (CWA) (33 USC Section 1251) establishes the basic structure for regulating discharges of pollutants (including dredged or fill material) into waters of the United States (U.S.), including wetlands, and for regulating quality standards for surface waters. The CWA provides policies for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

CWA Section 404 prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a permit from USACE. CWA Section 401 requires that an applicant for a federal license or permit that allows activities with the potential to result in a discharge to waters of the U.S., including wetlands, obtain a state 401 water quality certification.

Wetlands and Other Waters Potentially Exempt from USACE Jurisdiction

A number of exemptions from CWA regulations exist for areas that would otherwise qualify as waters of the U.S. Certain areas, which meet the technical definition of wetlands, generally are not considered waters of the U.S. (33 CFR 328.3(a)). Such potentially non-jurisdictional areas include:

- Non-tidal drainage and irrigation ditches excavated on dry land;
- Artificially irrigated areas, which would revert to upland, if the irrigation ceased;
- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons; and
- Water filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States.

USACE and USEPA reserve the right to determine that a particular water body within the categories is a water of the U.S. on a case-by-case basis. In general, potentially non-jurisdictional waters such as ditches are delineated during a wetland delineation, and submitted for verification by USACE.

7.2.2 State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code (F&G Code) includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977, the California Endangered Species Act (CESA), and requirements for lake or streambed alteration agreements.

The Native Plant Protection Act (F&G Code Sections 1900–1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized under limited circumstances.

CESA (F&G Code Sections 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of F&G Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. CDFW may issue an incidental take permit authorizing take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

F&G Code Sections 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Sections 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

CDFW regulates activities that will interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the F&G Code requires that CDFW be notified of lake or streambed alteration activities. If CDFW subsequently determines that such an activity might adversely affect an existing fish and wildlife resource, it has the authority to issue a streambed alteration agreement, including requirements to protect biological resources and water quality.

7.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* was adopted in January 2019 (City of Modesto 2019). The Jennings Plant is not within the boundaries of the Urban Area General Plan, but other Proposed Program components are within these boundaries.

The General Plan's natural resource policies in the Open Space and Conservation element are based on the realization that the remaining riparian and riverine corridors are perhaps the most significant providers of wildlife habitat in the County. The General Plan seeks to protect riparian and wetland habitats while allowing compatible uses where appropriate.

The General Plan identifies two areas within the study area to be preserved as natural resources: the Tuolumne River and Dry Creek. It also provides the following guidance regarding wildlife and other natural resources:

> **Policy VII-E.2[a].** For proposed development consistent with the adopted Urban Area General Plan on lands within the Baseline Developed Area and Downtown Area, exclusive of lands within the Dry Creek and Tuolumne River Comprehensive Planning Districts, no further biological study is warranted unless habitat is present or if specific information concerning the known or potential presence of significant biological resources is identified in future updates of the California Natural Diversity Database (CNDDB), or through formal or informal input received from resource agencies or other qualified sources.

Stanislaus County General Plan 2015

The following goals and policies in the Conservation/Open Space Element of the Stanislaus County General Plan 2015 (2016) are relevant to the Proposed Program:

Conservation and Open Space Element

Goal One: Encourage the protection and preservation of natural and scenic areas throughout the County.

Policy Three: Areas of sensitive wildlife and plant life (e.g., vernal pools, riparian habitats, flyways and other waterfowl habitats, etc.) including habitats and plant species listed in the General Plan Support Document or by state or federal agencies shall be protected from development and/or disturbance.

Policy Four: Protect and enhance oak woodlands and other native hardwood habitat.

Goal Ten: Protect fish and wildlife species of the County.

Policy Twenty-nine: Habitats of rare and endangered fish and wildlife species, including special status wildlife and plants, shall be protected.

Stanislaus County does not have a tree protection ordinance.

7.2.4 HABITAT CONSERVATION PLAN

The PG&E San Joaquin Valley Operation & Maintenance Habitat Conservation Plan (PG&E O&M HCP) (PG&E 2006) covers specific PG&E activities throughout nine counties in the San Joaquin Valley, including Stanislaus County. The PG&E O&M HCP complies with the federal and state ESA and addresses multiple species and critical habitats. The PG&E O&M HCP outlines steps on minimizing, avoiding, and compensating for possible direct, indirect, and cumulative adverse effects on threatened and endangered species that could result from PG&E operation and maintenance activities in the San Joaquin Valley. The Proposed Program lies within the PG&E O&M HCP boundaries but is not a covered activity under the PG&E O&M HCP.

7.3 ENVIRONMENTAL SETTING

7.3.1 REGIONAL SETTING

The Proposed Program is situated in the central San Joaquin Valley. The study area generally has gently sloping terrain. The Tuolumne River flows westerly through the southern portion of Modesto. Dry Creek, a tributary to the Tuolumne River, runs through the central portion of Modesto before joining the Tuolumne River near South 9th Street and River Road. The San Joaquin River is located adjacent to the Jennings Plant. Elevations range from approximately 40 feet above mean sea level (msl) at the Jennings Plant to approximately 120 feet above msl in the eastern portion of the study area.

The landscape in the study area is dominated by the urban development and agriculture. Other land uses in the study area include wastewater treatment facilities, transportation, and open space. Natural habitats are mostly found along the Tuolumne River, Dry Creek, and along the San Joaquin River adjacent to the Jennings Plant.

7.3.2 SURVEYS AND METHODS

Horizon biologist Robin Hunter conducted a reconnaissance survey (a preliminary survey to identify habitat types, potential special-status species habitat, and other biological resource issues) of the alignment and staging areas for the River Trunk Realignment Project in June 2017. Reconnaissance surveys were not conducted for components that are evaluated in this EIR at a program level because locations of some project components are conceptual, project designs have not been finalized for the proposed CIPs, and some components would not be constructed for a decade or more. For these reasons, reconnaissance surveys would potentially be out of date and no longer accurate by the time components would be constructed.

Instead, several documents covering biological resources in the vicinity of the Program were reviewed for relevant habitat and setting information. This existing information is sufficient to identify sensitive resources and evaluate impacts at a program level. These resources include:

- City's Modesto Wastewater Master Plan Update Draft Master Environmental Impact Report (City of Modesto 2007);
- City of Modesto Wastewater Collection System Master Plan. Final Draft. (Carollo Engineers 2016a);
- City of Modesto Wastewater Treatment Master Plan. Final Draft. (Carollo Engineers 2016b);
- Wastewater System Upgrades Project Draft Master Environmental Impact Report. (City of Modesto 2014); and
- North Valley Regional Recycled Water Program Draft Environmental Impact Report/Statement (Bureau of Reclamation and City of Modesto 2015).

Special-status plant and animal species with the potential to occur within the Program were identified through a review of the following resources:

- USFWS list of federally endangered and threatened species that may occur in the study area, and/or may be affected by the Proposed Program (USFWS 2017a);
- CDFW's CNDDB queries for the U.S. Geological Survey (USGS) 7.5-minute quadrangles within the study area and the quadrangles immediately adjacent to them, which are: Salida, Riverbank, Brush Lake, Ceres, Manteca, Avena, Escalon, Oakdale, Waterford, Denair, Turlock, Hatch, Crows Landing, Patterson, and Westley, Ripon (CDFW 2017);
- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California queries for the USGS 7.5-minute quadrangles within the study area and the quadrangles immediately adjacent to them (CNPS 2017); and

- eBird records for the study area (eBird 2017a).

Results from these database queries are provided in [Appendix C, *Biological Resources Analysis Supporting Information]*.

7.3.3 VEGETATION AND LAND COVER – STUDY AREA

Descriptions of vegetation and land cover occurring in the study area are adapted from previous documents related to the study area, including the 2008 Master EIR for the City's general plan (ICF Jones & Stokes 2008), the City of Modesto Wastewater Master Plan Update EIR (Turnstone Consulting 2006), and the North Valley Regional Recycled Water Program DEIR/Statement (Bureau of Reclamation and City of Modesto 2015). Wildlife typically associated with these biological communities is also described below.

Urban

The majority of the study area consists of urban land cover. This includes roads, parking lots, housing, landscaping, golf courses and commercial and industrial facilities. This habitat consists of a wide range of ornamental/landscaped vegetation and some native plants. This habitat supports a variety of urban-adapted wildlife.

Birds typical of urban habitats include American crow (*Corvus brachyrhynchos*), scrub jay (*Aphelocoma californica*), mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), wrentit (*Chamaea fasciata*), bushtit (*Psaltriparus minimus*), and oak titmouse (*Baeolophus inornatus*). Common mammals include raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*).

Agricultural Lands

Agricultural lands within the study area include pastures, orchards, and row crops. Pastures are typically cultivated in grasses and/or legumes such as alfalfa (*Medicago sativa*), rescue grass (*Bromus catharticus*), Johnson's grass (*Sorghum halepense*), tall fescue (*Festuca arundinaceae*), and Italian ryegrass (*Festuca perennis*). The primary orchard crops in the vicinity of the Program components are almond (*Prunus dulcis*) and English walnut (*Juglans regia*) cultivars.

Pastures provide food, cover, and nesting habitat for wildlife species; the value of the habitat varies with crop type and agricultural practices. Bird diversity can be high in irrigated pastures (Hartman and Kyle 2010). Species commonly utilizing pasture lands include red-winged blackbird, Brewer's blackbird (*Euphagus cyanocephalus*), European starling (*Sturnus vulgaris*), house finch (*Carpodacus mexicanus*), killdeer (*Charadrius vociferous*), American crow, and American kestrel. Some pasture lands and crop fields provide suitable breeding habitat for northern harrier (*Circus cyaneus*). Small mammals such as gophers (*Thomomys* spp.) and voles (*Microtus* spp.) present in pastures and row crops provide important prey resources for raptors such as red-tailed hawk and Swainson's hawk.

In orchards, understory vegetation is generally removed, which limits the abundance and diversity of wildlife species in this habitat, but some wildlife adapted to agriculture may use these habitats. Species such as the side-blotched lizard (*Uta stansburiana*) can occur in this habitat type. American crow and yellow-billed magpies (*Pica nuttalli*), which forage on nut crops, are often present (City of Patterson 2010).

Riverine

The Tuolumne River and Dry Creek support multiple species of freshwater and anadromous fish. Introduced freshwater species greatly outnumber native species in the Tuolumne River and associated waterways. Largemouth and smallmouth bass (*Micropterus salmoides* and *M. dolomieu*), and sunfishes (*Lepomis* spp.) are abundant and occur in many aquatic habitats. Anadromous fish rear and spawn in freshwater habitats and spend the remainder of their life in marine habitats. The amount of time individuals spent as adults in the ocean or as juveniles in freshwater various from species to species. Special-status fish in the Tuolumne River include Chinook salmon (Central Valley fall- late fall-run Evolutionarily Significant Unit [ESU]) (*Oncorhynchus tshawytscha*), Central Valley steelhead (*Oncorhynchus mykiss*), Sacramento splittail (*Pogonichthys macrolepidotus*), and hardhead (*Mylopharodon conocephalus*).

Some irrigation ditches also provide riverine-type habitat, but these areas provide only marginal habitat for aquatic species.

Valley Foothill Riparian

Riparian habitat in the study area is limited to the Tuolumne River, San Joaquin River, and Dry Creek. Common species in this habitat include willows (*Salix* spp.), valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), wild grape (*Vitis californicus*), and California blackberry (*Rubus ursinus*). Invasive species in riparian areas include Himalayan blackberry (*Rubus armeniacus*) and arundo (*Arundo donax*). Blue elderberry (*Sambucus nigra* ssp. *caerulea*) shrubs are common in this habitat, and are the host plant for the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

Riparian areas provide food, water, shelter, and migration corridors for a wide variety of wildlife. Mammals such as raccoon, desert cottontail (*Sylvilagus audubonii*), deer mouse (*Peromyscus maniculatus*), striped skunk, American beaver (*Castor canadensis),* and coyote (*Canis latrans*) are common in riparian woodlands. Raptor species such as great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and American kestrel (*Falco sparverius*) may nest and forage in riparian habitats. A wide variety of passerine species use this habitat for breeding and foraging, including belted kingfisher (*Megaceryle alcyon*), downy woodpecker (*Picoides pubescens*), northern flicker (*Colaptes auratus*), black phoebe (*Sayornis nigricans*), bushtit, and Bewick's wren (*Thryomanes bewickii*).

Wetlands and Vernal Pools

Wetlands within the study area are located in transitions between aquatic and terrestrial habitats, such as along the fringes of riverine habitat or in seasonally flooded grasslands.

Vernal pools are shallow, ephemeral waterbodies that form in depressions in grasslands, pastures, and woodlands. Vernal pools support specialized species adapted to their conditions. Conversion of natural habitats to agricultural and developed uses has eliminated much of the vernal pool habitat in the Central Valley. While vernal pools are unlikely in areas where Program activities would take place, they could not be ruled out as a possibility. This

habitat type was also included in the Modesto General Plan Update Final Master EIR (ICF Jones and Stokes 2008) and other documents related to the study area.

In the study area, wetlands could occur adjacent to or within the Tuolumne River, Dry Creek, or the San Joaquin River. Vernal pools could potentially occur in pastures and grasslands. Wetlands in the study area are dominated by bulrushes (*Schoenoplectus* spp. and *Scirpus* spp.,), cattails (*Typha* spp.), sedges (*Carex* spp.), and rushes (*Juncus* spp.). Vernal pools support a number of special-status species, such as vernal pool fairy shrimp (*Branchinecta lynchi*) and San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*).

Wetlands provide important habitat for birds and amphibians. Common wildlife species in wetlands include bullfrog (*Lithobates catesbeianus*), egrets (*Ardea* and *Egretta* spp.), sora (*Porzana carolina*), American coot (*Fulica americana*), and red-winged blackbird (*Agelaius phoeniceus*).

Grassland

Grassland habitat consists of a mixture of annual and perennial grasses, and forbs. In the Central Valley, grasslands are dominated by a variety of non-native annual grasses such as wild oats (*Avena* spp.), ripgut brome (*Bromus diandrus*) or foxtail barley (*Hordeum murinum*), with native grass species only infrequently present. Grasslands are relatively uncommon in the study area and are generally somewhat disturbed Grasslands provide food and cover for birds, reptiles, and small mammals. Many raptors may forage in this habitat.

7.3.4 Vegetation and Land Cover – River Trunk Realignment Project Area

Vegetation and land cover within the River Trunk Realignment Project footprint includes Urban, Valley Foothill Riparian, Riverine, and Grassland. The majority of the River Trunk Realignment Project takes place in existing roadways with low or no biological resource value. The alignment crosses Dry Creek and its associated riparian area, as well as grassland between the Gallo Staging Area and the Pump Station Area (Figure 2-1 in Chapter 2, *Project Description*). The majority of grassland habitat is disturbed, and has been disked. The pipeline alignment also crosses through the Dryden Golf Course. This is an urban habitat that has more biological resource value than roadways.

7.3.5 Special-Status Species

For the purposes of this EIR, special-status plant and wildlife species refers to those species that meet one or more of the following criteria:

- Species that are listed as threatened or endangered under the ESA (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals);
- Species that are candidates for possible future listing as threatened or endangered under ESA (76 Federal Register [FR] 66370);
- Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (14 CCR 670.5);
- Plants listed as rare under the California Native Plant Protection Act of 1977 (F&G Code Section 1900 et seq.);

- Plants listed as California Rare Plant Rank (CRPR) 1, 2, 3, or 4;
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines, Section 15380);
- Animals fully protected in California (F&G Code Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and
- Nesting raptors protected in California (F&G Code Section 3503.5).

Special-status species known to occur within the general Proposed Program vicinity were identified from the queries described in Section 7.3.2. A list of these species is provided in **Table 7-1,** and **Figures 7-1** and **7-2** show the CNDDB occurrences of special-status plants and animals, respectively, and critical habitat[1] within a five-mile radius of the Proposed Program. The potential for special-status species to occur in areas affected by the Proposed Program was evaluated according to the following criteria:

- **None:** the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
- **Not Expected:** suitable habitat or key habitat elements might be present but might be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
- **Possible:** the presence of suitable habitat or key habitat elements that potentially support the species.
- **Present:** either the target species was observed directly or its presence was confirmed by diagnostic signs during field investigations or in previous studies in the area.

7.3.6 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities include those that are of special concern to resource agencies, such as those that are protected under CEQA, Section 1600 of the F&G Code, or Sections 401 and 404 of the CWA. These include sensitive communities documented in the *List of Vegetation Alliances and Associations* (California Department of Fish and Game [CDFG] 2010) or that are tracked in the CNDDB (CDFW 2017), riparian communities, and waters of the U.S. and state, including wetlands. Sensitive natural communities within the study area include wetland and riparian communities. Riparian communities are located along the Tuolumne River, Dry Creek, and San Joaquin River. Wetlands are also associated with these watercourses, and may also be found in non-riparian areas in the study area, such as depressions or other low places in the landscape. These communities could be affected by Program components that are constructed within or adjacent to riparian or wetland areas. Vernal pools are a subset of wetlands that are unlikely in areas where Program activities would take place, but could potentially occur in pastures and grassland in the study area.

[1] Critical habitats are specific geographic areas identified by USFWS or NMFS that contain features essential to the conservation of a federally-listed species and that may require special management and protection.

7.3.7 WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors are established migration routes between multiple locations used by resident and migratory species. CEQA requires the analysis of a project's potential to substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see Section 7.4.2, below). Hence, resource agencies consider wildlife corridors to be a sensitive resource in the evaluation of projects.

The Tuolumne River, Dry Creek, and San Joaquin River are wildlife movement corridors. The rivers themselves are a movement corridor for anadromous fish such as steelhead, and the adjacent riparian areas allow for terrestrial wildlife movement.

7.4 IMPACT ANALYSIS

7.4.1 METHODOLOGY

The Proposed Program includes four primary types of improvements, as identified in Chapter 2, *Program Description*: pipelines, lift stations, treatment plant components, and disconnections of stormwater/sanitary sewer cross-connects. The Proposed Program may affect biological resources through direct or indirect disturbance, modification, or destruction of habitat that results in death, injury, or harassment of individuals or populations of plant or animal species, or that impedes or prevents the dispersal of individuals or populations of special-status species. Impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats present in the study area under baseline conditions to conditions after construction of proposed components. The River Trunk Realignment Project was analyzed at a project level of detail, while all other components are evaluated at a program level of detail. Direct and indirect impacts on special-status species were assessed based on the potential for the species or their habitat to be disturbed or enhanced by construction of the Proposed Program.

Improvements included in the Proposed Program include replacement or upgrade of existing facilities. Existing facilities are considered developed, and are not expected to have biological impacts, impact habitat or riparian areas. New facilities in the Proposed Program may be in developed areas, or within the public right of way, which again are not expected to have biological resource impacts, however new facilities proposed adjacent to the Tuolumne River and Dry Creek or in non-developed areas will require the analysis outlined in the following sections.

In general, once construction is complete, operation and maintenance of the Proposed Program including the River Trunk Realignment Project, as described in Chapter 2, would continue similar to existing conditions. More staff would be required at the Jennings Plant in the long-term; while the level of ongoing operation and maintenance activities would be anticipated to increase from adding capacity to serve growth, this increased operation and maintenance is not anticipated to cause disturbance to biological resources. Unless otherwise stated below, impacts associated with operation and maintenance are considered unlikely or less than significant, and are not discussed further.

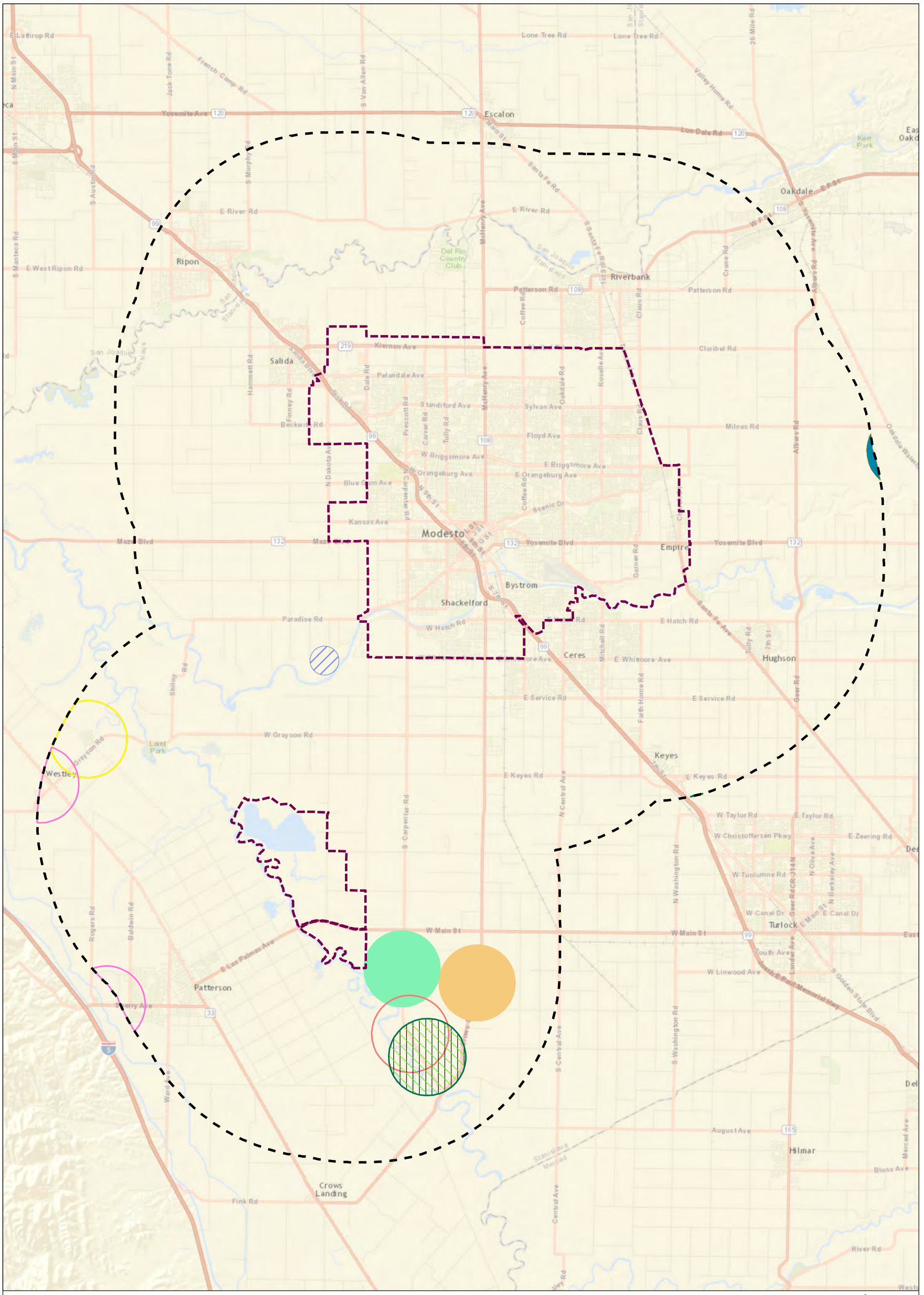

Figure 7-1
Special-Status Plant Species and Critical Habitat within 5 miles of the Proposed Program

N

0 1 2
Miles

Study Area Boundary
5-mile Buffer

California alkali grass
Colusa grass
Delta button-celery
Greene's tuctoria
San Joaquin Valley Orcutt grass
alkali milk-vetch
big tarplant
heartscale
lesser saltscale
prairie wedge grass
round-leaved filaree
subtle orache
vernal pool smallscale

Source: CDFW, CNDDB, July 2017 update

Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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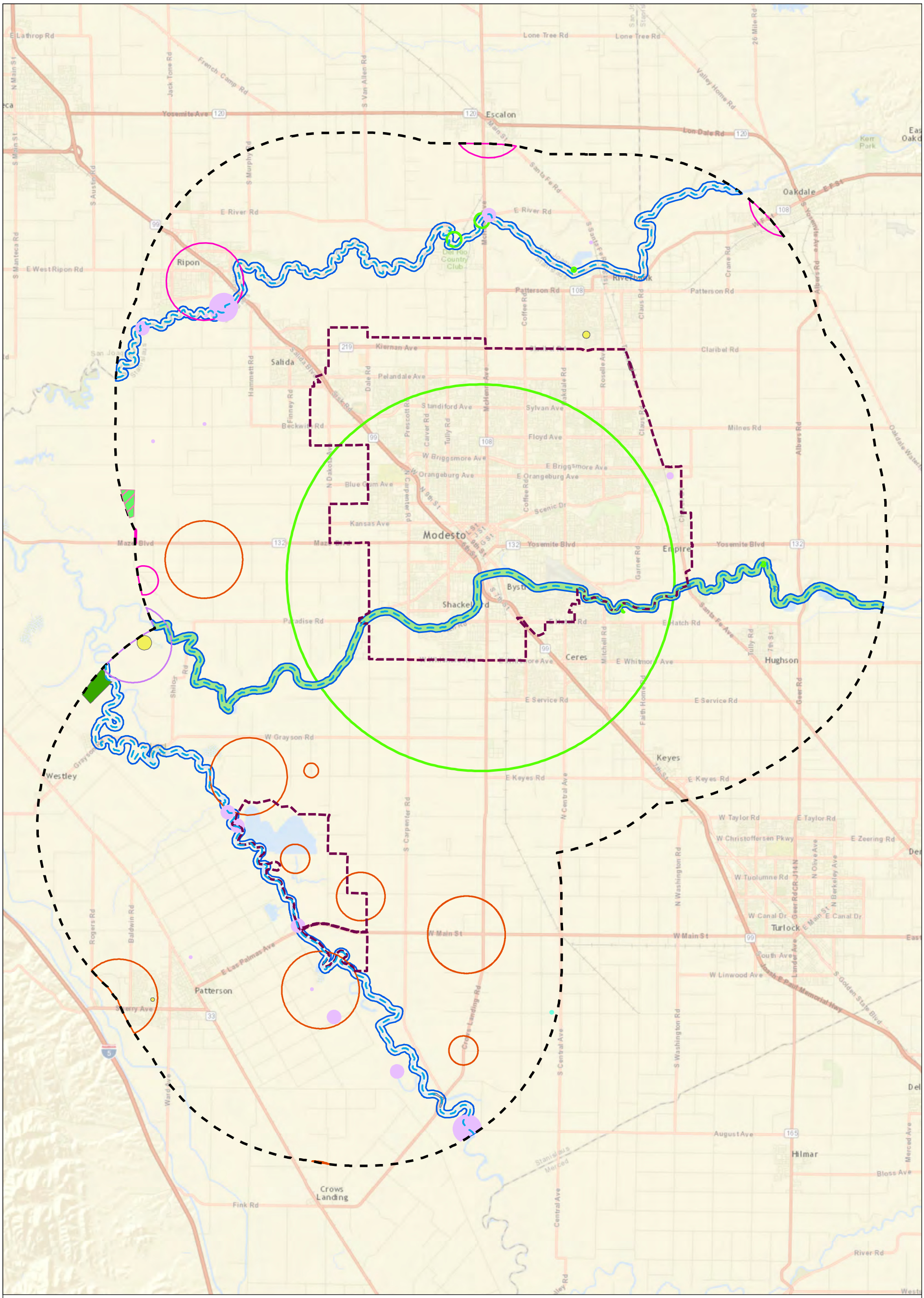

Figure 7-2
Special-Status Animal Species and Critical Habitat within 5 miles of the Proposed Program

City of Modesto
Wastewater Master Plan EIR

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Table 7-1. Special-Status Plant and Animal Species Known to Occur Within the Vicinity of the Study Area

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
PLANTS							
Astragalus tener var. *tener*	alkali milk-vetch	-	-	1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 meters. Blooms March through June	**Possible.** Potentially suitable habitat exists in grassland, and vernal pools in the study area.	**Not expected.** Marginally suitable habitat exists in the River Trunk Realignment Project in grassland.
Atriplex cordulata var. *cordulata*	heartscale	-	-	1B.2	Chenopod scrub, valley and foothill grassland, meadows and seeps. Alkaline flats and scalds in the Central Valley, sandy soils. 3-275 meters. Blooms April through October.	**Possible.** Potentially suitable habitat exists in alkaline grassland in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Atriplex coronata var. *coronata*	crownscale	-	-	4.2	Chenopod scrub, valley and foothill grassland, vernal pools. Valley and foothill grasslands, vernal pools. 1-590 meters. Blooms March through October.	**Possible.** Potentially suitable habitat exists in grassland and vernal pools in the study area.	**Possible.** Potentially suitable habitat exists in the River Trunk Realignment Project.
Atriplex minuscula	lesser saltscale	-	-	1B.1	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy, alkaline soils. 0-225 meters. Blooms May through October.	**Possible.** Potentially suitable habitat exists in alkaline grassland in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Atriplex persistens	vernal pool smallscale	-	-	1B.2	Vernal pools. Alkaline vernal pools. 3-115 meters. Blooms June through October.	**Possible.** Potentially suitable habitat exists in vernal pools in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Atriplex subtilis	subtle orache	-	-	1B.2	Valley and foothill grassland. Alkaline soils. 20-100 meters. Blooms June through September.	**Possible.** Potentially suitable habitat exists in alkaline grassland in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Blepharizonia plumosa	big tarplant	-	-	1B.1	Valley and foothill grassland. Dry hills and plains in annual grassland. Clay to clay-loam soils; usually on slopes and often in burned areas. 30-505 meters. Blooms July through October.	**Possible.** Potentially suitable habitat exists grassland in the study area.	**Possible.** Potentially suitable habitat exists in the River Trunk Realignment Project.
California macrophylla	round-leaved filaree	-	-	1B.2	Cismontane woodland, valley and foothill grassland. Clay soils. 15-1200 meters. Blooms March through May.	**Possible.** Potentially suitable habitat exists in grassland in the study area.	**Possible.** Potentially suitable habitat exists in the River Trunk Realignment Project.
Caulanthus lemmonii	Lemmon's jewelflower	-	-	1B.2	Pinyon and juniper woodland, valley and foothill grassland. 75-1585 meters. Blooms February through May.	**None.** The study area is not within the elevation range of this species.	**None.** The study area is not within the elevation range of this species.
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	-	-	4.2	Valley and foothill grasslands, vernal pools. Chaparral, cismontane woodland, coastal scrub. 0-100 meters. Blooms May through October.	**Possible.** Potentially suitable habitat exists in grassland and vernal pools in the study area.	**Possible.** Potentially suitable habitat exists in the River Trunk Realignment Project.
Clarkia breweri	Brewer's clarkia	-	-	4.2	Chaparral, cismontane woodland, coastal scrub. 215 – 1,115 meters. Blooms April through June.	**None.** The study area is not within the elevation range of this species.	**None.** The study area is not within the elevation range of this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Clarkia rostrata	beaked clarkia	-	-	1B.3	Cismontane woodland, valley and foothill grassland. North-facing slopes; sometimes on sandstone. 60-915 meters. Blooms April through May.	**None.** The study area is not within the elevation range of this species.	**None.** The study area is not within the elevation range of this species.
Eryngium racemosum	Delta button-celery	-	SE	1B.1	Riparian scrub. Seasonally inundated floodplain on clay. 1-335 meters. Blooms June through October.	**Possible.** Potentially suitable habitat exists along Dry Creek and the Tuolumne River.	**Possible.** Potentially suitable habitat exists in the River Trunk Realignment Project along Dry Creek.
Eschscholzia rhombipetala	diamond-petaled California poppy	-	-	1B.1	Valley and foothill grassland. Alkaline, clay slopes and flats. 30-625 meters. Blooms March through April.	**Possible.** Potentially suitable habitat exists in grassland in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Legenere limosa	legenere	-	-	1B.1	Vernal pools. In beds of vernal pools. 1-880 meters. Blooms April through June.	**Possible.** Potentially suitable habitat exists in vernal pools in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Monardella leucocephala	Merced monardella	-	-	1A	Valley and foothill grassland. Known from riverbeds, moist sandy depressions; requires moist subalkaline sands associated with low elevation grassland. 35-100 meters. Blooms May through August.	**Not expected.** This species is presumed extirpated and was last seen in Last seen in 1941.	**Not expected.** This species is presumed extirpated and was last seen in Last seen in 1941.
Neostapfia colusana	Colusa grass	FT	SE	1B.1	Vernal pools. Usually in the bottoms of large, or deep vernal pools; adobe soils. 5-125 meters. Blooms May through August.	**None.** Not within the current range for this species (USFWS 2017b).	**None.** Not within the current range for this species (USFWS 2017b).

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	FT	SE	1B.1	Vernal pools. 10-755 meters. Blooms April through September.	**None.** Not within the current range for this species (USFWS 2017c).	**None.** Not within the current range for this species (USFWS 2017c).
Puccinellia simplex	California alkali grass	-	-	1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. 1-915 meters. Blooms March through May.	**Possible.** Potentially suitable habitat exists in alkaline grassland and vernal pools in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Sphenopholis obtusata	prairie wedge grass	-	-	2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 300-2000 meters. Blooms April through July.	**None.** The study area is not within the elevation range of this species.	**None.** The study area is not within the elevation range of this species.
Tuctoria greenei	Greene's tuctoria	FE	SR	1B.1	Vernal pools. Vernal pools in open grasslands. 25-1325 meters. Blooms May through July.	**None.** Not within the current range for this species (USFWS 2017d).	**None.** Not within the current range for this species (USFWS 2017d).
FISH							
Hypomesus transpacificus	Delta smelt	FT	SE	-	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	**None.** The study area is outside the range of this species.	**None.** The study area is outside the range of this species

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Mylopharodon conocephalus	hardhead	-	SSC	-	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	**Present.** A recent CNDDB occurrence is located within the study area within the Tuolumne River.	**Possible.** Potentially suitable habitat is present in Dry Creek.
Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	FT	-	-	Populations in the Sacramento and San Joaquin rivers and their tributaries.	**Present.** A recent CNDDB occurrence is located within the study area within the Tuolumne River. This species may also stray into Dry Creek.	**Possible.** This species may stray into Dry Creek.
Oncorhynchus tshawytscha	Chinook salmon (Central Valley fall-late fall-run ESU)	-	SSC	-	Populations spawn in the Sacramento and San Joaquin rivers and tributaries. Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and high dissolved oxygen.	**Present.** This species occurs in the Tuolumne River and my stray into Dry Creek.	**Possible.** This species may stray into Dry Creek.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Oncorhynchus tshawytscha	Chinook salmon (Central Valley spring-run ESU)	Non-essential experi-mental pop-ulation	See FGC 2080.2 to 2080.4.		All spring-run Chinook salmon, including those that have been released or propagated, naturally or artificially, within the experimental population area, which is defined as the San Joaquin River from Friant Dam downstream to its confluence with the Merced River (exclusive). Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.	**Possible.** A nonessential experimental population has recently been reintroduced to the San Joaquin River (NMFS 2013). Individuals may potentially stray into the Tuolumne River or Dry Creek.	**Possible.** A nonessential experimental population has recently been reintroduced to the San Joaquin River (NMFS 2013). Individuals may potentially stray into Dry Creek.
Pogonichthys macrolepidotus	Sacramento splittail	-	SSC	-	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	**Possible.** Within the extant range for this species (UC Davis 2017).	**Possible.** Within the extant range for this species (UC Davis 2017).
INVERTEBRATES							
Branchinecta conservatio	Conservancy fairy shrimp	FE	-	-	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	**Not expected.** No known populations of this species are located within the study area (USFWS 2012a). Marginally suitable habitat exists in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Branchinecta lynchi	vernal pool fairy shrimp	FT	-	-	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Possible.** Potentially suitable habitat exists in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	-	-	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	**Possible.** Potentially suitable habitat exists in the study area where elderberry bushes are present.	**Possible.** Potentially suitable habitat exists where elderberry bushes are present. An elderberry bush was identified in the vicinity of the Dry Creek crossing exit pit, and several elderberry bushes were identified along the Tuolumne River in the vicinity of the Shackelford Pump Station.
Lepidurus packardi	vernal pool tadpole shrimp	FE	-	-	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	**Possible.** Potentially suitable habitat exists in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
AMPHIBIANS AND REPTILES							
Ambystoma californiense	California tiger salamander	FT	ST	-	Central Valley Distinct Population Segment federally listed as threatened. Santa Barbara and Sonoma counties Distinct Population Segment federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**Not expected.** No known extant populations of this species in the study area (USFWS 2017e).	**None.** No suitable habitat is present within the River Trunk Realignment Project.
Anniella pulchra	northern California legless lizard	-	SSC	-	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Not expected.** Marginally suitable habitat exists in riparian areas in the study area.	**Not expected.** Marginally suitable habitat is present within the River Trunk Realignment Project.
Emys marmorata	western pond turtle	-	SSC	-	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Possible.** Potentially suitable habitat exists in the study area.	**Possible.** Potentially suitable habitat exists in Dry Creek.
Gambelia sila	blunt-nosed leopard lizard	FE	SE	-	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	**None.** The study area is outside the current range for this species.	**None.** The study area is outside the current range for this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Masticophis flagellum ruddocki	San Joaquin coachwhip	-	SSC	-	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	**Not expected.** The study area is outside the current range for this species (CDFW 2012).	**Not expected.** The study area is outside the current range for this species (CDFW 2012).
Rana draytonii	California red-legged frog	FT	SSC	-	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**None.** This species is considered extirpated from the Central Valley (USFWS 2002).	**None.** This species is considered extirpated from the Central Valley (USFWS 2002).
Spea hammondii	western spadefoot	-	SSC	-	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Possible.** Potentially suitable habitat exists in the study area.	**None.** No suitable habitat is present within the River Trunk Realignment Project
Thamnophis gigas	giant garter snake	FT	ST	-	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.	**Not expected.** Potentially suitable habitat exists in the study area, but there have been no CNDDB occurrences within Stanislaus County.	**Not expected.** Marginally suitable habitat exists within Dry Creek.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
BIRDS							
Aquila chrysaetos	golden eagle	-	FP	-	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Present.** Species has been observed at the Jennings Plant (ebird.org 2017a). Flyover and foraging possible; no suitable nesting habitat.	**Possible.** Species has been observed at the Jennings Plant (ebird.org 2017a). Flyover and foraging possible; no suitable nesting habitat.
Agelaius tricolor	tricolored blackbird	-	SC, SSC	-	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Present.** CNDDB occurrences within the study area near the Jennings Plant.	**Not expected.** Marginally suitable habitat exists in the River Trunk Realignment Project.
Athene cunicularia	burrowing owl	-	SSC	-	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Possible.** Potentially suitable habitat exists in the study area.	**Not expected.** Marginally suitable habitat exists in the River Trunk Realignment Project. Disking of grassland habitat within the Project alignment makes occupation by this species unlikely.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Buteo swainsoni	Swainson's hawk	-	ST	-	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Present.** CNDDB occurrences within the study area near the Jennings Plant.	**Possible.** Potentially suitable foraging habitat is present in grassland habitat, and potentially suitable breeding habitat is present along Dry Creek and the Tuolumne River
Circus cyaneus	northern harrier	-	SSC	-	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	**Present.** Species has been observed at the Jennings Plant (ebird.org 2017a). Flood irrigated pastures provide potential nesting habitat.	**Not expected.** Marginally suitable habitat is present in the River Trunk Realignment Project.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT	SE	-	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**None.** The study area is not within the current range of this species (USFWS 2017f).	**None.** The study area is not within the current range of this species (USFWS 2017c).
Dendroica petechia	yellow warbler	-	SSC	-	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging. Also nests in montane shrubbery in open conifer forests.	**Present.** Species has been observed along the Tuolumne River in the study area (eBird 2017b).	**Not expected.** Habitat along Dry Creek is marginally suitable for this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Elanus leucurus	white-tailed kite	-	FP	-	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Present.** Species has been observed at the Jennings Plant (eBird.org 2017a). Riparian areas and isolated mature trees in agricultural areas provide potential nesting habitat.	**Possible.** Potentially suitable nesting habitat is present in along Dry Creek**.**
Haliaeetus luecocephalus	bald eagle	FD	SE, FP	-	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**Present.** Species has been observed at the Jennings Plant (eBird.org 2017a). Flyover and foraging possible; no suitable nesting habitat.	**Possible.** Species has been observed at the Jennings Plant (eBird.org 2017a). Flyover and foraging possible; no suitable nesting habitat.
Icteria virens	yellow-breasted chat	-	SSC	-	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	**Possible.** Potentially suitable habitat exists in the study area.	**Not expected.** Habitat along Dry Creek is marginally suitable for this species.
Lanius ludovicianus	loggerhead shrike	-	SSC	-	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Present.** Species may nest in riparian areas.	**Possible.** Potentially suitable foraging habitat is present in grassland habitat, and potentially suitable breeding habitat is present along Dry Creek and the Tuolumne River.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Melospiza melodia	song sparrow ("Modesto" population)	-	SSC	-	Emergent freshwater marshes, riparian willow thickets. Riparian forests, vegetated irrigation canals and levees. Inhabits cattails, tules and other sedges; also known to frequent tangles bordering sloughs.	**Possible.** Potentially suitable habitat exists in the study area.	**Not expected.** The River Trunk Realignment Project is not within the range for this population.
Vireo bellii pusillus	least Bell's vireo	FE	SE	-	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite.	**Not expected.** Species has recently been observed in restored riparian habitat at the San Joaquin River National Wildlife Refuge approximately 7 miles west of the study area (Howell et al. 2010). Some riparian areas in the study Area provide marginal breeding habitat. Due to the species rarity in the Central Valley and habitat quality, it is not expected to breed in the study area**.**	**Not expected.** Habitat in Dry Creek and along the Tuolumne River is marginally suitable for this species.
MAMMALS							
Corynorhinus townsendii	Townsend's big-eared bat	-	SSC	-	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Not expected.** Marginally suitable roosting habitat in existing buildings due to human presence.	**Not expected.** Marginally suitable roosting habitat exists in the River Trunk Realignment Project.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Eumops perotis californicus	western mastiff bat	-	SSC	-	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Not expected.** Marginally suitable roosting habitat exists in the study area.	**Not expected.** Marginally suitable roosting habitat exists in the River Trunk Realignment Project.
Lasiurus blossevillii	western red bat	-	SSC	-	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	**Possible.** Roosting habitat is present in riparian habitats. In the Central Valley, this species is strongly associated with riparian areas, especially with mature cottonwoods (*Populus* spp.) and sycamores (*Platanus racemosa*) (Pierson et al. 2006).	**Possible.** Roosting habitat is present in riparian habitats.
Neotoma fuscipes riparia	riparian (=San Joaquin Valley) woodrat	FE	SSC	-	Riparian areas along the San Joaquin, Stanislaus, and Tuolumne rivers. Need areas with mix of brush and trees. Need suitable nesting sites in trees, snags or logs.	**Not expected.** Known populations are limited to San Joaquin River National Wildlife Refuge and Caswell Memorial State Park (USFWS 2012b), which are approximately 7 and 5 miles west of the study area, respectively.	**Not expected.** Known populations are limited to San Joaquin River National Wildlife Refuge and Caswell Memorial State Park (USFWS 2012b), which are approximately 7 and 5 miles west of the study area, respectively.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area	Potential to Occur in the River Trunk Realignment Project
Sylvilagus bachmani riparius	riparian brush rabbit	FE	SE	-	Riparian areas on the San Joaquin River in northern Stanislaus County. Dense thickets of wild rose, willows, and blackberries.	**Not expected.** The study area is not within the known range of this species (USFWS 2017g). Existing populations are limited to Caswell Memorial State Park and a region in the south Delta near Lathrop (Kelly et al. 2011).	**Not expected.** The study area is not within the known range of this species (USFWS 2017g). Existing populations are limited to Caswell Memorial State Park and a region in the south Delta near Lathrop (Kelly et al. 2011).
Taxidea taxus	American badger	-	SSC	-	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Possible.** Potentially suitable habitat exists in riparian areas in the study area, and marginally suitable habitat exists in grasslands.	**Possible.** Potentially suitable habitat exists in the Dry Creek riparian corridor. Marginally suitable to no habitat present in open-cut portions of the River Trunk Realignment.
Vulpes macrotis mutica	San Joaquin kit fox	FE	ST	-	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**Not expected.** The study area is not within the known current range of this species and the study Area provides marginally suitable habitat (USFWS 2017h).	**Not expected.** The study area is not within the known current range of this species (USFWS 2017h).

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*** List of Abbreviations for Federal and State Species-Status:**

FE = Federally endangered
FT = Federally threatened
FD = Federally delisted

SE = State endangered
ST = State threatened
SC (Endangered) = State candidate for listing as endangered
SSC = State species of special concern

1A = plants presumed extirpated in California and either rare or extinct elsewhere.
1B = plants are considered rare, threatened, or endangered in California and elsewhere.
2B = plants are rare, threatened, or endangered in California, but more common elsewhere.
4 = plants of limited distribution - a watch list

Threat Ranks:

0.1-Seriously threatened in California (more than 80 percent of occurrences threatened/high degree and immediacy of threat)
0.2-Moderately threatened in California (20–80 percent of occurrences threatened/moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

CDFW (2017) used as the source for habitat descriptions and species status. Based on this information, qualified Horizon biologists determined the potential to occur.

7.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

7.4.3 Environmental Impacts

Impact BIO-1: Impacts on Special-Status Plants (Less than Significant with Mitigation)

Sutter and Jennings Plant Components

No special-status plants are likely to occur within these Program components. Therefore, impacts would be **less than significant**.

Outfall Pipelines and Collection System Components

Collection system components wholly within developed areas (such as paved streets) are not anticipated to have impacts on special-status plants. Special-status plants may occur in the vicinity of these Program components in habitats such as grassland, wetlands, vernal pools, and valley and foothill riparian (Table 7-1). Impacts to special-status plants such as alkali milk-vetch (*Astragalus tener* var. *tener*), heartscale (*Atriplex cordulata* var. *cordulata*), crownscale (*Atriplex coronata* var. *coronata*), lesser saltscale (*Atriplex minuscula*), vernal pool smallscale (*Atriplex persistens*), subtle orache (*Atriplex subtilis*), big tarplant (*Blepharizonia plumosa*), round-leaved filaree (*California macrophylla*), Parry's rough tarplant (*Centromadia parryi* ssp. *rudis*), Delta button-celery (*Eryngium racemosum*), diamond-petaled California poppy (*Eschscholzia rhombipetala*), legenere (*Legenere limosa*), and California alkali grass (*Puccinellia simplex*) could include removal of individuals, and indirect effects from sedimentation or changes to hydrology. Indirect effects from erosion or

sedimentation from Program components' construction could impact special-status plants in the vicinity of vernal pools, riparian areas, wetland areas, or grasslands. These indirect impacts could change the local hydrology which could alter the habitat for special status plants, and reduce habitat suitability to these plants. Program components constructed in grasslands could impact special-status species which grow in grasslands, if they are present in the project footprint. Impacts to special-status plants during construction of certain Program components would be minimized by using trenchless pipeline construction for crossings of the Tuolumne River and Dry Creek, where wetland and riparian habitat is located. The only collection system components that would cross wetland or riparian habitat are sewer rehabilitation components A-1 and A-2. A frac-out (described in Chapter 12, *Hydrology and Water Quality*) during trenchless pipeline construction could result in impacts to special-status plants such as removal of individuals or reduction in special-status plant habitat quality. These impacts would be significant.

As described in Chapter 11, *Hazards and Hazardous Materials*, many potential water quality impacts associated with the Proposed Program's construction activities would be minimized or avoided through compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a stormwater pollution prevention plan (SWPPP). As described in Section 12.2 in Chapter 12, *Hydrology and Water Quality*, the SWPPP must, among other things, present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. The SWPPP also would include spill prevention and response procedures for any hazardous materials used during construction. For Program components whose construction would disturb less than one acre, the City of Modesto's Standard Specifications require that all projects less than one acre develop a Local SWPPP or Erosion Control Plan and implement stormwater BMPs during construction. Implementation of BMPs to prevent erosion and potential discharge of sediment from construction sites, would avoid indirect impacts to plants from erosion or sedimentation during Program activities.

Several mitigation measures are proposed to avoid, reduce, or compensate for impacts to special-status plants. Implementation of Mitigation Measure HYD/WQ-1 would reduce impacts on special-status plants from a frac-out. Mitigation Measure BIO-1 would minimize the area of disturbance to habitat for special-status plants. Where disturbance within special-status plant habitat cannot be avoided, Mitigation Measure BIO-2 would identify the extent to which special-status plants are present and could be adversely affected by the project. For special-status plants found to be present, Mitigation Measure BIO-3 would require monitoring to confirm avoidance of identified special-status plant populations, and compensatory mitigation should special-status plants be adversely affected. Implementation of these measures would reduce this impact to **less than significant with mitigation.**

River Trunk Realignment Project

The footprint of the River Trunk Realignment Project supports grassland habitat that is suitable for crownscale, big tarplant, round-leaved filaree, and Parry's rough tarplant. Wetland and riparian areas associated with Dry Creek support habitat suitable for Delta button-celery. Impacts to these special-status plant species could include removal of individuals, and indirect effects from sedimentation or changes to hydrology. These impacts would be significant.

Impacts to Delta button celery would be minimized by using trenchless pipeline construction for the Dry Creek crossings where suitable habitat exists. As described above, preparation of a SWPPP would be required for this project. Implementation of SWPPP BMPs to prevent erosion and potential discharge of sediment from construction sites, would avoid indirect impacts to plants from erosion or sedimentation during construction of this project.

Implementation of Mitigation Measure HYD/WQ-1 would reduce impacts on Delta button celery from a frac-out. Mitigation Measure BIO-1 would identify the extent to which special-status plants are present and could be affected by the project component. Where special-status plants may be directly or indirectly affected, Mitigation Measure BIO-2 would identify and implement avoidance-related measures for the project component's design and/or construction. For special-status plants found to be present, Mitigation Measure BIO-3 would require monitoring to confirm avoidance of identified special-status plant populations, and compensatory mitigation should special-status plants be adversely affected.

Overall Conclusion

Considering the WWMP components as a whole, while no special-status plants are likely to be present at the Sutter or Jennings Plants, some special-status plants may occur in the vicinity of other Proposed Program components particularly in grassland, wetlands, vernal pools, and valley and foothill riparian habitats. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and HYD/WQ-1 would minimize adverse effects on special-status species. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation**.

Mitigation Measure BIO-1: Perform Focused Surveys for Special-status Plant Species.

Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species.

Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site as determined by the botanist. If special-status plants may be directly or indirectly affected, then Mitigation Measure BIO-2 shall be implemented.

Mitigation Measure BIO-2: Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species.

Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

If special-status plants are detected, the City shall implement the following measures to avoid, minimize, and compensate for impacts on special-status plant species:

- The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally-

sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally-sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally-sensitive area.

- If avoidance is not feasible, the Program proponent will consult with either CDFW or USFWS, or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival.

- The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the Rare Plant Plan. If success criteria are not met at that time, then mitigation activities and monitoring will continue until success criteria are met.

- As part of the Rare Plant Plan, the program proponent, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation, maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations

that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.

Impact BIO-2: Impacts on Vernal Pool Branchiopods and Western Spadefoot (Less than Significant with Mitigation)

All Program-level Components

Vernal pool branchiopods with the potential to occur in the study area include vernal pool fairy shrimp and vernal pool tadpole shrimp (*Lepidurus packardi*). These species could potentially occur within vernal pools located in the study area. Western spadefoot (*Spea hammondii*) also has the potential to occur in the study area and uses vernal pools as breeding habitat.

Grasslands and pastures within the study area have the potential to support vernal pool habitats. Proposed Program improvements that are not located in grasslands and pastures are not anticipated to have impacts on vernal pool habitat or inhabitants. If construction of Program components occurs in the microwatershed of vernal pools, such activity could result in sedimentation and alteration of hydrology and drainage patterns, which could impact habitat for vernal pool branchiopods and breeding habitat for western spadefoot. As described in Chapter 11, *Hazards and Hazardous Materials*, many water quality impacts associated with Proposed Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. As described in Section 12.2 in Chapter 12, *Hydrology and Water Quality*, the SWPPP must, among other things, present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Compliance with this permit and implementation of a SWPPP would reduce the potential for sediments and contaminants to enter pools or depressions where vernal pool branchiopods may occur and western spadefoot may breed, but construction impacts of individual Program components could nevertheless be significant. Implementation of Mitigation Measures BIO-3 and BIO-4 would reduce these impacts to **less than significant with mitigation**.

River Trunk Realignment Project

There is no habitat for vernal pool branchiopods within the vicinity of the River Truck Realignment Project; thus there would be **no impact**.

Overall Conclusion

Considering the WWMP components as a whole, no vernal pool branchiopods exist within the vicinity of the River Trunk Realignment Project, vernal pools are present in other locations throughout the study area and have potential to support vernal pool branchiopods. In the event that construction of program-level components occur in the microwatershed of vernal pools, impacts on vernal pool branchiopods and western spadefoot could occur. Implementation of Mitigation Measures BIO-3 and BIO-4 would minimize potential adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation**.

Mitigation Measure BIO-3: Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.

Applies to all Program-level components located in grasslands or pastures.

Prior to implementation of proposed CIPs in areas that could contain habitat for vernal pool branchiopods, the City shall retain a qualified biologist to conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City shall avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.

Mitigation Measure BIO-4: Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat.

Applies to all Program-level components located in grasslands or pastures.

If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures:

- After construction, restore surface topography and drainage to pre-construction conditions; and
- Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.

Impact BIO-3: Impacts on Valley Elderberry Longhorn Beetle (Less than Significant with Mitigation)

All Program-level Components

Valley elderberry longhorn beetle (VELB) is a federally-threated species, which is dependent on its host plant, elderberry. Elderberry shrubs may occur in riparian areas and along canals, or occasionally in non-riparian areas. Impacts of Proposed Program components located where elderberry shrubs are growing could include removal of elderberry shrubs, or ground disturbance within the rooting zone of these shrubs. If these shrubs were occupied by VELB, shrub removal or mortality could result in adverse effects on VELB. This would be considered a significant impact. Trimming of elderberry shrubs could result in injury or death of eggs, larva, or adults depending on the timing and extent of the trimming, a significant impact. No adverse impacts to the VELB would occur if trimming does not remove stems/branches that are ≥1 inch in diameter and is conducted between November and February (USFWS 2017i).

Implementation of **Mitigation Measures BIO-5 through BIO-7** would reduce impacts to VELB and its habitat to **less than significant with mitigation**.

River Trunk Realignment Project

During the reconnaissance survey, a blue elderberry shrub was observed near the exit pit for trenchless pipeline construction on the west side of Dry Creek. VELB exit holes were not observed on this shrub. Ground disturbance for this pit would be approximately 10 feet from the dripline of this shrub. Individual elderberry shrubs also have the potential to occur in riparian habitat along Dry Creek, but impacts to these shrubs and VELB would be avoided by the use of trenchless pipeline construction techniques.

Several blue elderberry shrubs were observed along the Tuolumne River in the vicinity of the Shackelford Pump Station. Ground disturbance for construction of the pump station would be approximately 40 feet from the dripline of these shrubs.

Impacts on VELB and its habitat would be significant. Implementation of Mitigation Measures BIO-5 through BIO-7 would reduce impacts to VELB and its habitat to **less than significant with mitigation.**

Overall Conclusion

The Proposed Program has could affect elderberry shrubs which provide habitat for VELB. If the shrubs are occupied and affected during construction, adverse effects on this federally-listed species could occur. Implementation of Mitigation Measures BIO-5 through BIO-7 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation**.

Mitigation Measure BIO-5: Avoid Impacts on VELB Habitat.

Applies to all Program-level Components and River Trunk Realignment Project

The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed improvements that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017f). This shall include the following avoidance measures:

- If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal.

- The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities.

- No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level.

- A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.

- A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and should be discussed with USFWS.

- As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March - July).

- If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter.

- Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method.

- Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry.

- Erosion control shall be implemented and the affected area shall be re-vegetated with appropriate native plants.

If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.

Mitigation Measure BIO-6: Implement VELB Compensatory Mitigation, if Necessary.

Applies to all Program-level Components and River Trunk Realignment Project

The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per Mitigation Measure BIO-7**.**

Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS.

Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio

applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used.

Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.

Mitigation Measure BIO-7: Transplant Elderberry Shrubs if Avoidance Is Not Feasible.

Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to Mitigation Measure BIO-6, the shrub shall be transplanted.

Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed:

- A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.
- Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the CNDDB.
- Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves.
- Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (www.tcia.org).

Impact BIO-4: Impacts on Special-status Fishes (Less than Significant with Mitigation)

Habitat in the study area for special-status fish species is limited to the Tuolumne River and Dry Creek. Special-status fish that are known to occur in the Tuolumne River include Chinook

salmon (Central Valley fall- and late fall-run ESU), Central Valley steelhead, Sacramento splittail, and hardhead. These species may also be present in Dry Creek.

Adult steelhead and Chinook salmon migrate through the Tuolumne River to reach spawning habitat upstream. Juvenile salmonids pass through the study area on their way out to the Pacific Ocean. Sacramento splittail may be present in this portion of the Tuolumne River in wet years. Hardhead are also known be present.

Sutter and Jennings Plant Components

Construction of proposed components at the Sutter and Jennings Plants would not occur in suitable habitat for special-status fishes. However, impacts to water quality due to construction of components near the Tuolumne River and the San Joaquin River could adversely affect special-status fishes. As discussed in Chapter 9, *Geology, Soils, and Seismicity,* construction of proposed components would include grading, excavation, trenching, or other construction-related activities that could loosen soils and increase the risk of erosion or sediment transport. Increases in sedimentation and turbidity have been shown to adversely affect fish physiology, behavior, and habitat. The effects of turbidity on fish include gill trauma, avoidance of habitat, changes in forage ability, increased predation risk, and reduced territoriality. The deposition of excessive fine sediment on the stream bottom could eliminate habitat for aquatic insects (a food source for fish); reduce density, biomass, numbers, and diversity of aquatic insects and aquatic vegetation; and reduce the quality of spawning habitat for fish. Potential impacts to special-status fish from water quality include reduction in habitat quality, injury, or mortality. These impacts would be considered significant.

As discussed in Chapter 12, *Hydrology and Water Quality*, water quality impacts of Program activities would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements for Program components with a disturbance footprint greater than one acre. The City of Modesto's Standard Specifications require that all projects less than one acre develop a Local SWPPP or Erosion Control Plan and implement stormwater BMPs during construction. Implementing these requirements would prevent substantial stormwater- and erosion-related water quality impacts.

Construction activities that take place near these rivers could result in discharges of hazardous materials if adequate precautions are not taken, a significant impact. As described in Chapter 11, *Hazards and Hazardous Materials*, the City would comply with all local, state, and federal regulations concerning hazardous materials handling and containment during construction of Program components. This includes standards for any secondary containment and countermeasures for hazardous materials used in construction and operation, and spill response procedures in case of an accidental release. Implementation of these requirements would prevent substantial hazardous materials-related water quality impacts from occurring during construction activities. This impact would be **less than significant**.

Outfall Pipelines, Collection System Components A-1 and A-2, and River Trunk Realignment Project

Construction-related impacts to special-status fish and their habitat would be minimized by using trenchless construction techniques for the new pipelines crossing the Tuolumne River and Dry Creek, as well as rehabilitation of an existing pipelines crossing the Tuolumne River

and another crossing Dry Creek (Components A-1 and A-2.). Impacts to special-status fish and their habitat may result from a frac-out of drilling fluids. Drilling fluids typically consist of bentonite, which is non-toxic to aquatic life. However, a frac-out may result in a temporary increase in turbidity or sedimentation that can adversely affect aquatic organisms by covering spawning and feeding areas, and clogging fish gills. These impacts are considered significant. Mitigation Measure HYD/WQ-1 would be implemented to reduce impacts in the event of a frac-out. With implementation of Mitigation Measure HYD/WQ-1, this impact would be **less than significant with mitigation**.

Trenchless construction under the Tuolumne River and Dry Creek is unlikely to result in any noise or vibration impacts on fish. Vibration from the drilling machinery is minimal and because the tunneling operation occurs below the river, it would be attenuated to an imperceptible level before it reaches the river bottom. No perceptible noise or vibration is likely to translate into the water. There would be no impacts from noise or vibration from drilling machinery on special-status fishes.

Construction activities of program-level components could result in water quality impacts which could adversely affect special-status fish. For example, temporary increases in sediment discharges and increased turbidity, and in the event of an accidental spill, hazardous materials could adversely affect water quality. These impacts would be significant. Such impacts would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit, SWPPP, and Local SWPPP requirements. With implementation of Mitigation Measure HYD/WQ-1, impacts would be **less than significant with mitigation**.

Other Collection System Components

Aside from Components A-1 and A-2, no other WWMP components would occur near waterways where potential adverse effects on special-status fish species could occur. Therefore, construction of other collection system improvements would result in **no impact** on special-status fish.

Overall Conclusion

WWMP components near the Tuolumne River and Dry Creek could adversely affect special-status fish species due to construction-related effects on water quality (e.g., increased sedimentation, turbidity, and hazardous materials in the event of an accidental spill). Implementation of Mitigation Measure HYD/WQ-1 would minimize adverse effects on water quality and reduce adverse effects on special-status fish. In conclusion, implementation of this mitigation measure would reduce the Proposed Program's overall impact to **less than significant with mitigation**.

Impact BIO-5: Impacts on Western Pond Turtle (Less than Significant with Mitigation)

Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

Potentially suitable habitat for western pond turtle occurs in the Tuolumne River and Dry Creek. Irrigation ditches with emergent vegetation provide marginally suitable habitat because they generally lack basking sites, the banks are very steep, and they are not perennially inundated. Canals do not provide suitable habitat.

Impacts to western pond turtle would be minimized by using trenchless pipeline construction where this species is most likely to occur, in the Tuolumne River and Dry Creek. The only collection system components that would cross the Tuolumne River and Dry Creek are Sewer Rehabilitation Components A-1 and A-2. The majority of collection system components would occur in urban portions of Modesto where habitat for western pond turtle is not present. Western pond turtle may also occur in upland areas. Construction activities that directly impact western pond turtle or their nests could result in significant impacts to this species.

The River Trunk Realignment Project crosses Dry Creek and the Tuolumne River, where there is suitable habitat for western pond turtle. The Dry Creek crossing would be a trenchless crossing, which would minimize impacts to western pond turtle. The west side of the pipeline connection for the crossing of the Tuolumne River is close to habitat for western pond turtle. Construction activities that directly impact western pond turtle or their nests in the vicinity of the Tuolumne River crossing could result in significant impacts to this species.

Mitigation Measure BIO-8 would avoid impacts to suitable habitat for this species to the extent feasible. Where disturbance of suitable habitat is unavoidable, the mitigation measure would require that impacts be minimized through pre-construction surveys, establishment of buffers, and monitoring. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Sutter and Jennings Plant Components

Wastewater treatment ponds provide potentially suitable habitat for this species (Rosenberg et al. 2009). Activities such as dredging in facultative ponds at the Jennings Plant could impact this species. Irrigation ditches with emergent vegetation provide marginally suitable habitat because they generally lack basking sites, the banks are very steep, and they are not perennially inundated.

Construction activities that directly impact western pond turtle or their nests could result in significant impacts to this species. Implementation of Mitigation Measure BIO-8 would reduce these impacts to **less than significant with mitigation.**

Overall Conclusion

While most collection system components would not occur near waterways, this species can occur in upland areas and in irrigation ditches. Construction activities in the vicinity of Tuolumne River or Dry Creek have higher potential to adversely affect western pond turtle or their nests. Implementation of Mitigation Measure BIO-8 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-8: Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.

Applies to all Program-level components adjacent to rivers and creeks and the River Trunk Realignment Project

Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, ponds, and sloughs

where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented.

- The project proponent will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating western pond turtles.
- If a western pond turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site (with authorization from CDFW).
- The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat.
- If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).

Impact BIO-6: Impacts on Burrowing Owl (Less than Significant with Mitigation)

All Program-level Components

Burrowing owls could occur within grasslands, agricultural habitats and canal and railroad right of ways where burrows are present. Collection system improvements, such as pipelines SO-2, SO-4, L-5, W-1, D-2, N-6, N-8, and N-9, and lift station LS#67 are located within agricultural lands. Collection system improvements such as EM-2, C-1, L-1, L-3, SO-1, SO-3, and N-5 and the third outfall pipeline are located in close proximity to agricultural lands. Rehabilitation pipeline B-1 is located within disturbed grassland and collection system improvements N-1 and N-2 are located near disturbed grassland habitat. If this species is present in the vicinity of Proposed Program-level components, construction activities could disturb burrowing owls through noise, visual distraction, or direct impacts to occupied habitat. These impacts would be considered significant. Implementation of Mitigation Measure BIO-9 would reduce impacts to this species. Where disturbance is unavoidable, impacts to burrowing owls would be minimized through establishing buffers around active burrows. If active burrows cannot be avoided, passive relocation techniques may be used. If relocation occurs, then compensation would be provided to offset impacts. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

River Trunk Realignment Project

No evidence of burrowing owl was observed during reconnaissance surveys conducted in June 2017. Grassland habitat between Dry Creek and the River Trunk Pump Station site is

marginally suitable for burrowing owl. The majority of this habitat has been disked, eliminating the burrow that this species depends upon for habitat. Burrowing owls are not likely to occur where ground-disturbing activities would occur during construction of River Trunk Realignment Project. Therefore, impacts would be **less than significant**.

Overall Conclusion

While the River Trunk Realignment Project would be unlikely to have adverse effects on burrowing owl, construction activities associated with some program-level components could occur in grassland or agricultural habitats where burrowing owl may be present. If present, implementation of Mitigation Measure BIO-9 would minimize adverse effects on this species. In conclusion, implementation of this mitigation measure would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-9: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary.

Applies to all Program-level components

Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented.

If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW.

If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.

Impact BIO-7: Impacts on Golden Eagle and Bald Eagle (Less than Significant)

Golden eagle and bald eagle are State Fully Protected species. CDFW cannot authorize take of these species. Golden eagles have been observed at the Jennings Plant (eBird 2017a), and are commonly observed in the canyons/foothills to the west of the study area. In central California, golden eagles nest primarily in large trees and cliffs within open grasslands and oak savanna, and occasionally in oak woodland and open shrublands (Hunt et al. 1999). The study area provides marginal foraging habitat and nesting is unlikely.

Bald eagles have been observed in canyons/foothills to the west of the study area and at Jennings Plant (eBird.org 2017a). In California, the majority of bald eagles nest in conifer trees near reservoirs (Jackman and Jenkins 2004). Typically, bald eagles forage near open water (rivers, lakes, reservoirs) where fish or waterfowl are abundant (USFWS 2007). The Tuolumne River, San Joaquin River, and possibly the Jennings Plant, provide potential foraging habitat. Large trees along the San Joaquin River and Tuolumne River are potential roost sites. Bald eagles are generally winter visitors in the Central Valley; nesting within the vicinity of the study area is unlikely. There are no published reports of nest sites on the San Joaquin Valley floor.

Impacts to non-breeding golden and bald eagles may include visual distractions, noise, and possibly temporary displacement from suitable foraging areas. Project activities are not likely to reduce fitness, affect breeding, result in "take" of these species, or result in any substantial adverse impacts to eagles. Therefore, impacts to golden and bald eagles would be **less than significant**.

Impact BIO-8: Impacts on Raptors, Including Special-status Species (Less than Significant with Mitigation)

Numerous raptors are known to nest and forage in habitats in the study area. Non-listed raptors commonly observed in the vicinity of the study area include red-tailed hawk, American kestrel, red-shouldered hawk, and merlin (*Falco columbarius*), among others. Special-status raptors (excluding burrowing owls, golden eagle, and bald eagle) known to occur in the vicinity of the study area include Swainson's hawk, white-tailed kite, and northern harrier (Table 7-1). These species have been observed in the study area and are known to nest locally. Riparian trees along the Tuolumne River and Dry Creek provide potential nesting habitat for Swainson's hawk and white-tailed kite; isolated mature trees in adjacent fields may also be used for nesting. These raptors commonly forage in agricultural fields. Northern harriers nest on the ground in open areas, and may nest in agricultural fields. Program components in the vicinity of suitable nesting habitat for Swainson's Hawk and white-tailed kite include the third outfall, sewer rehabilitation components C-1, CT-1, B-1, RT-9, RT-10, treatment plant components, and the River Trunk Realignment Project.

Construction in the vicinity of raptor nest sites could disturb nesting raptors through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., tree removal or ground disturbance). Impacts to Swainson's hawk and white-tailed kite would be minimized by using trenchless construction techniques for crossing of the Tuolumne River and Dry Creek, where nesting is most likely to occur. However, special-status raptors could nest in relatively close proximity to trenchless construction operations, and in other portions of the Program area. For the River Trunk Realignment Project, special-status species such as Swainson's hawk and white-tailed kite could nest in riparian habitat adjacent to the entry and

exit pits for the trenchless crossing of Dry Creek. Noise from construction equipment could disturb nesting raptors in these areas, if present. Thus, there would be the potential for disturbance of nesting raptors. Impacts that result in nest abandonment, nest failure, or reduced health or vigor of nestlings are considered significant.

Horizon biologists have conducted protocol surveys for Swainson's hawk in Stanislaus County annually since 2012. The surveys have documented nest sites and successful fledging of juveniles from nests located adjacent to busy roads, railroad tracks, residences, industrial sites, commercial businesses, and various agricultural operations. Swainson's hawks observed during numerous surveys appear to be tolerant of human activity. Bechard et al. 2010 report that Swainson's hawk are generally tolerant of regular, ongoing human activities around nest sites in agricultural and urban landscapes, but may abandon nest in response to loud, irregular, unpredictable activities. It is possible that construction equipment, worker vehicles, and increased human presence during construction of proposed CIPs may cause physiological stress resulting in nest abandonment or behavior modification that may indirectly lead to nesting failure or mortality of Swainson's hawk chicks. Direct mortality or injury from proposed construction activities is unlikely.

Construction of program-level components such as those planned at the Jennings Plant (e.g., new sludge drying beds) could result in the loss of suitable foraging habitat for Swainson's hawk. This impact would be considered significant.

Construction of the River Trunk Realignment Project would result in temporary disturbance of foraging habitat for Swainson's hawk in the grassland to the west of the Dry Creek Crossing. It would also result in permanent loss of approximately 0.3 acre of marginally suitable foraging habitat in the footprint of the Shackelford pump station. This impact would be considered significant.

Implementation of Mitigation Measure BIO-10 (Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species), which would require preconstruction surveys for nesting raptors and establishment of no-disturbance buffers, and Mitigation Measure BIO-11 (Compensate for Loss of Raptor Foraging Habitat), which would require mitigation for the loss of suitable foraging habitat, would reduce this impact to **less than significant with mitigation.** Implementation of Mitigation Measure BIO-11 for the River Trunk Realignment Project would result in provision of 0.3 to 0.6 acre of Swainson's hawk habitat management lands, the amount depending upon percentage of active management of the lands (see Mitigation Measure BIO-11 for details). Alternatively, 0.3 acre of Swainson's hawk mitigation credit may be purchased from a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the Proposed Program area,

Mitigation Measure BIO-10: Avoid and Minimize Impacts on Raptors, including Special-status Species.

Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius

around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests.

If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.

Mitigation Measure BIO-11: Compensate for Loss of Raptor Foraging Habitat.

Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the study area, such as the Dutchman Creek Conservation Bank.

The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program-level components are assumed to be within 1 mile of an active Swainson's hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows:

- 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk; or

- 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands.

The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.

Impact BIO-9: Impacts on Special-status Passerine Species and Birds Protected under the MBTA (Less than Significant with Mitigation)

Sutter and Jennings Plant Components

Special-status passerines that may nest in the vicinity of the Sutter and Jennings Plants include tricolored blackbird (*Agelaius tricolor*), loggerhead shrike (*Lanius ludovicianus*),

yellow-breasted chat (*Icteria virens*) and yellow warbler (*Dendroica petechia*). Various birds, such as red-winged blackbird (*Agelaius phoeniceus*), cliff swallow (*Petrochelidon pyrrhonota*), and mourning dove (*Zenaida macroura*), protected by the MBTA could also occur in the vicinity of proposed components at the Sutter and Jennings Plant.

Construction could disturb nesting passerines through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Nest failure or removal of a nest are considered significant impacts.

Implementation of Mitigation Measure BIO-12 would minimize impacts to passerines by conducting pre-construction surveys during the nesting season and establishing buffers around active nests. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

Portions of the proposed outfall pipeline alignments, collection system components, and the River Trunk Realignment Project cross sensitive habitat in the Tuolumne River and Dry Creek where nesting of special-status passerines are most likely to occur. The only collection system components that would cross these habitats are Sewer Rehabilitation Components A-1 and A-2. Impacts would be minimized by using trenchless construction techniques for activities crossing these habitats. However, construction could still disturb nesting passerines or other birds protected by the MBTA through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Reconnaissance surveys for the River Trunk Realignment Project identified swallow nests on the 9th Street Bridge, and other birds protected by the MBTA may nest in proximity to the project site. Additionally, nesting birds protected by the MBTA could occur in the vicinity of proposed outfall pipeline alignments, collection system components. Nest failure or removal of a nest are considered significant impacts. Implementation of Mitigation Measure BIO-12 would minimize impacts to passerines by conducting pre-construction surveys during the nesting season and establishing buffers around active nests. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Overall Conclusion

Construction activities that take place at the Sutter and Jennings Plants, Tuolumne River and Dry Creek could affect habitat where special-status passerines are likely to be present. Implementation of Mitigation Measure BIO-12 would minimize adverse effects by conducting pre-construction surveys during nesting season and establishing buffers around active nests. In conclusion, implementation of this mitigation measure would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-12: Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary.

Applies to all Program-level components and River Trunk Realignment Project

The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the

start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required.

If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.

Impact BIO-10: Impacts on Special-status Mammals (Less than Significant)

Special-status mammals with the potential to occur in the vicinity of the proposed outfall pipeline components and collection system component sites include western red bat (*Lasiurus blossevillii*) and American badger (*Taxidea taxus*). Breeding of western red bats are strongly associated with Central Valley riparian habitat, especially mature stands of cottonwoods (*Populus* spp.) and sycamores (*Platanus* racemosa) (Pierson et al. 2006), and may roost in trees along the Tuolumne River and Dry Creek. The only collection system components that would cross these habitats are Sewer Rehabilitation Components A-1 and A-2. It riparian trees would be removed for construction of these two components. Non-riparian trees in the vicinity of proposed collection system components are generally located in areas with a relatively high level of human activity. The proximity to human activity makes it unlikely that these trees would be used as special-status bat habitat. The Tuolumne River floodplain provides potential foraging and dispersal habitat for badgers. Impacts to western red bat and American badger would be minimized by using trenchless construction techniques in the riparian areas where these species may occur. For these reasons, impacts to special-status mammals would be less than significant.

Special-status mammals are unlikely to occur in the vicinity of Sutter and Jennings Plant components. These wastewater treatment plants are within the range of Townsend's big-eared bat (*Corynorhinus townsendii*), and this bat is known to roost in buildings and other structures. However, this species is very sensitive to human disturbance and would not be likely to occur within structures at either treatment plant. Impacts to special-status mammals would be less than significant.

In the vicinity of the River Trunk Realignment Project, the Dry Creek riparian area provides potential foraging and dispersal habitat for badgers. Impacts to western red bat and American badger would be minimized by using trenchless construction techniques in the riparian areas where these species may occur. Removal of suitable special-status bat roosting habitat is unlikely for this project. Due to avoidance of suitable habitat for special-status mammals, impacts on these species would be unlikely.

For the reasons described in the paragraphs above, the Proposed Program as a whole would have **less-than-significant** impacts on special-status mammals.

Impact BIO-11: Impacts on Riparian Habitat and Other Sensitive Natural Communities (Less than Significant with Mitigation)

Outfall Pipelines, Collection System Components, and River Trunk Realignment Project

Portions of the proposed outfall pipeline components, collection system components, and River Trunk Realignment Project would traverse riparian habitat and associated wetlands. The proposed outfall pipeline components and Sewer Rehabilitation Component A-2 would cross riparian habitat in the Tuolumne River and Sewer Rehabilitation Component A-1 would cross Dry Creek. The River Trunk Realignment Project would cross riparian habitat associated with Dry Creek. Impacts to riparian habitat would be avoided by the use of trenchless construction techniques in riparian habitat. If a frac-out were to occur beneath riparian habitat, direct impacts on this habitat could occur.

Additionally, vernal pool habitat may be present in areas where outfall pipelines and collection system components would be constructed in grasslands and pastures. Construction-related impacts on vernal pool habitats could include sedimentation or alteration in drainage patterns. These impacts are considered significant. SWPPP and Local SWPPP requirements would reduce sedimentation. Implementation of Mitigation Measure HYD/WQ-1, which would require preparation of a frac-out Contingency Plan; and Mitigation Measures BIO-3 and BIO-4, which would require avoidance and/minimization of impacts on vernal pools, would reduce this impact to **less than significant with mitigation**.

Sutter and Jennings Plant Components

Proposed components at the Jennings and Sutter Plants would generally take place in urban/developed habitats, and would not occur in sensitive natural communities. This impact would be to **less than significant**.

Overall Conclusion

Considering the WWMP components as a whole, while proposed construction activities at the Jennings and Sutter Plants would not affect sensitive natural communities, construction of other components would traverse riparian habitat and could result in adverse effects to this natural community in the event of a frac-out. Effects on vernal pool habitat could also occur due to construction of some program-level components. These impacts would be significant. SWPPP and Local SWPPP requirements would reduce adverse effects. Implementation of Mitigation Measures HYD/WQ-1 would minimize adverse effects. In conclusion, implementation of Mitigation Measures BIO-3 and BIO-4 would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Impact BIO-12: Impacts on Federally Protected Wetlands (Less than Significant with Mitigation)

Collection System Components (except A-1 and A-2), Stormwater/Sanitary Sewer Disconnection, and Other City-wide Projects

The study area contains wetlands and waters that are likely to be regulated by the USACE and USEPA under Section 404 the CWA. In the study area, the Tuolumne River is considered Traditional Navigable Waters of the U.S., as is the San Joaquin River adjacent to the Jennings Plant. Other wetlands and waters with a "significant nexus" to the Tuolumne or San Joaquin River would also be considered jurisdictional waters of the U.S. Wetlands and waters would

be preliminarily identified. Drainages excavated wholly in uplands and draining only uplands are not likely to be jurisdictional features.

Program components located in or adjacent to wetlands and waters could cause significant impacts to wetlands or waters through temporary or permanent fill, and erosion or sedimentation. Implementation of SWPPP and Local SWPPP requirements would reduce sedimentation, Mitigation Measure BIO-13, which would avoid and minimize impacts to wetlands to the maximum extent practicable; and Mitigation Measure BIO-14, which requires regulatory permits for work in wetlands and waters and compensatory mitigation for unavoidable impacts to wetlands and waters, would reduce this impact to **less than significant with mitigation**.

Sutter and Jennings Plant Components

Wetlands within the spray fields associated with the Jennings Plant, if any, as well as treatment ponds associated with the Sutter Plant and the Jennings Plant are also not likely to be considered jurisdictional because they are artificially irrigated areas, which would revert to upland if the irrigation ceased, and artificial ponds created by excavating dry land used exclusively for such wastewater treatment. Impacts to these features, such as dredging in facultative ponds would be considered **less than significant**.

Outfall Pipelines and Components A-1 and A-2

These Program components and the River Trunk Realignment Project would avoid impacts on wetlands and waters through the use of trenchless pipeline construction for crossings of Dry Creek and the Tuolumne River. If a frac-out were to occur beneath wetlands, significant direct impacts could occur. Implementation of Mitigation Measure HYD/WQ-1, which requires preparation of a Frac-out Contingency Plan would reduce impacts to wetlands and waters. Other significant impacts to wetlands and waters could occur through temporary or permanent fill, and erosion or sedimentation. Implementation of SWPPP and Local SWPPP requirements, would reduce erosion and sedimentation impacts. Implementation of Mitigation Measures **BIO-13 (Avoid and Minimize Impacts on Federally Protected Wetlands)**, and **BIO-14 (Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State)** would reduce this impact to **less than significant with mitigation**.

River Trunk Realignment Project

The River Trunk Realignment Project would avoid impacts on wetlands and waters through the use of trenchless pipeline construction for the crossing of Dry Creek. This would completely avoid fill in federally-protected wetlands. If a frac-out were to occur beneath wetlands, significant direct impacts could occur. Implementation of Mitigation Measure HYD/WQ-1, which requires preparation of a Frac-out Contingency Plan would reduce the potential for impacts to wetlands and waters. The crossing of the Tuolumne River would be accomplished by connecting into existing siphons. Implementation of Mitigation Measures HYD/WQ-1, BIO-13 and BIO-14, and by complying with SWPPP requirements in the NPDES Construction General Permit, would reduce this impact to **less than significant with mitigation**.

Overall Conclusion

Although activities at the Sutter and Jennings Plants would not likely impact wetlands or waters of the U.S., other program-level components could result in such impacts including those that would take place near Dry Creek and the Tuolumne River. Implementation of SWPPP and Local SWPPP requirements, would reduce erosion and sedimentation impacts. Implementation of Mitigation Measures HYD/WQ-1, BIO-13, and BIO-15 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-13: Avoid and Minimize Impacts on Federally Protected Wetlands.

Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project.

The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands.

If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of Mitigation Measure BIO-14. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters, and for all activities less than one acre of disturbance, a Local SWPPP shall be implemented. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.

Mitigation Measure BIO-14: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.

Applies to Outfall Pipelines, Collection System Components, and River Trunk Realignment Project.

The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. S19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.

Impact BIO-13: Impacts on Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites (Less than Significant with Mitigation)

Sutter and Jennings Plant Components and Collection System Components (except A-1 and A-2)

The majority of Sutter and Jennings Plant components and Collection System Components (except Components A-1 and A-2, addressed below) would be constructed in previously developed areas or agricultural lands that do not function as a significant movement corridor for fish and wildlife. Some wildlife breeding does occur in agricultural lands and wetlands, as described in Section 7.3.3. At the Jennings Plant, the new DAF Effluent Pipeline to Irrigation Forebay would be constructed within approximately 1,250 feet of the San Joaquin River, but this component is on the opposite side of the levee for the river and is unlikely to cause significant impacts on wildlife movement or breeding.

Impacts on breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season (through implementation of Mitigation Measures BIO-9, BIO-10, and BIO-12). Open-cut pipeline construction, such as for Jennings Plant pipelines, would create temporary barriers to wildlife movement in agricultural lands and ruderal habitat and result in a significant impact. Impacts of open-cuts on wildlife movement would be minimized by implementation of **Mitigation Measure BIO-15 (Install Temporary Trench Plates over Open Trenches)**, which requires that trenches be covered at the end of each work day. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season. In addition, impacts to breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season and implementing appropriate measures, such as no-work buffer areas if necessary, to minimize impacts on breeding wildlife (see Mitigation Measures BIO-8, BIO-9, BIO-11, and BIO-12). These Program Components would not create any permanent barriers to wildlife movement or permanently disrupt breeding sites. With implementation of the above mitigation measures, impacts would be **less than significant with mitigation**.

Outfall Pipelines, Components A-1 and A-2, and River Trunk Realignment Project

As described in Section 7.3.3, several fish and wildlife species utilize the Tuolumne River, and to a lesser degree Dry Creek, and adjacent riparian habitat as breeding sites and a migration corridor. Additionally, wildlife breeding does occur in agricultural lands and non-riparian wetlands. Impacts to wildlife migration and breeding in these riverine and riparian areas would be avoided by the use of trenchless construction methods.

In addition, impacts to breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season (see Mitigation Measures BIO-8, BIO-9, BIO-11, and BIO-12). Open-cut pipeline construction would create temporary barriers to wildlife movement, a significant impact Impacts of open-cuts on wildlife movement would be minimized by implementation of Mitigation Measure BIO-15, which requires that trenches be covered at the end of each work day. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season. These Program Components and the River Trunk Realignment Project would not create any permanent barriers to wildlife movement or permanently disrupt breeding sites. With

implementation of the above mitigation measures, impacts would be **less than significant with mitigation**.

Overall Conclusion

Construction of most WWMP components would occur in developed areas or agricultural lands that do not function as wildlife movement corridors for fish and wildlife but open-cut pipeline construction could temporarily create barriers to wildlife movement. Implementation of Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, BIO-12, and BIO-15 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-15: Install Temporary Trench Plates over Open Trenches.

Applies to all Program-level Components and River Trunk Realignment Project

The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.

Impact BIO-14: Conflict with Local Ordinances or Policies Protecting Biological Resources (Less than Significant with Mitigation)

Implementation of Mitigation Measures BIO-1 through BIO-15 would ensure that the Proposed Program would be consistent with all local ordinances and policies protecting biological resources, reducing impacts to a level that is **less than significant with mitigation**.

Chapter 8
CULTURAL, PALEONTOLOGICAL, AND TRIBAL CULTURAL RESOURCES

8.1 Overview

This chapter describes the regulatory setting, the study area's cultural resources setting, and impacts of the Proposed Program related to cultural and paleontological resources. Cultural resources include prehistoric and historic-era archaeological sites; tribal cultural resources (TCRs) or traditional cultural properties (TCPs); and historic-era buildings, structures, landscapes, districts, and linear features. Prehistoric archaeological sites are places where Native Americans lived or carried out activities during the prehistoric period, which is generally defined as before the early 1800s in the study area. Historic-era archaeological sites reflect the activities of people after initial exploration and settlement in the region during the early 1800s. Native American sites can also reflect the historic era. Prehistoric and historic-era sites may contain artifacts, cultural features, subsistence remains, and/or human burials. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. TCPs can include TCRs, but they also encompass resources that are culturally important to any community.

Paleontological resources are the fossil remains of prehistoric flora and fauna, or traces of evidence of the existence of prehistoric flora and fauna. This chapter addresses the occurrence of paleontological resources within the Program area and the impact that construction activities and operation of the Proposed Program will have on scientifically important fossil remains, as identified in the State CEQA Guidelines. The analysis presented in this chapter conforms to the Society of Vertebrate Paleontology criteria.

The purpose of this chapter is to describe the regulatory setting associated with cultural resources (including TCRs), and paleontological resources, the affected environment for these resources, Program impacts on cultural and paleontological resources, and mitigation measures that would reduce these impacts.

The following key data sources support this chapter:

- Records search from the North Central Information Center of the California Historical Resources System at California State University, Sacramento;
- Files search from the California Native American Heritage Commission (NAHC); and
- The City of Modesto, City of Ceres, and Stanislaus County general plans.

8.2 Regulatory Setting

8.2.1 Federal Laws, Regulations, and Policies

National Historic Preservation Act and Implementing Regulations

The River Trunk Realignment Project would require a permit from USACE under Section 404 of the CWA. Other future program-level components may also require a permit from USACE under Section 404 of the CWA as well. Projects that require federal permits, receive federal funding, or are located on federal lands must comply with 54 USC 306108, formally and more commonly known as Section 106 of the National Historic Preservation Act (NHPA). To comply with Section 106, a federal agency must "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places." The implementing regulations for Section 106 are found in 36 CFR Part 800, as amended (2004).

The implementing regulations of the NHPA require that cultural resources be evaluated for their eligibility to be listed in the National Register of Historic Places (NRHP) if they cannot be avoided by an undertaking or project. To determine if a site, district, structure, object, and/or building is significant, the NRHP Criteria for Evaluation are applied. Pursuant to 36 CFR Part 60.4, a resource is significant and considered a historic property when it:

A. Is associated with events that have made a significant contribution to the broad patterns of our history; or

B. Is associated with the lives of persons significant in our past; or

C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or

D. Yields, or may be likely to yield, information important in prehistory or history.

In addition, 36 CFR Part 60.4 requires that, to be considered significant and historic, a resource must also exhibit the quality of significance in American history, architecture, archaeology, engineering, or culture and must possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Other "criteria considerations" need to be applied to religious properties, properties that are less than 50 years old, a resource no longer situated in its original location, a birthplace or grave of a historical figure, a cemetery, a reconstructed building, and commemorative properties. These types of properties are typically not eligible for NRHP inclusion unless the criteria for evaluation and criteria considerations are met.

For archaeological sites evaluated under criterion D, "integrity" requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

TCPs are locations of cultural value that are historic properties. A place of cultural value is eligible as a TCP "because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1990, rev. 1998). A TCP must be a tangible property, meaning that it must be a place with a referenced location, and it must have been continually a part of the community's cultural practices and beliefs for the past 50 years or more.

Federal law does not address TCRs as those resources are defined in the California Public Resources Code (Pub. Res. Code). However, TCRs are a category of TCP and would be addressed in the same manner as TCPs under federal law.

Note that, typically, USACE consultation is specifically limited to those Program and Project areas under USACE jurisdiction (i.e., activities to be conducted within Waters of the U.S.).

8.2.2 State Laws, Regulations, and Policies

CEQA and State CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Special limitations on measures to avoid, conserve, preserve, or mitigate significant effects on unique archaeological resources are also provided under Public Resources Code Section 21083.2. These limitations do not apply if an archaeological site is also a CEQA-defined "historical resource," as defined below (State CEQA Guidelines Secion15064.5[c]).

Section 15064.5 of the State CEQA Guidelines notes that, "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historical resource or to its immediate surroundings, such that the significance of the historical resource would be materially impaired. Lead agencies must identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource before they approve such projects. "Historical resources" are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Pub. Res. Code Section 5024.1[k]);

- included in a local register of historic resources (Pub. Res. Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Pub. Res. Code Section 5024.1(g); or

- determined by a lead agency to be historically significant.

State CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under California Health and Safety Code Section 7050.5 and Pub. Res. Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

State CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with State CEQA Guidelines and other applicable statutes.

Assembly Bill No. 52, which was approved in September 2014 and which went into effect on January 1, 2015, requires that lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in State CEQA Guidelines Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Pub. Res. Code Section 21074 (a, b, and c), TCRs are:

(A.1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

a. Included or determined to be eligible for inclusion in the CRHR; or

b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(A.2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(B) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(C) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique

archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

AB 52 establishes a consultation process between California Native American tribes and lead agencies. A lead agency must notify a tribe of proposed CEQA projects if the tribe has submitted a request to a lead agency to be so notified. The lead agency then provides the tribe with formal notice of CEQA projects, and the tribe must request formal consultation within 30 days of receiving notice. As part of formal AB 52 consultation, measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to Pub. Res. Code Section 21080.3.2. Pub. Res. Code Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs; treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource; conservation easements; and protecting the resource.

California Register of Historical Resources

Pub. Res. Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the NRHP, including properties evaluated under Section 106 of the NHPA. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1) Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Are associated with the lives of persons important in our past;

3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

4) Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

8.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019a) contains a progressive and extensive list of policies related to archaeological and cultural resources under Chapter VII, Environmental Resources, Open Spaces and Conservation. As is often the case with general plans that involve historic urban centers, many of the City of Modesto's policies focus on the preservation of buildings that reflect the history and historic character of the city. Because the Proposed Program will not directly impact the buildings in Modesto's historic district, those policies will not be presented here in detail. It is sufficient to note that projects involving the demolition or alteration of buildings aged 50 years or older will require evaluation for NRHP and CRHR eligibility, if the buildings haven't previously been evaluated, by a professional historian or architectural historian prior to project approval. This requirement is also applicable when construction is proposed within 100 feet of a building

that is older than 50 years. Other policies identify measures to mitigate damage to historically significant buildings, which generally defer to the U.S. Secretary of the Interior's *Standards for the Treatment of Historic Properties*, and guidelines provided by the State Historic Preservation Officer.

A number of policies address potential impacts to archaeological resources for projects that involve ground disturbance. Those policies that are the most pertinent to the Proposed Program are listed below.

Policies in the Downtown Area and Baseline Developed Area

Policy VII-F.2[h]. When proposed development lies within an archaeological resource study area (shown on Figure V-7-1 in the Master EIR), analyze the area to determine whether it has a high potential to have been used by Native Americans or contain prehistoric deposits. Resources to be utilized include archival research through the Central California Information Center at CSU Stanislaus, preliminary surface field reconnaissance, consultations with the Native American Heritage Commission (NAHC) and individuals and organizations identified by the NAHC. Any archaeological resources discovered shall be recorded and mapped. Require an evaluation of the significance of any such resources only when proposed development might affect the resources.

Policy VII-F.2[i]. If land designated or proposed to be designated for development is discovered through archival research, consultation or by chance, to contain a sacred or traditional place, consult with the NAHC and the appropriate Native American groups and individuals for the purpose of determining the level of confidentiality required to protect the cultural place and for the purpose of developing treatment with appropriate dignity of the cultural place in any corresponding management plan. Avoid and preserve sacred sites whenever feasible.

Policy VII-F.2[j]. Consistent with AB 52 of 2016, conduct consultations with the Native American Heritage Commission and the appropriate Native American Tribes for the purpose of determining the level of confidentiality required to protect identified cultural place(s), if any, and for the purpose of developing treatment with appropriate dignity of said cultural place(s) in any corresponding management plan. Avoid and preserve sacred sites whenever feasible.

Policy VII-F.2[k]. For any project that involves earth-disturbing activities within the archaeological resource study area, or on a site determined to be archaeologically or culturally sensitive by City staff through consultation with Native American tribes or bands and a qualified archaeologist, require the project applicant to implement the following mitigation measures, at a minimum:

(1) Where excavation or construction would occur outside of areas where development has occurred, or where excavation / construction would occur at depths greater than existing foundations, roads, and/or trenches in the immediate vicinity, evaluate the site via a qualified archaeologist retained by the project applicant. Said evaluation would include at minimum a records search, a Phase I pedestrian survey, and preparation of an archaeological report containing the results of this cultural resources inventory identification effort for submittal to the Central California Information Center. If a Phase II

archaeological evaluation is recommended, complete a report of the survey and any excavations with recommendations prior to project approval;

(2) In the event of the discovery of a burial, human bone, or suspected human bone, immediately halt all excavation or grading in the vicinity of the find and protect the area of the find. The project applicant shall immediately notify the Modesto Police Department and County Coroner of the find and comply with the provisions of California Health and Safety Code Section 7050.5, including California Public Resources Code Section 5097.98, if applicable. If human remains are identified, also retain a Native American monitor at the applicant's expense;

(3) A qualified archaeological monitor will be present and will have the authority to stop and redirect grading activities, in consultation with the Native Americans and their designated monitors, to evaluate the significance of any Native American archaeological resources discovered on the property; and,

(4) Relinquish ownership of all Native American human remains and/or artifacts that are found within the project area, to the appropriate Native American Most Likely Descendent (MLD), as assigned by the Native American Heritage Commission, for proper treatment and disposition. The MLD will decide whether or not standard archaeological analysis will be allowed on human remains and associated artifacts from burials.

(5) If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find, and the City's Planning Manager shall be notified. A qualified paleontologist shall evaluate the resource and prepare a proposed mitigation plan in accordance with Society of Vertebrate Paleontology guidelines. The proposed mitigation plan may include a field survey of additional construction areas, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Policy VII-F.2[l]. Whenever possible, avoid disturbing or damaging archaeological resources. Preservation in place to maintain the relationship between the artifacts and the archaeological context is the preferred manner of mitigating impacts to archaeological sites. Preservation may be accomplished by:

(1) Planning construction to avoid archaeological sites;

(2) Incorporating sites within parks, green space, or other open space;

(3) Covering the sites with a layer of chemically stable soil; and/or,

(4) Deeding the site into a permanent conservation easement.

When in-place mitigation is not feasible, data recovery through excavation may be necessary. A data recovery plan, which makes provisions for adequately recovering the scientifically consequential information about the site, shall be prepared and adopted prior to any excavation being undertaken. Such studies must be deposited with the Central California Information Center in Turlock, California. Special rules apply to any archaeological sites known to contain human remains (Health and Safety Code Section 7050.5; Guidelines Section 15126.4(b)).

Data recovery shall not be required if the lead agency determines that testing or studies already completed have adequately recovered the necessary data, provided that the data have already been documented in another EIR and are available for review at the California Historical Resource Regional Information Center (Guidelines Section 15126.4(b)).

Policy VII-F.2[m]. Allow reasonable time for the qualified archaeologist to notify the proper authorities for a more detailed inspection and examination of the exposed cultural resources. During this time, excavation and construction would not be allowed in the immediate vicinity of the find; however, those activities could continue in other areas of the project site.

Policy VII-F.2[n]. If any find is determined to be significant by the qualified archaeologist, representatives of the construction contractor and the City, the qualified archaeologist, and a representative of the Native American community (if the discovery is an aboriginal burial) will meet to determine the appropriate course of action.

Policy VII-F.2[o]. All cultural materials recovered as part of a monitoring program are subject to scientific analysis, professional museum curation, and a report prepared according to current professional standards.

Policies in the Planned Urbanizing Area

Policy VII-F.3[a]. Any project subject to CEQA that involves substantial earth-disturbing activities should require consultation by the applicant for the purposes of determining archaeological and cultural resources impacts and creating appropriate mitigation to address such impacts.

Policy VII-F.3[b]. Any project that involves earth-disturbing activities within previously undisturbed soils in an area determined to be archaeologically or culturally sensitive by the City of Modesto through consultation with Native American tribes or bands and a qualified archaeologist should be subject to archaeological and Native American monitoring during all ground-disturbing activities.

Policy VII-F.3[c]. Any project that involves earth-disturbing activities within previously undisturbed soils in an area determined to be archaeologically or culturally sensitive by the City of Modesto through consultation with Native American tribes or bands and a qualified archaeologist should be required to carry out the following mitigation measures, at a minimum:

(1) If prehistoric archaeological remains are discovered during project construction (inadvertent discoveries), all work in the area of the find shall cease, and a

qualified archaeologist should be retained by the project sponsor to investigate the find, and make recommendations as to treatment and mitigation. In the event of the discovery of a burial, human bone, or suspected human bone all excavation or grading in the vicinity of the find should halt immediately and the area of the find should be protected and the project applicant immediately should notify the County Coroner of the find and comply with the provisions of California Health and Safety Code Section 7050.5, including California Public Resources Code Section 5097.98, if applicable. If human remains are identified, the project sponsor should also retain a Native American monitor;

(2) A qualified archaeological monitor should be present and should have the authority to stop and redirect grading activities, in consultation with the Native Americans and their designated monitors, to evaluate the significance of any Native American archaeological resources discovered on the property;

(3) Native American monitors from the appropriate Native American Tribes, as determined by the NAHC should be allowed to monitor all groundbreaking activities, including all archaeological testing and data recovery excavations that are likely to affect Native American resources, as determined by a qualified archaeologist. The project proponent should be responsible for compensating Native American monitors. If human remains are discovered, the NAHC should assign a Most Likely Descendent (MLD); and,

(4) The landowner agrees to relinquish ownership of all Native American human remains and associated burial artifacts that are found within the project area, to the appropriate Native American MLD, as assigned by the NAHC, for proper treatment and disposition. The MLD will decide whether or not standard archaeological analysis will be allowed on human remains and associated artifacts from burials.

(5) If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find, and the City's Planning Manager shall be notified. A qualified paleontologist shall evaluate the resource and prepare a proposed mitigation plan in accordance with Society of Vertebrate Paleontology guidelines. The proposed mitigation plan may include a field survey of additional construction areas, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

These and other policies require proactive consultation by project proponents with Native American tribes for any projects that may impact culturally sensitive sites.

Furthermore, through the Modesto General Plan Update Final Master EIR (20019b), the City of Modesto has adopted Policies VII.F-2[h] through VII.F-3[c] to reduce a project's impacts to archaeological and/or historic resources to a less-than-significant level except where a significant historic building would be demolished. These policies largely reflect those found in the State CEQA Guidelines (Pub. Res. Code 15126.4[b]), including the treatment of human

remains (Health and Safety Code Section 7050.5). The policies also outline procedures for address the unanticipated discovery of archaeological materials and human remains during construction.

Landmark Preservation Ordinance

The City of Modesto passed a Landmark Preservation ordinance in 1988 after many of the historic downtown buildings were demolished (City of Modesto 2017). The ordinance recognizes the cultural and economic benefits of preserving the City's historic landmarks. In addition to establishing a Modesto Landmark Preservation Committee, in response to the ordinance the City commissioned a survey of historic resources and developed a list of Designated Landmark Preservation Sites. The ordinance also provides guidance for review of permit applications for proposed alterations, relocations, demolition or new construction on properties that are listed on the Designated Landmark list.

City of Ceres General Plan

Policies in the Ceres *General Plan 2035* (2018) seek to develop a systematic and comprehensive historic preservation program to ensure that Ceres' historically and architecturally significant resources are preserved, as well as to identify and preserve any archaeological resources that may be disturbed by development activities. The following goals and policies are relevant to the Proposed Program:

Goal 4.H. Preserve and maintain sites, structures and landscapes that serve as significant, visible reminders of the city's social, architectural and agricultural history.

> **Policy 4.H.2. Reuse of Historic Buildings.** Encourage the preservation, maintenance, and adaptive reuse of existing historic buildings in the Planning Area in order to prevent demolition and disrepair.

> **Policy 4.H.3. Preservation of Historic Buildings.** Identify and preserve buildings of local historic importance Downtown and in surrounding areas through inclusion on the local historic resources register and the Historic Building Code.

Goal 4.I. Protect and preserve archaeological and paleontological resources in the Planning Area.

> **Policy 4.I.1. Archaeological Sites.** Refer development proposals that may adversely affect archaeological sites to the California Archaeological Inventory at California State University, Stanislaus. Do not knowingly approve any public or private project that may adversely affect an archaeological site without first consulting the California Archaeological Inventory, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendations of a qualified archaeologist. City implementation of this policy shall be guided by Appendix K of the CEQA Guidelines.

> **Policy 4.I.2. Archaeological Resource Management.** Establish a procedure for the management of archaeological materials found on-site during a development, including the following provisions:

- If significant resources are known or suspected to be present on a site, require that a qualified archaeologist conduct monitoring of building demolition and/or construction grading activities.

- If materials are found on-site during construction activities, require that work be halted until a qualified archaeologist evaluates the find and makes a recommendation for the preservation in place or recovery of the resource.

Policy 4.I.3. Preservation in Place. Seek to preserve discovered archaeological resources in place in order to maintain the relationship between the artifacts and their archaeological context, where feasible. Preservation can be achieved through measures such as planning construction to avoid archaeological sites, incorporating sites within open space areas, capping the site prior to construction, and permanently protecting the site using a conservation easement.

Policy 4.I.4. Paleontological Resources. Establish a procedure for the management of paleontological materials found on-site during a development, including the following provisions:

- If materials are found on-site during grading, require that work be halted until a qualified professional evaluates the find to determine if it represents a significant paleontological resource.

- If the resource is determined to be significant, the paleontologist shall supervise removal of the material and determine the most appropriate archival storage of the material.

- Appropriate materials shall be prepared, catalogued, and archived at the applicant's expense and shall be retained within Stanislaus County if feasible.

Goal 4.J. Protect Ceres' Native American Heritage.

Policy 4.J.1. Native American Outreach. Conduct outreach to local Native American tribal contacts to identify potential opportunities to highlight the area's Native American history

Policy 4.J.2. Coordination with Native American Tribes. Proactively coordinate with the local Native American tribes in the review and protection of any tribal cultural resources discovered at development sites.

Policy 4.J.3. Tribal Cultural Resources. Avoid the disturbance of tribal cultural resources and, where possible, seek to preserve resources in place, exploring opportunities for permanent protection of the resources where feasible. Treat tribal cultural resources with respect.

Policy 4.J.4. Native American Consultation. Conduct project specific Native American consultation early in the development review process to ensure adequate data recovery and mitigation for adverse impacts to significant Native

American sites. Ensure that City staff and local developers are aware of their responsibilities to facilitate Native American consultation under SB 18 and AB 52.

Stanislaus County General Plan

The Stanislaus County General Plan (Stanislaus County 2016) has the following goal and policy pertaining to cultural resources listed in its Conservation and Open Space chapter.

Goal Eight. Preserve areas of national, state, regional, a local historical importance.

> **Policy Twenty-four.** The County will support the preservation of Stanislaus County's cultural legacy of archeological, historical, and paleontological resources for future generations.

8.3 Environmental Setting

8.3.1 Prehistory

Very little archaeological work has been conducted in the Modesto area or in the San Joaquin Valley in general; therefore, the archaeology of the study area is understood within the prehistoric context developed for the Central Valley as a whole. Since the early 1930s, various schemes have been set forth by researchers to organize the archaeological data of California into a chronological framework. As reported by Moratto (1984), the Central Valley sequence established by Lillard, Heizer, and Fenenga in 1939 is particularly notable. Based on archaeological investigations in the lower Sacramento Valley, Lillard and colleagues divided human prehistory into three broad cultural horizons: Early, Middle, and Late. This chronology was first known as the Delta sequence and later became the basis of Richard Beardsley's Central California Taxonomic System (CCTS). The system relies on the identification of characteristics such as burial patterns, shell bead types, stone tools, and the types of locations where the sites tend to occur. These traits and characteristics are used to identify an archaeological resource as belonging to a specific time period.

The CCTS has continued to undergo significant refinement but remains the framework within which California archaeologists explain cultural change. The general system is still widely used by archaeologists, but it has been expanded and revised to include economic and technological strategies, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods. The current chronology (Rosenthal et al. 2010:150) for central California archaeology includes:

- Paleo-Indian: 11,550–8550 B.C.
- Lower Archaic: 8550–5550 B.C.
- Middle Archaic: 5550–550 B.C.
- Upper Archaic: 550 B.C. to 1100 A.D.
- Emergent: 1100 A.D. to Historic

The Paleo-Indian Period (11,550–8,550 B.C.) is generally characterized by big-game hunters occupying broad geographic areas. Archaeological deposits from the Paleo-Indian period are rarely found in the Central Valley, however, and those that have been identified have largely been discovered at the south end of the San Joaquin Valley near Tulare Lake. Post-depositional processes, mainly glacial outwash occurring at the end of the Pleistocene Epoch,

either destroyed or deeply buried much of the existing evidence of human activity in the region from this period. As result, little is known about Paleo-Indian lifeways in the region (Moratto 2004).

Similar to the preceding period, the Lower Archaic Period (8550–5550 B.C.) is presumed to reflect a mobile population that continued to hunt big game. Few localities in the Central Valley are associated with this period, and those that have been found are largely isolated artifacts consisting of large wide-stemmed and leaf-shaped projectile points, along with flaked stone crescents. Only two sites with associated deposits of faunal and shell remains have been identified for the Lower Archaic Period, one at Buena Vista Lake in the southern San Joaquin Valley (Rosenthal et al. 2010:151-152) and one in Sacramento (Tremaine 2008). Some sites in the Sierra Nevada foothills from this period, however, indicate the use of milling equipment (hand stones and milling stones) to process seeds and nuts.

The Middle Archaic Period (5550–550 B.C.) indicates a shift to a more settled way of life that is reflected by substantial, though often deeply buried, archaeological sites with artifacts that are more elaborate in design, imply a more diverse subsistence regime, and indicate interregional trade. Sites are often situated along the major rivers and streams within the Central Valley, emphasizing a focus on riverine and marsh habitats. The Windmiller Tradition or Pattern, which was first identified in sites around the Sacramento–San Joaquin River Delta, is often considered representative of this period. Characteristic artifacts from this period include a variety of fish hooks and spears; large stemmed and leaf-shaped projectile points of obsidian and chert; shaped charmstones of alabaster, steatite, or marble; and a variety of *Haliotis* and *Olivella* shell ornaments and beads, respectively. Mortars and pestles, associated with acorn preparation, became commonplace by the middle of the period. The presence of ventrally and dorsally extended burials with a western orientation is particularly indicative of the Windmiller Pattern.

Increased sedentism and technological specialization are evidenced during the Upper Archaic Period (550 B.C. to 1100 A.D.), as populations exploited more diverse resources and established trade relationships. Mortars and pestles became the primary ground stone implements, suggesting that acorns had become a more important dietary staple. Regional diversity in artifact styles, such as *Haliotis* shell ornaments, bone tools, and ground charmstones or plummets, became more pronounced; burial postures also varied.

Archaeological sites from the Emergent Period (A.D. 1100 to the historic period) indicate increased social complexity and the development of large, central villages with resident political leaders and specialized activity sites. Enhanced regional diversity in terms of artifact styles, housing, and interment methods is evident in the archeological record. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a variety of shell and stone beads and ornaments.

8.3.2 Ethnography

The Modesto area lies within the ancestral territory of the Northern Valley Yokuts. “Yokuts” is a term applied to a large and diverse group of people inhabiting the San Joaquin Valley and Sierra Nevada foothills of central California. The Northern Valley Yokuts inhabited a 40- to 60-mile-wide area straddling the San Joaquin River, south of the Mokelumne River, east of the Diablo Range, and north of the sharp bend that the San Joaquin River takes to the east-northeast near Mendota in Fresno County. The Southern Valley Yokuts inhabited the San

Joaquin Valley south of the bend in the river. Although they were divided geographically and ecologically, the two groups have a common linguistic heritage (Wallace 1978:462).

The Northern Valley tribes closely resembled the Yokuts groups to the south, although there were some cultural differences. The northerners had greater access to salmon and acorns, two important dietary resources, and some of their religious practices reflected the influences of groups to their north, such as the Miwok. While inhumation was the usual practice in the southern valley, the Northern Valley Yokuts either cremated their dead or buried them in a flexed position (Wallace 1978:464, 468). A chief headed the tribal villages, which averaged around 300 people. Family houses were round or oval, sunken, with a conically shaped pole frame, and covered with tule mats. Each village also had a lodge for dances and other community functions, as well as a sweathouse (Wallace 1978:462-464).

The Northern Valley Yokuts built their riverside villages on elevated areas along the water's edge to avoid the spring floods, which were a result of heavy Sierra Nevada snow melts. Living beside rivers and streams provided plentiful river perch, Sacramento pike, salmon, and sturgeon. Hunting provided waterfowl such as geese and ducks, as well as terrestrial animals such as antelope, elk, and brown bear, although by all indications, fish constituted most of their diet. The surrounding woodland, grasslands, and marshes provided acorns, tule root, and seeds.

The Northern Valley Yokuts used bone harpoon tips for fishing, stone sinkers for nets, chert projectile points for hunting, mortars and pestles, scrapers, knives, and bone awl tools to procure and process food. Marine shells, procured from coastal tribes, were used for necklaces and other adornments, and marine shell beads sometimes accompanied the deceased. The Yokuts used tule reed rafts to navigate the waterways for fishing and fowling. They also manufactured intricate baskets for a variety of purposes, including storing, cooking, eating, winnowing, hopper mortars, the transport of food materials, and ritual. Very little is known of the Northern Valley Yokuts' clothing, but drawings of their tattoos show that they served not only as a decoration but also as a form of identity (Wallace 1978:464).

Initially, the Diablo Range served as a natural barrier against heavy recruitment of Native Californians by the Spanish, who established missions along the coast. By the early 19th century, however, Spanish and (later) Mexican missionaries began to explore the inner valleys in search of potential neophytes. The Yokuts resisted recruitment and California Indians from a variety of tribes sought refuge among the Yokuts after fleeing the missions. Introduced diseases, destruction of traditional resources from cattle grazing, and forced relocation took a heavy toll on the Northern Yokuts. Despite decades of hardship, many individuals who can trace their ancestry to the Northern Valley Yokuts continue to live and thrive in the Central Valley and throughout California and the United States.

8.3.3 History

The historic era began in Stanislaus County when the first Spanish expedition entered the San Joaquin Valley in 1806 under the leadership of Gabriel Moraga. Traveling north and northwest through the region in search of possible mission sites, Moraga's party explored along what came to be known as the Stanislaus River. Moraga visited the area again in 1808 and 1810 (Kyle et al. 2002:516-517).

After Mexico gained its independence from Spain in 1822, two additional expedition forces entered the area; however, the purposes of their campaigns were no longer exploratory. Soldiers were sent into the Central Valley to recover stolen animals and punish hostile Indians in order to reduce the attacks upon coastal towns, missions, and ranchos.

Americans also began to enter the region during the Mexican period. In 1827 and 1828, Jedediah Smith entered the San Joaquin Valley through the Tejon Pass and trapped beavers along the San Joaquin, Kings, and other rivers and streams that flowed from the Sierra. Smith was followed by fellow trappers such as Peter Ogden, Ewing Young, Kit Carson, and Joseph Walker.

The first permanent European settlement may have occurred in Stanislaus County when two land grants were issued by the Mexican government in 1843. The first was the *Rancho El Pescadero* on the west side of the San Joaquin River near the border of what would eventually become San Joaquin County. The second was the *Rancheria del Rio de Estanislao* located north of the Stanislaus River bordering Tuolumne County. Two additional land grants were issued the following year. These were the *Rancho del Puerto* and *Rancho Orestimba*, both of which were on the west side of Tuolumne County near Rancho Pescadero (eReferenceDesk 2017).

The City of Modesto came into being in 1870 when the Central Pacific Railroad announced that the location would be the end point of the next extension of the rail line as it progressed south through the Central Valley (Kyle et al. 2002:521). By the time the tracks were completed in November of that year, a viable town had already been established by entrepreneurs (City of Modesto 2016). Modesto residents were among California's first irrigation advocates, and by 1904 a system of canals had been constructed to allow more productive agriculture. During the 19th century, grain-growing was Stanislaus County's dominant agricultural activity. Stock-raising, dairy farming, fruit and nut orchards, and vegetable farming all became more important over time. When Prohibition ended in 1933, the Gallo brothers came to Modesto, bringing the wine business to the area on an industrial scale. In the 21st century, almonds and walnuts are the most lucrative local crops, although fruit, vegetables, livestock, and other agricultural products remain important. Modesto is still the most important town in the region and is the Stanislaus County seat.

8.3.4 Paleontology

The standard guidelines for assessment and mitigation of adverse impacts on paleontological resources set forth by the Society of Vertebrate Paleontology (2010) have been used to establish three categories of sensitivity. These are High, Low, and Undetermined. Areas that consist of rock that is not of sedimentary origin and that have not been known to produce fossils are considered low sensitivity areas and monitoring is not required during project construction or operation. Additionally, when it can be demonstrated that the conditions of the unconsolidated sediments are such that fossils could not form in these sediments, and that any fossils found in the sediments could not be considered in situ, they would have minimal scientific value, and the area would be considered low sensitivity. When both low sensitivity conditions were present, it was considered that no significant paleontological resource was present and consequently no impact would occur.

Cultural Resources Studies

For the purposes of this DEIR, a focused cultural resources evaluation was conducted for the Proposed Program. All aspects of the cultural resources study were conducted in accordance

with the U.S. Secretary of the Interior's *Standards and Guidelines for Identification of Cultural Resources* (48 CFR Parts 44720–44723). The study included archival research, Native American outreach and consultation, a field study focused on the River Trunk Realignment Project, and the evaluation of identified cultural resources to determine their eligibility for listing on the NRHP and CRHR.

Archival Research

A records search for the River Trunk Realignment Project study area (River Trunk study area) was conducted by the Central California Information Center (CCIC) of the California Historical Resources Information System at California State University, Stanislaus, before initiating the field study. The purpose of the records search was to determine if the River Trunk study area had previously been surveyed for cultural resources, and to identify any previously recorded cultural resources in, or within ¼ mile of, the study area. The CCIC archival research (Records Search File No. 10317N) included review of the California Inventory of Historic Resources, local historical inventories, historical literature, and historical maps including USGS topographic maps, General Land Office maps, and Rancho Plat Maps.

The records search indicated that 11 previous studies had included portions of the River Trunk study area; one overview also included the study area. These studies are listed in **Table 8-1**; another 21 studies had been conducted within the ¼ mile search area. All of the studies listed were conducted in the study area east of 7th Street.

Table 8-1. Previously Conducted Cultural Studies within the Proposed River Trunk Realignment Project Study Area

CCIC Report No. (ST-)	Author	Date	Title
035	L. K. Napton	1981	Seven California Counties: An Archaeological Overview, Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne Counties, California, Parts 1 & 2.
1435	W. Hill	1992	Historic Architecture Survey Report: Track Consolidation and Realignment, Modesto, California
1836	Harmon, R. M., J. C. Bard, D. M. Garaventa, S. J. Rossa, and J. Yelding-Sloan	1992	Negative Archaeological Survey Report; Modesto Track Consolidation Corridor Lathrop, San Joaquin County and Modesto, Stanislaus County, California.
2759	Hatoff, B., B. Voss, S. Waechter, S. Wee, and V. Bente	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project.
2801	Marvin, J., and S. Davis-King	1996	Historic Property Survey Report (Positive) for the Seventh Street Bridge Project, City of Modesto, Stanislaus County, California.
3995	Nelson, W. J.	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.

CCIC Report No. (ST-)	Author	Date	Title
4592	Gatlin, J. P., General Attorney	2000	Before the Surface Transportation Board: Docket No. AB-33 (Sub-No. 145X), Union Pacific Railroad Co.--Abandonment Exemption--in Stanislaus Co., CA (Tidewater Subdivision Near Modesto, California), Combined Environmental and Historic Report.
4816	William Self Associates	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County,
6345	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California.
6352	EDAW, Inc.	2005	TRRP Gateway Precise Plan, Modesto, Ceres, Stanislaus County, California, Initial Study
7537	Kuzak, C.	2011	Historic Property Survey Report, 10-STA-99, P.M. 0.0/24.7, 2576 E-FIS1000020344, Stanislaus County, California.
7775	Helton, C. and Cardenas, G.	2011	Cultural Resources Monitoring and Mitigation Plan, Almond 2 Power Plant, Turlock Irrigation District.

Source: *Information obtained from the CCIC in 2017.*

The records search identified five previously recorded cultural resources within the River Trunk study area (**Table 8-2**). Two of these resources, the Tidewater-Southern Railroad wooden trestle bridge over the Tuolumne River (P-50-1811) and the Tidewater-Southern Railroad line, no longer exist. One of the resources, the Seventh Street Bridge (P-50-514), has been determined eligible for listing in the NRHP. The remaining resources have been determined not eligible for listing in the NRHP.

Table 8-2. Previously Recorded Cultural Resources within the Proposed River Trunk Realignment Project Study Area

Resource No. (P-50-X)	Resource Trinomial (CA-STA-X)	Recorded by	Date Recorded	Resource Information
0001	350H	various	1999-2007	Southern Pacific Railroad line; multiple sections recorded. Determined not eligible for the NRHP.
0083	425H	various	1992	Tidewater-Southern Railroad line; multiple sections recorded. Section in project area removed.
0514		J. Snyder W. Hill	1991 1992	Southern Pacific Railroad Tuolumne River Bridge; Bridge #113.75. Originally constructed 1897; significantly rebuilt 1944-45. Determined not eligible for the NRHP.
0617		Office of Historic Preservation L. Martin	1986 2000	Seventh Street Bridge; Lion Bridge; Bridge #38C-23; City of Modesto Designated Landmark Preservation Site #14. Constructed 1916. Determined eligible for listing in the NRHP.
1811		J. Snyder	1991	Tidewater-Southern Railroad Bridge; constructed 1914. Burnt down 2001.

Source: *Information obtained from the CCIC in 2017.*

Another six previously recorded resources within 0.25 mile of the River Trunk alignment were identified. All of the resources are from the historic era, and include office and industrial buildings, features (e.g., a pump station and a water tower), and one scatter of historic artifacts.

The list of City of Modesto Designated Landmarks provided by the CCIC includes 59 resources, many of which are residences and buildings, but cemeteries and heritage trees, among other features, are also included. A vast majority are in the Modesto downtown core area. The Seventh Street Bridge is listed as Designated Landmark Preservation Site #14, and the Dryden Golf Course is listed as #52. The Directory of Historic Places in the Historic Property Data File for Stanislaus County[1], compiled by the Office of Historic Preservation and obtained from the CCIC, lists a large number of resources in the Program area. While most of these are in Modesto, some are also situated in Ceres. These range from residences and buildings to water and transportation infrastructure, along with other features. A vast majority are assigned the California Historical Resources Code of 52D (identified as a contributor to a district that is eligible for local listing or designation) or 6Y (determined ineligible for listing on the NRHP)

[1] The Directory of Historic Places is compiled by the Office of Historic Preservation and consists of a listing of all resources that have been evaluated for the NRHP and CRHR, by county. Each resource is assigned a status code so that its eligibility status can be determined (e.g., individually eligible for the NRHP or CRHR; eligible as a contributing element to a district; determined significant by a local government; not eligible under any listing) at a glance. The list also identifies those resources that may need reevaluation.

Historic USGS topographic maps and historic aerials were examined in addition to the record search materials. USGS maps from 1915/1916 indicate that the area around the railroad yards between 7th and 9th streets were already well-developed by that era, and that much of the town west of present-day Highway 99 and south of Tuolumne Avenue to South Avenue was laid out, but not developed. South of South Avenue to the Tuolumne River, acreage within the River Trunk Realignment Project footprint contained just a scattering of homes. By the 1940s (USGS 1939, 1941), much of the area within the River Trunk Realignment Project vicinity was well developed. The most significant modification was the construction of Highway 99 as a freeway through town by the early 1970s.

Information about cultural resources within the larger study area was available in the Modesto General Plan Update Final Master EIR (City of Modesto 2019b) and the Stanislaus County General Plan EIR (ICF 2016). The City of Modesto EIR noted that archaeological surveys have been sporadic throughout the area and have largely been conducted as part of urban development. Nevertheless, prehistoric and historic-era sites have been previously recorded primarily along waterways (Dry Creek, Stanislaus and Tuolumne rivers) and on adjacent terraces, which are considered particularly sensitive for archaeological remains. The Stanislaus County EIR provided information largely based on the Directory of Historic Places for Stanislaus County.

Soils information presented in Chapter 9, *Geology*, *Soils, and Seismicity*, and geoarchaeological data (Rosenthal et al. 2004) indicates that the soils within the Program area (Dinuba loamy sand, Hanford sandy loam, Madera sandy loam, Modesto clay loam, San Joaquin sandy loam, and Tujunga loamy sand) date from the late Pleistocene through the Holocene Epoch and have depths of up to 80 inches. These soils are largely considered to have low sensitivity ratings for buried archaeological remains, although the Hanford series is considered to be moderately sensitive and the Tujunga is rated as highly sensitive for buried archaeological remains (Rosenthal et al. 2004). Proximity to the Tuolumne and San Joaquin Rivers, and Dry Creek increases the potential for buried resources within the Program area and River Trunk Realignment Project.

Field Investigation

A field review of the River Trunk Realignment Project footprint was conducted by qualified archaeologists from Horizon Water and Environment on June 15, 2017. The field investigation consisted of two approaches. A pedestrian survey was conducted in areas where open trenching or bore pit excavation is proposed and the ground surface is undeveloped or where native ground surface is visible. The cursory inspection was conducted in areas where the ground surface is developed or paved and no native ground surface is visible. **Figure 8-1** shows both the areas subject to pedestrian survey and those areas subject to cursory survey. The pedestrian component consisted of walking the proposed alignment or areas of proposed excavation using 10-meter transects. Any exposures of subsurface were more closely inspected and trowel exposures were also applied to the surface in areas that were heavily vegetated or grassy. The cursory inspection was conducted by car and any areas that were undeveloped were more closely inspected.

Approximately 1 mile of the River Trunk Realignment Project was subject to intensive pedestrian survey. These areas included the east end of the pipeline from the Gallo property west to the River Trunk Pump Station and to Highway 99; from Neece Drive, east across the Dryden Golf Course to the Tuolumne River; and Shackelford Pump Station. The proposed

location of the River Trunk Pump Station is currently a fully developed oil and gas storage facility and, therefore, was not subject to pedestrian survey. Other areas subject to cursory survey were paved streets in the City of Modesto, including Tuolumne Boulevard, Colorado Avenue, Neece Drive, and Pelton Avenue. The Sutter Plant is also fully developed and was not surveyed. The survey is fully described in *An Archaeological Assessment of the River Trunk Realignment Project, Modesto, Stanislaus County, California* (Horizon 2017) (**Appendix D**).

Study Results

The record search identified three extant cultural resources within the River Trunk study area: the Southern Pacific Railroad line, the Southern Pacific Railroad Tuolumne River Bridge, and the Seventh Street Bridge (Lion Bridge). All three are built environment resources and the new River Trunk pipeline will either be bored underneath the resources (the railroad tracks) or pass below the resources (the bridges), and are not in the direct path of the proposed River Trunk Realignment Project pipeline. Archival research also revealed that two resources are listed as City of Modesto Designated Landmark Preservation Sites: the Seventh Street Bridge (#14) and the Dryden Golf Course (#52). No archaeological resources were identified within the River Trunk Realignment Project footprint, either during archival research or during the pedestrian field survey.

Archival research indicates that there are many previously recorded cultural resources, of which a majority are of the built environment, within the Program area. Most of the City of Modesto landmarks are clustered in the downtown core area and in the neighborhoods directly to the north. A large number of resources listed on the Directory of Historic Places in the Historic Property Data File for Stanislaus County are also within the Program area.

Native American Coordination

The City of Modesto notified Native American tribes with a traditional and cultural affiliation with the region about the Proposed Program on June 8, 2016, pursuant to the requirements of Pub. Res. Code 21080.3.1 (also known as AB 52).

The City has received letters of interest from two Native American tribes pursuant to Pub. Res. Code Section 21080.3.1(b)(1) for all proposed City CEQA projects: the Northern Valley Yokuts and the Ione Band of Miwok Indians. However, after examining the map of the Ione Band's indigenous territory that accompanied their letter, it was determined that the Proposed Program is outside of the tribe's area of interest. A request to the NAHC for a list of tribes with a traditional and cultural association with the Proposed Program resulted in the identification of two tribes. In addition to the Northern Valley Yokuts, the NAHC listed the Southern Sierra Miwok Nation. The City notified these tribes about the Program in a letter dated June 8, 2016. A notification letter was also sent to the Tule River Indian Tribe, as there had been consultation with that tribe in the past. The City did not receive requests for formal consultation under Pub. Res. Code Section 21080.3.1(b)(2) from any of those contacted, and none of the tribes expressed concerns about potential significant resources within the study area. Follow-up phone calls were made to the Tule River Indian Tribe but did not receive a response. All correspondence with tribes related to Pub. Res. Code Section 21080.3.1, including the Tribes' letters of interest to the City, is provided in Appendix F.

Paleontological Resources

A desktop study conducted to assess the sensitivity of the Program area, including the River Trunk study area, for paleontological resources. The study area is predominantly underlain by Pleistocene-aged alluvial fan deposits of the Modesto Formation (California Geological Survey 1991). The Modesto Formation is composed primarily of unconsolidated, unweathered, coarse sand and sandy silt along the upper portions of the unit. The older, deeper portions of this unit shift to more consolidated, slightly weathered, well-sorted silt and fine sand, silty sand, and sandy silt. The Modesto Formation is overlain by Holocene alluvium, particularly along watercourses within the study area. The Holocene soils can have depths of 6.5 feet.

The Modesto Formation has yielded a wide variety of fossils within Stanislaus County, including extinct land mammals such as ground sloths, mammoths, camels, and bison, among others. Fossils of petrified wood, clam shells, fishes, birds, and amphibians have also been uncovered (California Energy Commission 2017).

Tribal Cultural Resources

No TCRs have been identified within the Program study area.

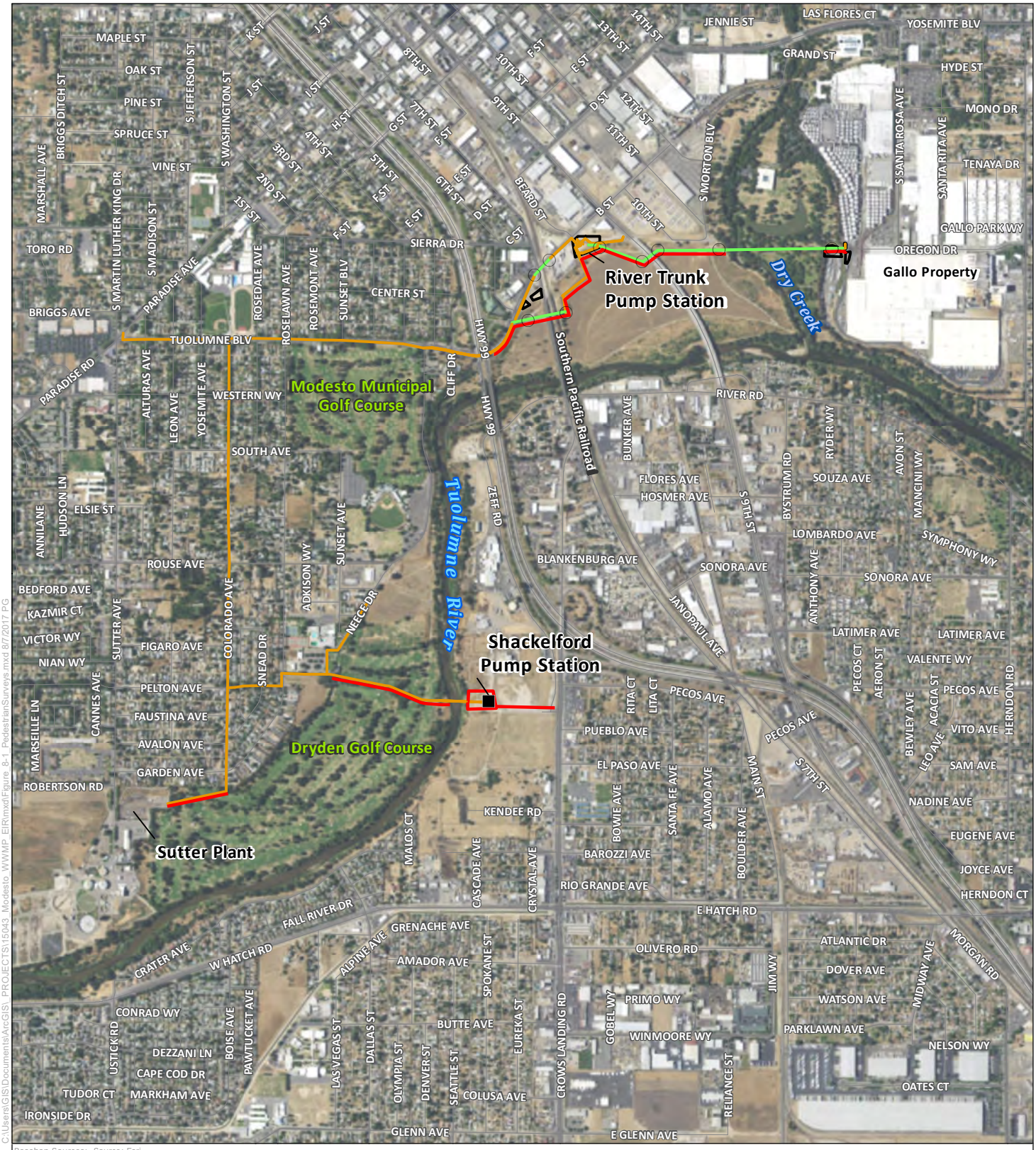

Figure 8-1
River Trunk Realignment Project Pedestrian Survey

City of Modesto
Wastewater Master Plan EIR

8.4 Impact Analysis

8.4.1 Methodology

The following impact analysis was conducted based on records search, review of previous investigations and historic maps, Native American consultation, and field work completed in June 2017. In conjunction with prehistoric and historic overviews, previous investigations and historic maps provided background information for assessing cultural sensitivity and identifying the types of sites likely to be located within the River Trunk Realignment Project footprint. The City of Modesto Urban Area General Plan (2008a) provided city-wide data that supported the analysis of program-level impacts. The Stanislaus County General Plan EIR (ICF 2016) and 2015 General Plan (Stanislaus County 2016) provided relevant information for the study area located within the county.

Consultation with tribes who have a traditional and cultural affiliation with the Proposed Project area followed the protocols outlined under Pub. Res. Code Sections 21080.3.1, 21080.3.2, and 21082.3, and guidelines provided the NAHC (n.d.), and the Governor's Office of Planning and Research (2017; n.d.). Because tribes notified pursuant to Pub. Res. Code Sections 21080.3.1 declined consultation on the Program, the City determined that no TCRs exist within the study area.

8.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on cultural, paleontological and tribal resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of dedicated cemeteries; or
- Cause a substantial adverse change in the significance of a TCR, defined in Pub. Res. Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Pub. Res. Code Section 5020.1(k), or
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Pub. Res. Code Section 5024.1. In applying the criteria set forth in

subdivision (c) of Pub. Res. Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

CEQA does not establish specific criteria for determining significance of paleontological resources.

8.4.3 Environmental Impacts

Impact CR-1: Impacts on Known Historic, Archaeological, or Tribal Resources (Less than Significant)

All Program-level Components

The Proposed Program would occur partially within Modesto's incorporated limits and partially outside its incorporated limits, within the jurisdiction of the County but within the City's wastewater service area. Program-related activities would also take place within the City of Ceres. The County and the City of Ceres do not maintain policies or requirements related to cultural resources that are more restrictive or otherwise incompatible with those of the City of Modesto. All proposed improvements, including those in Empire, the Beard Industrial Park District, and unincorporated "islands" within the County would implement existing City of Modesto Urban Area General Plan policies related to the investigation and mitigation of historical and archaeological impacts, as necessary.

The Proposed Program does not propose demolition or modification of existing structures. Based on the Program information available, the Proposed Program does not appear to propose work in proximity to any of the historic resources listed in the City of Ceres. Therefore, it is unlikely that the proposed program would adversely affect known, listed historic resources, and the Engineer's Report evaluated in this EIR would have a **less-than-significant** impact on historic resources in Ceres. However, some construction work may occur adjacent to resources listed on the City of Modesto Designated Landmark Preservation Sites list or on the Directory of Historic Places in the Historic Property Data File for Stanislaus County, and some resources may be eligible for the NRHP/CRHR.

All site-specific improvements proposed as part of the Proposed Program would be required to adhere to federal (if applicable), state, and local policies pertaining to the survey and impact analysis of historic resources. Accordingly, if CIP improvements propose to demolish or modify existing structures, or if they propose work within 100 feet of structures, those structures would need to be evaluated for their significance and for any project-related impacts and mitigation. Adherence to City of Modesto Urban Area General Plan Section VII-F policies 2-h, 2-i, 2-j, 2-k, 2-l, 2-m, 2-n, 2-o, 3-a, 3-b, and 3-c (presented above) would ensure that proposed CIP improvements would avoid significant impacts on known historic, archaeological, and tribal resources, and that any unforeseen significant impacts would be reduced to less-than-significant levels.

It also should be noted that if WWMP components were to use federal funds and proposed the demolition or modification of existing structures, such improvements would be subject to historic property review and consultation with the SHPO under Section 106 of the NHPA. Any impacts identified during that review would be mitigated fully by site-specific measures developed in consultation with the SHPO.

River Trunk Realignment Project

The cultural resources study identified four extant cultural resources in or adjacent to the footprint of the River Trunk Realignment Project: the Southern Pacific Railroad line, the Southern Pacific Railroad Tuolumne River Bridge, the Seventh Street Bridge (Lion Bridge), and the Dryden Golf Course. All are built environment resources. The Seventh Street Bridge has been determined eligible for the NRHP and is a City of Modesto Designated Landmark, and the Dryden Golf Course is also listed as a City Designated Landmark. The Southern Pacific Railroad line and the Southern Pacific Railroad Tuolumne River Bridge, have been determined not eligible for the NRHP, and neither resource is included as a Designated Landmark by the City.

The new River Trunk pipeline will be bored underneath the railroad tracks and Southern Pacific Railroad Tuolumne River Bridge, and trenched below the elevated Seventh Street Bridge. As a result, construction will not impact those resources. Although the Dryden Golf Course is listed as a City of Modesto Designated Landmark, the trenching methods used to install pipelines across the golf course would cause a temporary disturbance to the resource, similar in nature (if not scale) to the installation and maintenance of the irrigation system at the site. As a result, there would be **no impact** on known historic properties/historical resources from construction of the River Trunk Realignment Project.

Overall Conclusion

Considering the WWMP components as a whole, the River Trunk Realignment Project would not impact historic properties/historical resources, and all site-specific improvements proposed as part of the Proposed Program would be required to adhere to federal (if applicable), state, and local policies pertaining to the survey and impact analysis of historic resources. Adherence to City of Modesto Urban Area General Plan Section VII-F policies 2-h, 2-i, 2-j, 2-k, 2-l, 2-m, 2-n, 2-o, 3-a, 3-b, and 3-c (presented above) would ensure that proposed CIP improvements would avoid significant impacts on known historic, archaeological, and tribal resources, and that any unforeseen significant impacts would be reduced to less-than-significant levels. Mitigation is not necessary and this impact would be **less than significant.**

Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources (Less than Significant with Mitigation)

All Program-level Components

Individual CIP improvements implemented pursuant to the Proposed Program would entail extensive excavation work to install certain components. Construction grading and earthmoving activities could disturb previously undiscovered archaeological deposits or buried historic resources. Proposed pipelines, storage tanks, and groundwater wells to be located within riverbeds and otherwise adjacent to natural channels are particularly susceptible to encountering Native American artifacts. The City has adopted guidelines to aid project compliance with requirements for archaeological resources analysis, and subsequent projects would be required to adhere to these guidelines.

Projects proposing earthwork within archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k (presented above), which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Improvements proposing earthwork in the Planned

Urbanizing Area must also adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-kas well as Policies 3-a, 3-b, and 3-c (also presented above), which require the applicant (City in this case) to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures.

All proposed improvements must adhere to City of Modesto Urban Area General Plan Section VII-F Policies 2-k, 2-l, 2-m, 2-n, 2-o, and 3-c (presented above), which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process. Adherence to existing City policies regarding archaeological investigation, construction requirements, and proper mitigation for any resources discovered on the site, as well as to **Mitigation Measures CR-1**, below, would ensure that specific improvements would result in impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources that are **less than significant with mitigation**.

River Trunk Realignment Project

A pedestrian survey of the River Trunk Realignment Project footprint did not identify any archaeological resources; however, archaeological remains could be buried with no surface manifestation or in areas that were not surveyed because they were paved and there was no ground surface visibility (i.e., city streets, parking lots, etc.). Although archaeological materials were not observed on the ground surface at the locations of proposed launch and receiving pits for borings under Dry Creek for the River Trunk Realignment Project, the banks of this waterway are known to be sensitive for archaeological remains. The locations of the proposed launch and receiving pits for the outfall pipeline crossings under the Tuolumne River are also known to be sensitive for archaeological resources, and thus could affect archaeological remains that are present. Installation of new or replacement sewer lines, construction of pump or lift stations, or excavations for borings, for example, could uncover buried archaeological deposits. Various locations along Tuolumne Boulevard, Colorado Avenue, and within the Dryden Golf Course are underlain by patches of Tujunga loamy sand, which is sensitive for buried archaeological remains. Should a previously undiscovered resource be found during construction and be determined eligible for inclusion in the CRHR, and should project construction activities render the resource ineligible for inclusion in the CRHR, the impact would be significant. Implementation of existing City policies regarding archaeological investigation, construction requirements, and proper mitigation for any resources discovered, as well as **Mitigation Measure CR-1,** would reduce any impacts on CRHR-eligible archaeological sites accidentally uncovered during construction to a level that is less than significant with mitigation.

Outfall Pipelines

In addition, construction of the new third outfall pipeline and the new Tuolumne River pipeline crossings would involve trenchless pipeline construction methods in which excavation would be required for the launch and receiving pits for the pipeline borings to the north and south of the Tuolumne River. Implementation of Mitigation Measures CR-1 would reduce any impacts on CRHR-eligible archaeological sites accidentally uncovered during construction to a level that is less than significant with mitigation.

Overall Conclusion

Various WWMP components, including the River Trunk Realignment Project, could affect archaeological remains during construction. Implementation of Mitigation Measure CR-1 would ensure that work is suspended in the event that archaeological resources are encountered during construction. With implementation of this mitigation measure, the Proposed Program's overall impact would be **less than significant with mitigation.**

Mitigation Measure CR-1: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work.

Applies to all Program-level components and the River Trunk Realignment Project

Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive information about the kinds of archaeological materials that could be present at the River Trunk Realignment Project site and other CIP sites, and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.

Impact CR-3: Disturb Any Human Remains, Including those Interred Outside of Dedicated Cemeteries (Less than Significant with Mitigation)

Based on the Program information for the proposed infrastructure improvements, the Proposed Program does not appear to propose earthwork in proximity to any known cemeteries or Native American burial grounds. However, improvements implemented as part of the Proposed Program have the potential to disturb previously undiscovered human remains. All of the City of Modesto Urban Area General Plan policies identified above for Impact CR-2 also pertain to the discovery of human remains. Specifically, Policy VII-F.2[k](2) (presented above) cites California Health and Safety Code 7050.5, which requires the cessation of further excavation and disturbance in the event of a human remains discovery, and coordination with the County coroner and (if applicable) the Native American Heritage Commission (NAHC) regarding further action.

Adherence to Policy VII-F.2[k] and other relevant general plan policies and the California Health and Safety Code, as well as Mitigation Measures CR-1, would ensure that impacts on human remains as a result of constructing CIP improvements would be **less than significant with mitigation**.

Impact CR-4: Impacts on Paleontological Resources (Less than Significant with)

The study area is underlain by the Modesto Formation, which is considered a paleontologically-sensitive rock unit under the SVP guidelines (2010), as discussed earlier in this section. Records of vertebrate fossil localities throughout the San Joaquin Valley and all sediments referable to the Modesto Formation suggest there is a potential for uncovering

additional similar fossil remains during construction-related earthmoving activities, as part of implementation of the Proposed Program. Though the large majority of the study area has been developed, and any fossil remains have previously been removed, there are parcels within the study area that have not yet been developed, and the Proposed Program would require excavation activities in undisturbed sediments below existing development. As such, the potential for damage to unique, scientifically important fossils during construction-related activities at project sites does exist. For improvements located within the Downtown, Baseline Developed and the Planned Urbanizing areas identified in the City's General Plan, Policies VII-F.2[k](5) and VII-F.3[c](5) would apply. If paleontological resources are discovered during ground-disturbing activities, these policies would require that construction work cease in the vicinity of a find, ensure that a qualified paleontologist evaluates the resource, and that appropriate measures are taken to mitigate effects on paleontological resources if discovered.

Impact CR-5: Potential for a Substantial Adverse Impact on Tribal Cultural Resources (Less than Significant with Mitigation)

TCRs have not been identified within the Program study area. None of the tribes contacted under Pub. Res. Code Section 21080.3.1 have responded with concerns about the potential impact of the Program on TCRs; thus, the City, as the lead CEQA agency, has determined that no known TCRs exist within the study area.

Project grading and earthmoving activities could disturb previously undiscovered archaeological deposits or buried historic resources. Proposed pipelines, lift stations, and other wastewater infrastructure to be located within riverbeds and otherwise adjacent to natural channels are particularly susceptible to encountering Native American artifacts. The City has adopted guidelines to aid project compliance with requirements for archaeological resources analysis, and subsequent projects would be required to adhere to these guidelines.

Projects proposing earthwork within archaeological resource study areas must adhere to general plan Section VII-F Policy 2-k, which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Projects proposing earthwork in the Planned Urbanizing Area must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c , which require the applicant to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures.

All subsequent projects must adhere to other City of Modesto Urban Area General Plan Sections VII-F Policies listed above, including 2-l, 2-m, 2-n, and 2-o, which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process. Adherence to existing City policies regarding archaeological investigations, construction requirements, and proper mitigation for any resources discovered on the site, as well as to Mitigation Measure CR-1, would ensure that specific projects implemented subsequent to the Proposed Program would result in **less-than significant with mitigation** impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources.

Chapter 9
GEOLOGY, SOILS, AND SEISMICITY

9.1 Overview

This chapter identifies geologic, soils, and seismic conditions that could affect or be affected by the Proposed Program. The chapter describes the regulatory setting, affected environment, impacts, and proposed mitigation measures based on published geologic reports, maps and professional expertise. The discussion of impacts considers the consequences of the Proposed Program on geology, soils, and seismicity, and how geology, soils, and seismicity would affect the Proposed Program. This chapter also evaluates whether operation of individual Program components would expose people or structures to substantial geologic hazards.

9.2 Regulatory Setting

9.2.1 Federal Laws, Regulations, and Policies

Section 402 of the Clean Water Act – National Pollutant Discharge Elimination System

The CWA is discussed in detail in Chapter 12, *Hydrology and Water Quality*. Because Section 402 of the CWA is directly relevant to earthwork, additional information is provided here.

The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. As described in Chapter 12, USEPA has delegated to SWRCB the authority for the NPDES program in California, where it is implemented by the state's nine RWQCBs. Under the NPDES Phase II Rule, any construction activity disturbing 1 acre or more must obtain coverage under the state's General Permit for Storm Water Discharges Associated with Construction Activity (General Permit). General Permit applicants are required to prepare a Notice of Intent stating that stormwater will be discharged from a construction site, and that a SWPPP describes the BMPs will be implemented to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS; National Science Foundation (NSF); Federal Emergency Management Agency (FEMA); and National Institute of Standards and Technology. Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2017) are as follows:

1. Develop effective measures to reduce earthquake hazards;
2. Reduce facilities and system vulnerabilities to earthquakes;
3. Improve earthquake hazards identification and risk assessment methods; and
4. Improve the understanding of earthquakes and their effects.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

9.2.2 State Laws, Regulations, and Policies

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act; Pub. Res. Code Section 2621 et seq.) was enacted in 1972 to reduce the risk to life and property from surface faulting in California. The Alquist-Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during the Holocene (defined for purposes of the act as referring to approximately the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (Bryant and Hart 2007). Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

As with the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (SHMA) (Pub. Res. Code Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. The Alquist-Priolo Act addresses surface fault rupture, including strong ground shaking, liquefaction, and seismically induced landslides, and SHMA provisions are similar in concept in that the State is charged with identifying and mapping areas of risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within Seismic Hazard Zones.

Under SHMA, permit review is the primary mechanism by which development can be locally regulated. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been performed and measures to reduce potential damage have been incorporated into the development plans.

California Building Code and International Building Code

Title 24 of the CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California. CBC standards determine building strength based on regional seismic risks and recommended construction specifications to provide building strength above that risk.

9.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019) identifies the Stanislaus and Tuolumne Rivers, and Dry Creek, as regional parks. The River Greenway Program, which guides development within the Stanislaus River, Tuolumne River, and Dry Creek Comprehensive Planning Districts, includes the following policies that are potentially relevant to the Proposed Program and analysis of geology, soils, and seismicity:

> **Policy VII-K [a].** Continue to use building codes as the primary tool for reducing seismic risk in structures. The current version of the California Building Code, as adopted by the City of Modesto, is intended to ensure that buildings resist major earthquakes of the intensity or severity of the strongest experience in California, without collapse, but with some structural as well as nonstructural damage. In most structures, it is expected that structural damage could be limited to repairable damage, even in a major earthquake.
>
> **Policy VII-K[b].** Require all new buildings in the City to be built under the seismic requirements of the current adopted California Building Code.
>
> **Policy VII-K[c].** Enforce provisions of the Alquist-Priolo Earthquake Fault Zoning Act.
>
> **Policy VII-N[a].** Any construction that occurs as a result of the General Plan must conform with the current UBC regulations, which address seismic safety of new structures and slope requirements. As appropriate, require a geotechnical analysis prior to tentative map approval in order to ascertain site-specific subsurface information necessary to estimate foundation conditions. These geotechnical studies should reference and make use of the most recent regional geologic maps available from the California Department of Conservation Division of Mines and Geology.
>
> **Policy VII-N[e].** Control construction-related fluvial erosion by a construction erosion control program filed with the City's Public Works Department and kept current throughout site development.
>
> **Policy VII-N[f].** Include "best management practices" in the erosion control program, as appropriate, given the specific circumstances of the site and/or project. Table V-9-2 in the Master Environmental Impact Report presents examples of best management practices.

Stanislaus County General Plan

The *Stanislaus County General Plan* guides land use and development in the unincorporated area of Stanislaus County (Stanislaus County 2016). Goals and policies in the general plan related to geology, soils, and seismicity include the following:

Conservation and Open Space Element

Goal Two. Conserve water resources and protect water quality in the County.

Policy Five. Protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

Policy Six. Preserve natural vegetation to protect waterways from bank erosion and siltation.

Goal Five. Reserve, as open space, lands subject to natural disaster in order to minimize loss of life and property of residents of Stanislaus County.

Policy Sixteen. Discourage development on lands that are subject to flooding, landslide, faulting, or any natural disaster to minimize loss of life and property.

Safety Element

Goal One. Prevent loss of life and reduce property damage as a result of natural disasters.

Policy Three. Development should not be allowed in areas that are particularly susceptible to seismic hazard.

Goal Two. Minimize the effects of hazardous conditions that might cause loss of life and property.

Policy Six. All new development shall be designed to reduce safety and health hazards.

Policy Fourteen. The County will continue to enforce state-mandated structural Health and Safety Codes, including but not limited to the California Building Code, the International Property Maintenance Code, the California Fire Code, the California Plumbing Code, California Electric Code, and Title 24, Parts 1-9.

Agricultural Element

Goal Three. Protect the natural resources that sustain our agricultural industry.

Policy 3.7. The County shall encourage the conservation of soil resources.

9.3 Environmental Setting

The study area is located in the Great Valley geomorphic province of central California, often referred to as the California Central Valley. This geomorphic province is characterized as an alluvial plain approximately 50 miles wide and 400 miles long (California Geologic Survey

[CGS] 2002). The study area is within the central portion of the province at the northern end of the San Joaquin Valley. The San Joaquin Valley is bounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Coast Range (Diablo Range) to the west.

The study area is drained primarily by the Tuolumne River, a major tributary to the San Joaquin River. The study area is predominantly flat. Elevations within the City range from approximately 115 feet above msl in the northeast portion of the City to 45 feet msl along the Tuolumne River in West Modesto. Most variations in surface topography within the study area are relatively minor with more appreciable changes in grade directly adjacent to surface water features (e.g., Tuolumne River and Dry Creek).

9.3.1 Local Geology

Alluvial sediments have accumulated within the San Joaquin Basin almost persistently for the last 160 million years. Most sediments in the basin derive from the Sierra Nevada Mountains, transported and deposited by the alluvial fans draining the western flanks of that range. Some sediments originate from the Diablo Range on the western side of the basin.

The study area is predominantly underlain by Pleistocene-aged alluvial fan deposits of the Modesto Formation (USGS 1991). The Modesto Formation is composed primarily of unconsolidated, unweathered, coarse sand and sandy silt along the upper portions of the unit. The older, deeper portions of this unit shift to more consolidated, slightly weathered, well-sorted silt and fine sand, silty sand, and sandy silt.

Near active floodplain areas, younger (Holocene) alluvium (Dos Palos Alluvium) is present near the San Joaquin River and Jennings Plant. Holocene alluvium is also present near the Tuolumne River area where the Sutter Plant and southern portion of the River Trunk Realignment Project are located.

9.3.2 Soils

Soils consist of younger alluvial material overlying older alluvium. These alluvial fan soils are highly fertile and productive for agricultural uses. Soil associations mapped as occurring in the study area generally consist of: Hanford, Dinuba, Tujunga, or Modesto (NRCS 2016). Most soils range from moderate to deep (i.e., 36 to 80+ inches deep).

The most predominant soils in the study area consist of sandy loam to fine sandy loam of the Hanford, Dinuba, Tujunga associations. In general, these soils are considered moderately well to well drained, with a very low to medium runoff class (NRCS 2016). A west-southwest trending band of Modesto loam-clay loam traverses the area north of Dry Creek. This association is moderately well drained with a high runoff class (NRCS 2016). San Joaquin and Madera sandy loams underlie the northeastern portion of the study area. These soils are moderately drained with very high runoff and a hardpan layer approximately 20 to 40 inches below ground surface (bgs) (NRCS 2016).

Portions of the River Trunk Realignment Project alignment near Dry Creek and the Tuolumne River corridors likely traverse fine sandy loams. Along the proposed Third Outfall Pipeline alignment, underlying soils mostly include Dinuba sandy loam and Hanford sandy loam. Going southward, soils become slightly saline-alkali near the Jennings Plant.

Soil Erosion

Soil erosion is the process of removing soil particles from a land surface by wind, water, or gravity. Factors influencing the rate of erosion may include climatic conditions, soil composition and roughness, soil moisture, ground cover, and topography and slope. Most natural erosion occurs slowly. However, ground-disturbing construction activities may increase the rate of erosion by exposing bare soils to the effects of wind and/or water. Erosion also may occur along the Tuolumne River and Dry Creek corridors during storm events, resulting in locally significant bank failures if the bank integrity is comprised or not properly stabilized. In general, the erosion potentials of most soils in the study area are considered low to moderate, with the exception of the Dinuba sandy loam, which is highly susceptible to erosion by water and Modesto clay loam, which is susceptible to erosion by wind (NRCS 2016).

Expansive Soils

Expansive soils are predominantly composed of clays and can undergo substantial volume change in response to changes in moisture content. During wetting and drying cycles, expansive soils may shrink and swell, creating differential ground movements. In general, the expansion potentials of most soils in the study area are considered low to moderate, with the exception of Modesto clay loam (NRCS 2016).

9.3.3 Seismicity

California is subjected to enormous tectonic forces stemming from the lateral motion of the Pacific (west) and North American (east) plates moving in opposing directions. The shearing forces of the plate movement results in an extremely fractured boundary referred to as the "San Andreas Fault Zone." Many smaller active and historic fault zones are associated with the Pacific/North American tectonic movement as well.

The eastern portion of the San Joaquin Valley and study area lie in a region with limited faulting and relatively low seismic activity. Despite limited seismic activity, there have been several large earthquakes that resulted in ground shaking in the study area during the last 200 years. Potential seismic hazards resulting from a regional moderate-to-major earthquake include: fault ground rupture (surface faulting); ground shaking; liquefaction, subsidence, and differential settlement; and landslide, slope failure, and lateral spreading. Discussion of regional seismic faulting and hazards and their potential to occur in the study area is discussed below.

Alquist-Priolo Fault Zones and Ground Rupture

Horizontal and/or vertical surface or ground ruptures can occur during seismic events, typically along existing fault lines. Ground rupture that occurs along a fault trace (mapped location of the intersection(s) of a fault with the ground surface) is referred to as *fault rupture*. Some seismogenic faults (e.g., blind thrusts) do not extend to the ground surface and may not generate fault rupture even during major earthquakes. Other rupturing of the ground surface can occur as the result of slope failure or settlement caused by seismic shaking. Ground ruptures can result in damage to buildings, roads, and underground utilities. The potential for ground rupture depends on the proximity of faults, shaking severity, and local geologic conditions.

Fault areas considered to be of greatest risk are identified as Alquist-Priolo fault zones. No Alquist-Priolo designated fault zones or potentially active faults exist within or near the study area. Most seismic activity in this region stems from the San Andreas Fault Zone and associated fault systems west of the study area. Past evidence of recent fault displacement can be seen throughout the San Andreas Fault Zone and San Francisco Bay area. Active and potentially active faults near the Program study area are presented in **Table 9-1**.

Table 9-1. Regional Faults in Proximity to the Program Study Area

Fault	Approximate Distance from City's Wastewater Service Area	Last Known Major Displacement
San Joaquin Fault (potentially active)	12 miles west	11,700–700,000 years ago; without historical record
Vernalis (inactive)	10 miles west	Within last 1.6 million years; age undifferentiated
Ortigalita Fault Zone, Cottonwood Arm Section (potentially active)	27 miles southwest	11,700–700,000 years ago; without historical record
Foothills Fault System, Southern Reach Section (potentially active)	25 miles east	11,700–700,000 years ago; without historical record
Greenville Fault Zone (active)	28 miles west	1980, Magnitude (M) 5.8
Calaveras Fault Zone, Central Calaveras Section (active)	46 miles southwest	1979, M 5.7 2007, M 5.6
San Andreas Fault Zone, Santa Cruz Mountains Section (active)	55 miles southwest	1989, M 7.2 1906, M 7.9

Sources: CGS 2010; USGS 2016

Ground Shaking

Seismically induced ground shaking can cause substantial damage to structures. The severity of ground shaking experienced at a specific location depends on a variety of factors, such as the magnitude and duration of the seismic event, fault type associated with the event, distance from the epicenter, and physical properties of the underlying geology and soils. The Modified Mercalli Intensity Scale (MMI) of perceived intensity, shown in **Table 9-2**, is based on observed effects and is the current standard used throughout the United States. Less intense earthquakes are typically rated on the basis of individual accounts, whereas higher intensity events are rated based on observed structural damage.

Table 9-2. Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not Felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS 1989

Although ground shaking in the Modesto area has historically been very minimal, ground shaking events periodically affect the region. In Stanislaus County, the level of seismic ground shaking decreases from "High" risk along the western border of the County and the foothills of the Diablo Range, to "Moderate" risk in the central part of the County, to "Low" risk in the eastern portion (CGS 2008). The study area lies within the central portion of the County and is considered "Moderate" to "Low" to risk for earthquake shaking potential. In addition, the expected (10 percent chance of occurring in the next 50 years) peak ground shaking (acceleration[1]) in the study area is relatively low at 0.247*g* (CGS 2008).

Differential Settling, Subsidence, and Liquefaction

Settlement of the ground surface can be caused by a number of geologic processes. Settlement is the lowering of the land surface elevation as a result of the compression, compaction, or

[1] Ground shaking is usually quantitatively expressed as the acceleration of movement relative to the acceleration of gravity (*g*).

consolidation of underlying soils, sediment, or rock. These processes are exasperated under increased loading (e.g., additional sediment deposition or construction of structures, including fills) or the withdrawal of groundwater. The processes cause a reduction in the volume of the materials. Compaction and compression generally occurs within unconsolidated granular soils or younger alluvial sediment over a relatively short timeframe. Consolidation usually occurs over a longer period (sometimes many years) in saturated finer grained material as pore water (i.e., water within the spaces between sediment grains) is forced out of the sediment structure under loading or groundwater pumping.

Surface settlement can be referred to as subsidence, a term generally used for settlement of large magnitude or affecting a large area. Subsidence can also occur following oxidation of buried organic material. Areas consisting of fine-grained sediments are more susceptible to ground subsidence. Although mining and extraction activities may also lead to subsidence, excessive pumping of groundwater is the predominant cause for this phenomenon. Historic land subsidence has occurred in large portions of the San Joaquin Valley, with more recent subsidence areas around El Nido and Tulare-Kettleman City (California Department of Water resources [DWR] 2014; DWR 2017a; DWR 2017b). In the Modesto area, the effects of subsidence have been subtler with surface elevations generally 0 to 5 feet lower as compared to 1949 elevations (DWR no date). However, more recent groundwater elevations from local wells within the study area generally show declines in groundwater elevations ranging from 0 to 50 feet below the historical spring low levels (DWR 2014). As such, and in consideration of other basin-wide factors, DWR has classified the San Joaquin Valley Groundwater Basin, Turlock Subbasin as having a low to medium overall potential for future land subsidence, the Modesto Subbasin as having a medium to high overall potential, and the Delta-Mendota Subbasin as having a high overall potential (DWR 2004; DWR 2006a; DWR 2006b; DWR 2017a). Please refer to Chapter 12, *Hydrology and Water Quality*, for further discussion on groundwater resources.

Ground settlement can cause the development of cracks or fissures in the ground surface. When ground settlement is non-uniform or uneven, differential settlement results, potentially inducing stress to structures.

Liquefaction can occur when water-saturated, loose sandy soils suddenly lose strength during seismic shaking. The primary factor that triggers liquefaction is moderate to strong ground shaking. The probability of liquefaction correlates directly with the intensity and duration of ground shaking (i.e., the stronger and/or longer the earthquake, the greater the chance of liquefaction). Additionally, physical properties may increase the susceptibility of soil to liquefaction. Saturated relatively clean/loose granular soils have a relatively high susceptibility for liquefaction while cohesive soils (even if saturated) have a low susceptibility. No specific liquefaction hazards have been identified in Stanislaus County (Bryant and Hart 2007). Although the study area is located in a seismically limited region, several proposed components would be located near the Tuolumne River and Dry Creek with the potential for the presence of a high water table and sandy, liquefiable soils. Therefore, impacts related to seismic-related ground failure, including liquefaction would be significant if not adequately addressed

Landslide, Slope Failure, and Lateral Spreading

Landslides or slope failure may occur in steeply sloped areas (15 percent slope or greater) following heavy rains, seismic events, or human activities (e.g., grading or excavation

activities). Similarly, horizontal displacement of gently sloping ground (5 percent or less slope) may occur along river banks or exposed embankments, a phenomenon known as lateral spreading. Saturated, loosely consolidated soils and precipitation events increase the likelihood that an earthquake will trigger landslides, slope failure, or lateral spreading.

Modesto and the surrounding area is relatively flat with little variation in topography. Some gradual slopes may be observed near river terraces and former sand dunes. Effects of landslides, slope failures, and lateral spreading are negligible in the Modesto area.

9.4 Impact Analysis

9.4.1 Methodology

The methods used to evaluate the environmental impacts of the Proposed Program on geology, soils, and seismicity involved a review and assessment of published maps, professional publications, and reports pertaining to the geology, soils, and seismicity within the Program vicinity. Information reviewed included USGS and CGS geologic maps (USGS 1991; CGS 2002), NRCS soils maps (NRCS 2016), California seismic hazard zone mapping (Bryant and Hart 2007; CGS 2008; CGS 2010; CGS 2002;), DWR groundwater basin information (DWR 2004; 2006a, 2006b; 2017a; 2017b), and USGS historic earthquake data (not cited). The impact analysis assumed the proposed program activities and Realignment project, would, as required, conform to the latest CBC standards, General Plan policies, local ordinances, and local permit requirements.

9.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on geology, soils, and seismicity if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
  - Strong seismic ground shaking;
  - Seismic-related ground failure, including liquefaction; or
  - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or

- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

The first criterion and sub-criterion regarding rupture of a known earthquake fault are not included in the detailed EIR impact analysis because the Proposed Program is not located within a Alquist-Priolo designated hazard zone. The nearest known active fault (i.e., surface displacement in the last 10,000 years) is the Greenville Fault Zone, approximately 25 miles west (CGS 2010). The nearest potentially active fault (i.e., surface displacement in the last 1.6 million years) is the San Joaquin Fault, approximately 8 miles west of the study area (CGS 2010). Since there are no known faults in the in the Program area, there would be no impact from ground rupture of a known fault.

In addition, the criterion regarding use of septic tanks or alternative wastewater disposal systems is not included in the detailed EIR impact analysis as the Proposed Program does not involve construction of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact related to the suitability of soils to support septic tanks or alternative disposal systems.

9.4.3 Environmental Impacts

Impact GEO-1: Cause Damage to Facilities and Exposure of People to Hazards from Strong Seismic Events, Including Ground Shaking or Landslides (Less than Significant)

Due to the Proposed Program's significant distance to active faults and the underlying geologic and soil conditions, the Central Valley generally experiences infrequent, lower levels of ground shaking than many other regions of California. Recent seismic events associated with the San Andreas Fault Zone have resulted in light or moderate ground shaking in the study area. Little to no damage would occur to most newly constructed structures (e.g., lift stations and pump stations) in the Modesto area following ground shaking of this magnitude. Additionally, the City would be required to comply with CBC standards which would further minimize seismic-related impacts by ensuring that all structures are designed and constructed in compliance with California's seismic-related engineering standards. Any potential for foundational or structural damage associated with seismic ground shaking and adverse effects to structures or people would be minimal.

The floor of the Central Valley is relatively flat with only minor changes in topography. Some gradual slopes may be observed near river terraces and the banks of the Tuolumne River and Dry Creek. However, landslides are not likely to occur on or near any of the proposed component sites.

Based on the above, impacts related to seismic ground shaking and landslides would be **less than significant**.

Impact GEO-2: Result in Risk to Property and Life from Expansive Soils (Less than Significant)

Soils that contain a relatively high percentage of clay minerals have the potential to shrink and swell with changing moisture conditions. This uneven movement can fracture concrete

foundations and footings, resulting in potential damage or failure of infrastructure. In general, most of the study area, including the River Trunk Realignment Project area, contains sandy or loamy soils exhibiting low to moderate plasticity characteristics (NRCS 2016). In addition, development of Program facilities (e.g., pump stations and treatment plant facilities) and upgrades to existing wastewater collection and treatment facilities on expansive soils typically can be addressed through compliance with CBC standards by designing and building structures to a level of strength appropriate to regional seismic risks. However, the Proposed Program includes numerous components throughout central Stanislaus County, including areas with underlying soils exhibiting moderate to high expansive characteristics that may result in damage to infrastructure.

The City's Standard Specifications require under Section 11.05 that a comprehensive soils report be prepared for each project in the City. The report must be prepared by a licensed Geologist or Geotechnical Engineer and must include R-values of soil test samples, groundwater elevations, stripping and grading recommendations, and a determination of whether expansive soil is present. Section 11.08 of the City's Standard Specifications further requires that projects be graded/constructed in accordance with the recommendations in the soils report and any additional recommendations provided during construction by the project Geotechnical Engineer. These requirements would ensure that Proposed Program components would not be constructed on expansive soils such as to subject persons or property to substantial risks of harm. Therefore, this impact would be **less than significant.**

Impact GEO-3: Result in Substantial Soil Erosion or Loss of Topsoil (Less than Significant)

Construction-related activities would involve disturbance and exposure of soils, which could leave soils susceptible to erosion during precipitation or wind events. The Proposed Program would include grading, excavation, trenching, or other activities that could loosen soils and increase the risk of erosion or sediment transport. In addition, some components, such as the River Trunk Realignment Project and proposed third outfall pipeline, may involve removing, stockpiling, and transporting a substantial volume of topsoil. These impacts are considered significant. However, as discussed in Chapter 12, *Hydrology and Water Quality*, for Program components with a footprint greater than one acre, construction-related impacts on soil resources from all Proposed Program components, including the River Trunk Realignment Project, would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements. For Program components that would result in disturbance of less than one acre, similar construction-related impacts on water quality due to erosion would be avoided and minimized by complying with the City of Modesto's Standard Specifications which require development of a Local SWPPP or Erosion Control Plan and implementation of stormwater BMPs. Therefore, by implementing VMPs pursuant to either the NPDES General Construction Permit or the City of Modesto's Standard Specifications, this impact would be considered **less than significant**.

Impact GEO-4: Result in Subsidence, Liquefaction, or Collapse Due to Seismic Activity or an Unstable Geologic Unit or Soil (Less than Significant)

Due to the physical composition of the soils, subsidence in the Modesto area has historically been minor with surface elevation loss of 0 to 5 feet (compared to 1949 elevations) despite significant observed subsidence in other portions of the San Joaquin Valley (DWR no date). The Proposed Program would not directly use groundwater as components would be limited

to sewer lines, pump and lift stations, treatment plant components, and related facilities. Groundwater could be encountered during excavation work, particularly during construction of the River Trunk Pump Station and pipeline construction activities including those involving trenchless methods. For such components, groundwater dewatering activities would likely be required during construction activities. However, dewatering would be minimal and temporary and the potential for localized collapse or subsidence as a result of Program construction activities or River Trunk Realignment Project construction activities would be less than significant.

Under certain conditions, some geologic units or soils can become unstable and lead to landslides, trench collapse, lateral spreading, and liquefaction, especially when construction activities result in exposed soils and/or steep slopes. Construction-related ground-disturbing or excavation activities could alter soil stability. Although most Program construction activities would generally occur in relatively flat areas not at risk from landslides and lateral spreading, excavation and trenching for structures and pipelines would temporarily create potentially unstable slopes. Construction of the River Trunk Pump Station would also require substantial excavation of at least 75 feet and would likely require dewatering and installation of a shoring system. Currently, the City is considering two different approaches for establishing a dry and stable work area for the River Trunk Pump Station: (1) designing the temporary shoring system to be part of the permanent pump station, or (2) design a temporary shoring system to create a dry and stable work area and construct permanent structural walls for the pump station separately (Carollo Engineers 2016). The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) outlines specific Excavation and Trenching standards for building (29 CFR Section 1926.650) and utility trenching operations (29 CFR Section 1926.652). To reduce the risk of excavation-related accidents, the City and its contractor(s) would adhere to such OSHA standards.

Liquefaction may occur in water-saturated soils during moderate to large earthquakes. The potential for liquefaction to occur depends on soil composition, soil saturation levels, and intensity and duration of seismic ground shaking and can lead to severe damage in concrete foundations and infrastructure. Although the study area is located in a seismically limited region, several proposed components would be located near the Tuolumne River and Dry Creek with the potential for the presence of a high water table and sandy, liquefiable soils. Therefore, impacts related to seismic-related ground failure, including liquefaction would be significant if not adequately addressed. Adherence to current CBC standards would reduce these risks by designing and building structures to a level of strength appropriate to regional seismic risks. In addition, as described in Impact GEO-2, per Section 11.08 of the City's Standard Specifications, all WWMP components would be graded/constructed in accordance with the recommendations in a required soils report and any additional recommendations provided during construction by the project Geotechnical Engineer. Incorporating the findings and recommendations identified for the project into the final project designs, would reduce significant risks of subsidence, liquefaction, or collapse by ensuring new structures are designed and constructed in a manner that addresses underlying geologic conditions. In addition, the risks of landslides and lateral spreading in the study area would not be substantial. Thus, with adherence to the City's Standard Specifications, adverse effects from unstable geologic units would be **less than significant**.

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Chapter 10
GREENHOUSE GAS EMISSIONS AND ENERGY RESOURCES

10.1 OVERVIEW

This chapter describes the regulatory and environmental setting related to greenhouse gases (GHGs) and energy resources and then evaluates impacts related to the Proposed Program's forecasted GHG emissions. The impact evaluation begins by describing the methodology used to evaluate significance and the GHG significance criteria, and then presents the impact evaluation.

10.2 REGULATORY SETTING

10.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs. The following sections briefly describe the history and content of the regulatory programs developed to date by USEPA and the U.S. Supreme Court (Court).

The Court ruled for the first time in 2007 that GHG emissions are air pollutants covered under the federal Clean Air Act, in its decision *Massachusetts v. Environmental Protection Agency* (549 U.S. 497). The Court held that GHGs fit the definition of an air pollutant causing and contributing to air pollution, which reasonably may be anticipated to endanger public health or welfare. In 2009, the USEPA Administrator determined that existing and projected concentrations of GHGs threaten public health and welfare of present-day and future generations, and that combined emissions from motor vehicles contribute to GHG pollution. USEPA's endangerment finding covers emissions of six key GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These GHGs are discussed further in Section 10.3, "Environmental Setting."

GHG Emission Standards

On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012–2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses. On October 15, 2012, USEPA and NHTSA established a program to reduce GHG emissions and improve fuel economy standards for new cars and light trucks through 2025 (USEPA 2012). However, in August 2018, the USEPA and the NHTSA published a proposed rule for model years 2021-2026 of new cars and light trucks that would freeze mileage standard requirements at 2020 levels through 2026, and thus the mileage standard requirements may be subject to change from the standards established in 2012 (Center for Climate and Energy Solutions 2019). In August 2016, USEPA and the NHTSA jointly finalized

Phase 2 Heavy-Duty National Program standards to reduce GHG emissions and improve fuel efficiency of medium- and heavy-duty vehicles for model year 2018 and beyond (USEPA 2017a).

Clean Power Plan

In 2015, President Barack Obama and USEPA announced the Clean Power Plan, which is aimed at reducing carbon pollution from existing fossil fuel–fired electric generating units. The plan was designed to be flexible while implementing strict regulations to encourage the development of cleaner and lower-polluting American energy. On February 9, 2016, the Court stayed implementation of the Clean Power Plan pending judicial review. While awaiting action by the Court, USEPA was continuing to work with states that choose to find ways to reduce GHG emissions from power plants. However, in 2018, the USEPA proposed to repeal the Clean Power Plan and replace it with the proposed Affordable Clean Energy (ACE) rule (USEPA 2018). The ACE rule identifies a "best system of emission reduction", provides states with a list of "candidate technologies" that can be used to establish standards of performance, and updates EPA's New Source Review Permitting program to incentivize efficiency improvements at existing power plants (USEPA 2018). This regulation could influence the indirect GHG emissions associated with electricity use.

10.2.2 STATE LAWS, REGULATIONS, AND POLICIES

GHG Reduction Goals

In recent years, California has enacted a number of policies and plans to address GHG emissions and climate change. Efforts on a statewide level to regulate and reduce GHG emissions are detailed below but include establishing GHG emission goals, developing vehicle emission standards, and promoting sustainable land use and transportation planning. Most recently, the state's efforts to continuing GHG emission control and regulation progress include developing international partnerships.

AB 32, SB 32 and Executive Orders

In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. EOs S-3-05 and B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050. EO B-30-15 established an interim target to cut California's GHG emissions to 40 percent below 1990 levels by 2030.Senate Bill 32 codified the target of achieving 40 percent below 1990 levels by 2030.

CARB approved the First Update to the AB 32 Scoping Plan on May 22, 2014 (CARB 2014). This update defines climate change priorities for the next 5 years and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update also highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals and evaluates how to align the State's longer term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB is updating the Scoping Plan to reflect progress since 2005, additional reduction measures, and plans for reductions beyond 2020.

CARB released and adopted a 2017 Scoping Plan Update (CARB 2018a) to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 (CARB 2018a, CARB 2017). The

2017 Scoping Plan Update suggests several areas where measures for water and wastewater treatment could be considered. This includes improving the energy consumption for water pumping, treatment, heating; utilizing anaerobic digestion and wastewater treatment plant capacity to help process organic waste diverted from landfills; using biosolids for soil amendments; and incentivizing methane capture systems at wastewater treatment plants to produce renewable electricity, transportation fuel, or pipeline biomethane.

California has adopted several vehicle emission reduction and fuel efficiency regulations that are similar and consistent with the federal USEPA and NHTSA regulations. These California vehicle regulations were granted under a waiver request by the USEPA and would not necessarily be affected by changes in the federal policies. The current federal administration has suggested revoking California's waiver, and if the waiver is revoked the California standards may be subject to change.

GHG Reporting and Reduction Regulations

CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional GHG emission reduction regulations. These include the low carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the renewable portfolio standard (RPS), which requires electricity suppliers to increase the amount of electricity generated from renewable sources to 33 percent by 2020 and to 50 percent by 2030.

In January 2012, CARB approved the Advanced Clean Cars Program, a vehicle emission control program for model years 2017–2025. To further California's support of the national program to regulate emissions, CARB submitted a proposal that would allow automobile manufacturer compliance with USEPA's requirements to show compliance with California's requirements for the same model years. The final rulemaking package was filed on December 6, 2012, and the final rulemaking became effective December 31, 2012.

CBC Title 24 governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect GHG emissions associated with buildings.

SB 1383 directed ARB to develop a Short-Lived Climate Pollutant (SLCP) reduction strategy with targets of reducing emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and black carbon emissions 50 percent below 2013 levels by 2030 (CARB 2017).

Wastewater treatment plants can assist with this goal by determining opportunities to support co-digestion of food-related waste streams at wastewater treatment plants and incentivizing methane capture systems at wastewater treatment plants to produce renewable electricity, transportation fuel, or pipeline biomethane. Both of these are considered under the Proposed Program.

California requires industrial sources with GHG emissions over 10,000 metric tons (MT) to annually report their GHG emissions under the Mandatory Reporting Rule. Wastewater treatment facilities may be required to report GHG emissions depending on their size and types of equipment used in the wastewater treatment process.

Climate Change Adaptation Policies

In 2009, California adopted a statewide Climate Adaptation Strategy that summarizes climate change impacts and recommends adaptation strategies across seven sectors: public health, biodiversity and habitat, oceans and coastal resources, water, agriculture, forestry, and transportation and energy. The California Natural Resources Agency (CNRA), in coordination with other state agencies, has updated the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009). The new Safeguarding California Plan and the Safeguarding California Plan: 2018 update augment previously identified strategies in light of advances in climate science and risk management options (California Natural Resources Agency 2014, 2018, and 2019). The Safeguarding California Plans highlights climate risks in multiple broad areas (e.g., energy, forests, transportation, public health, water, etc.) in California, discusses progress to date, and makes realistic sector-specific recommendations. For the Proposed Program, the Water and Public Health sectors are relevant.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every two years (CEC 2018). The reports and report updates analyze data and provide policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2018). The 2018 Integrated Energy Policy Report Update highlights California's innovative policies and the related clean energy economy (CEC 2018).

10.2.3 LOCAL LAWS, REGULATIONS, AND POLICIES

San Joaquin Valley Air Pollution Control District

The SJVAPCD's *Climate Change Action Plan*, adopted in 2008, directed the District Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change (SJVAPCD 2009a, 2017). On December 17, 2009, the SJVAPCD adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (Guidance) (SJVAPCD 2009b). The Guidance establishes a streamlined process that can be used to evaluate the significance of project-specific GHG emission impacts on global climate change, based on the use of best performance standards (BPS) (SJVAPCD 2009b); the streamlined evaluation process is designed to meet the reduction goals of AB 32. The SJVAPCD defines BPS as "the most effective achieved-in-practice means of reducing or limiting GHG emissions from a GHG emissions source." Types of BPS include equipment type, equipment design, operational and maintenance practices, measures that improve energy efficiency, and measures that reduce vehicle miles traveled (SJVAPCD 2009b). Potential BPS related to boilers or process heaters may be applicable to the Proposed Program. If BPS are not available, the SJVAPCD encourages users to demonstrate at least a 29-percent reduction from business as usual (BAU); however, the Guidance does not provide clear BPS or thresholds for the evaluation of construction-related effects under CEQA.

Stanislaus County Regional Transportation Plan / Sustainable Communities Strategy

Stanislaus County's *Regional Transportation Plan / Sustainable Communities Strategy, (RTP/SCS),* adopted in 2014, contains land-use and transportation goals and objectives for the County and addresses requirements, including those in SB 375, for reductions in GHG emissions from the transportation sector (StanCOG 2014). The WWMP is a tool to ensure implementation of appropriate water management policies for the land-use goals outlined in the RTP/SCS.

Stanislaus County Regional Sustainability Toolbox

Stanislaus County, in collaboration with the nine cities within the county, completed the Stanislaus Regional Sustainability Toolbox (RST) (Stanislaus County 2017). The RST includes multiple planning tools to achieve regional GHG reductions. The planning tools include an example climate action plan (CAP) with regional CAP strategies and low-impact development (LID) standards and specifications. Regional strategies from this model CAP related to water-related infrastructure projects like the Proposed Program include the following (ESA 2013):

Goal E.1: Increase Building and Equipment Efficiency Community-Wide

> **Strategy 1.7:** Industrial Equipment Energy Efficiency Promotion. Promote San Joaquin Valley Air Pollution Control District Best Performance Standards to increase energy efficiency in industrial equipment.

Stanislaus County General Plan

The *Stanislaus County General Plan's* Conservation and Open Space Element (2016) identifies water conservation-related goals and policies that would contribute to reduced GHG emissions by conserving water resources and reducing related energy use for water supply/distribution activities. The General Plan also contains the following goal, policies, and implementation measures for reducing air pollutant emissions that would also reduce GHG emissions:

Goal Six: Improve air quality.

> **Policy Nineteen:** The County will strive to accurately determine and fairly mitigate the local and regional air quality impacts of proposed projects.
>
> > **Implementation Measure 1.** Require all development proposals, where appropriate, to include reasonable air quality mitigation measures.
> >
> > **Implementation Measure 2.** Minimize case-by-case analysis of air quality impacts through the use of standard criteria for determining significant environmental effects, a uniform method of calculating project emissions, and standard mitigation methods to reduce air quality impacts.
>
> **Policy Twenty:** The County shall strive to reduce motor vehicle emissions by reducing vehicle trips and vehicle miles traveled and increasing average vehicle ridership.

City of Modesto General Plan

The *City of Modesto's General Plan* Chapter VII, Environmental Resources, Open Space and Conservation (2019) contains the following goals related to energy conservation may be relevant to the Proposed Project:

> **Policy I.2.a.** Require shade trees, where feasible and appropriate, in landscape plans for all new development proposals. Mature trees have lower water needs. Develop shade-tree specifications for development projects, including appropriate types of trees (size, deciduous or evergreen, absence or lower branches, etc), locations (e.g., distance from structures), density (i.e. within a subdivision or parking lot), and orientation (trees on the west side of a building generally provide the most benefit) for use in landscape plans.
>
> **Policy I.1.c.** Discourage removal of street trees unless they are badly diseased and have become a threat to public safety. If a tree must be removed, it should be replaced no later than the end of the next planting season with a large-canopy species.
>
> **Policy I.1.g.** Encourage the use of solar energy systems for residential, agricultural, parks, public buildings, and business purposes as provided in Government Code Section 65850.5.
>
> **Policy I.1.j.** Support the State of California's commitment to the "Renewable Portfolio Standard," which requires electrical utility providers to obtain one-third (33%) of their electricity from renewable energy sources by 2020.
>
> **Policy I.1.l.** Consider purchasing clean-fuel / alternative-fuel fleet vehicles.

City of Ceres General Plan

The *City of Ceres General Plan's* Chapter 54, Health and Safety (2018) contains the following goals and policies related to energy use and greenhouse gas emissions that may have direct or indirect beneficial effects on the generation of GHGs that may be relevant to the Proposed Project:

Goal 5.E: Reduce the community's GHG emissions to mitigate the rate and extent of climate change.

> **Policy 5.E.1. Green Building Code:** Continue to implement and enforce the Green Building Code to promote energy efficient building design and construction.
>
> **Policy 5.E.2. LEED Certification:** Encourage new development to participate in the Leadership in Energy and Environmental Design (LEED) certification program for the design, operation, and construction of high-performance energy efficient buildings.
>
> **Policy 5.E.4. Energy Efficient Design:** Reduce the need for artificial temperature control and lighting by establishing standards to encourage the following:
>
> - Passive cooling measures in new and existing development; and

- Design that incorporates windows that open to the outside in all habitable rooms to maximize the use of daylight and promote ventilation.

Policy 5.E.5 Energy Efficient Lighting. Establish standards to improve energy efficiency related to outdoor lighting by limiting unnecessary fixtures and utilizing low-energy fixtures.

Policy 5.E.7 Energy Efficient Municipal Operations. Demonstrate leadership by reducing the use of energy and fossil fuel consumption in municipal operations, increasing energy efficiency in transportation, waste management, building design and use, and the purchasing of goods and services.

10.3 ENVIRONMENTAL SETTING

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (CO_2, methane, and N_2O) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. GHG emissions are typically reported in terms of carbon dioxide equivalents (CO_2e), which converts all GHGs to an equivalent basis taking into account their global warming potential (GWP) compared to CO_2. **Table 10-1** shows the six GHGs and their respective GWP.

Table 10-1. Greenhouse Gas Overview and Global Warming Potential

Greenhouse Gas	GWP over 100 years (in IPCC 2013/SAR)[(a)]	Description
Carbon Dioxide (CO_2)	1/1	Released into the atmosphere through burning of fossil fuels (coal, natural gas and oil), solid waste, trees, and wood products, and also because of certain chemical reactions; removed from the atmosphere when it is absorbed by plants and oceans; remains in the atmosphere for 50 to more than 100,000 years.
Methane (CH_4)	28/21	Emitted during the production and transport of coal, natural gas, and oil; methane emissions also result from livestock and other agricultural practices and from the decay of organic waste, notably in municipal solid waste landfills; remains in the atmosphere for about 10 years.
Nitrous Oxide (N_2O)	265/310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste; remains in the atmosphere for about 100 years.
Hydrofluoro-carbons (HFCs)	4-12,400/ 650–11,700	Typically used in refrigeration and air conditioning equipment, as well as in solvents; emissions are generated primarily from use in air conditioning systems in buildings and vehicles; remains in the atmosphere from 10 to 270 years.
Perfluoro-carbons (PFCs)	6,630-11,100/ 6,500–9,200	Emitted as by-products of industrial and manufacturing sources; remains in the atmosphere from 800 to 50,000 years.
Sulfur Hexa-fluoride (SF_6)	23,500/23,900	Used in electrical transmission and distribution; remains in the atmosphere approximately 3,200 years.

(a) As scientific understanding of the global warming potential (GWP) of various greenhouse gases (GHGs) improves over time, GWP values are updated in the Intergovernmental Panel on Climate Change (IPCC) scientific assessment reports. For regulatory consistency, however, the United Nations Framework Convention on Climate Change reporting guidelines (and international treaties) for national inventories continue to the use of GWP values to those published in the IPCC's 1996 Second Assessment Report (SAR). The table shows GWP values for 100 years from IPCC 2013 and SAR.

Sources: USEPA 2015; IPCC 2013; IPCC 1996

These six gases are the major GHGs that were recognized by the United Nations Framework Convention on Climate Change and other international climate change treaties including the Kyoto Accords which was the first international treaty to establish GHG emission reduction goals. Other GHGs were not recognized by the international treaties, chiefly because of the smaller role that they play in global climate change or the uncertainties surrounding their effects. One GHG not recognized by the international treaties is atmospheric water (H_2O) because no obvious correlation exists between H_2O and specific human activities. Water appears to act in a feedback manner; higher temperatures lead to higher H_2O concentrations, which in turn cause more global warming (Intergovernmental Panel on Climate Change [IPCC] 2003). Nitrogen trifluoride was not recognized in the initial Kyoto Accords, but was subsequently included by the United Nations Framework Convention on Climate Change and recognized in California as a GHG.

The most important GHG in human-induced global warming is CO_2. Although many gases have much higher GWP than the naturally occurring GHGs, CO_2 is emitted in such vastly higher quantities that it accounts for about 82 percent of the GWP of all GHGs emitted by the United States (USEPA 2017b). Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions over time and, thus, substantial increases in atmospheric CO_2 concentrations. In 2005, atmospheric CO_2 concentrations were about 379 ppm, more than 35 percent higher than the pre-industrial concentrations of about 280 ppm (Forster et al. 2007, as cited in IPCC 2007). In addition to the sheer increase in the volume of its emissions, CO_2 is a major factor in human-induced global warming because of its long lifespan in the atmosphere (50,000–100,000 years).

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from

climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

In 2016, total California GHG emissions were 429.4 million metric tons of carbon dioxide equivalents (MMT CO_2e) (CARB 2018b). This represents a reduction in total GHG emissions from 2012, which had the first emissions increase since 2007. The 2012 increase was driven primarily by strong economic growth in the state, the unexpected closure of the San Onofre Nuclear Generating Station, and drought conditions that limited in-state hydropower generation. Overall GHG emissions reached a peak in 2004 and have since decreased by 13 percent. In 2016, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 39 percent of the total emissions. On-road vehicles accounted for roughly 91 percent of emissions in the transportation sector.

10.3.1 ENERGY RESOURCES AND CONSUMPTION

MID provides electricity services to the City of Modesto through a network of over 1,800 miles of power lines throughout its service area (MID 2017a). MID also provides power to the Cities of Waterford, Salida, Mountain House, and parts of Ripon, Escalon, Oakdale and Riverbank. Approximately 23 percent of the power provided comes from solar and wind renewable sources, while the remaining 77 percent comes from a mixture of coal, large hydroelectric, natural gas, and unspecified sources of power. Turlock Irrigation District (TID) and PG&E also provide power in the Proposed Program area. **Table 10-2** provides a more detailed breakdown of MID's, TID's, and PG&E's energy resources. As mentioned in Section 10.2.2, California's RPS requires electricity suppliers to increase the amount of electricity generated from renewable sources to 33 percent by 2020 and to 50 percent by 2030, which will decrease the GHG intensity of the electricity the Proposed Program will utilize in the future.

Table 10-2. Summary of Energy Sources for the Modesto Irrigation District, Turlock Irrigation District, and PG&E

Energy Resources	Utility Power Mix (%)		
	MID (2016)	TID (2015)	PG&E (2015)
Eligible Renewable	23	21	30
Coal	19	10	0
Large Hydroelectric	10	14	6
Natural Gas	21	36	25
Nuclear	0	0	23
Unspecified Power*	27	19	17
Total	100	100	100

** "Unspecified sources of power" is defined as electricity from transactions that are not traceable to specific generation sources.*

Sources: MID 2017b, CEC 2017a, CEC 2017b

TID in conjunction with MID owns and operates the San Pedro Dam, providing up to 203 megawatts of hydroelectric power to customers throughout the City of Modesto. Out of the 203 megawatts produced by this dam, 139 megawatts go to TID and the remaining 64 go to MID (TID 2017).

10.4 IMPACT ANALYSIS

10.4.1 METHODOLOGY

Program-level Components

For WWMP program-level components, construction and operation-related GHG emissions and energy use impacts were evaluated qualitatively by considering the Proposed Program's potential sources of GHG emissions, including fossil-fueled or electric energy consuming equipment and vehicles, potential frequency and duration of emissions, and wastewater treatment process releases of biogenic emissions. Where specific construction or operation-related details were lacking, impacts were conservatively judged to be significant, and prescriptive mitigation measures were developed to minimize significant impacts.

River Trunk Realignment Project

For the River Trunk Realignment Project, construction and operational emissions were estimated using CalEEMod version 2016.3.1. CalEEMod is an emissions model that estimates GHG emissions for land use development projects. It contains reasonable default assumptions that can be replaced if site-specific information is available. CalEEMod incorporates both CARB's EMFAC for vehicles and current off-road in-use engine emissions modeled for construction equipment. Modeling for the River Trunk Realignment Project was based on the construction phasing information provided in Chapter 2, *Program Description*. Detailed CalEEMod output, including relevant input parameters, is contained in **Appendix B**, *Air Quality and Global Climate Change Impacts Evaluation Supporting Documentation*. In general, CalEEMod default numbers were used for construction phases and equipment, construction duration, and quantity of construction workers for each phase, with exceptions noted below and/or in Appendix B. Some of these construction details are also provided in Chapter 2.

Fabrication of equipment and materials such as cement and steel requires energy and, therefore, indirectly result in GHG emissions. These indirect GHG emissions associated with building materials are referred to as "embodied energy" and are based on life-cycle GHG emission analyses of individual materials. The embodied energy from building materials has not been estimated for this analysis, as detailed specifications and estimates of building materials are not available. For a typical building construction project, the materials that have some of the largest amounts of embodied energy are the aforementioned cement and steel.

Project-specific inputs into CalEEMod included estimated hauling truck trips, and use of assumptions developed by the City for the project's construction phasing and construction equipment. The equipment assumptions for all construction phases can also be found in Appendix B.

Estimated energy intensity associated with pumps at the River Trunk Pump Station and Shackleford Pump Station (as described in Chapter 2, *Program Description*) assumed pumping usage of 8 hours per day year-round (Appendix B).

Consideration of the Effects of GHG Emissions

Projected changes in climate associated with global warming may have related effects on other resources in the future, including effects on the Proposed Program (such as changed weather patterns). Anticipated potential worldwide climate change effects include coastal erosion, sea level rise, melting glaciers, atmospheric temperature warming, increased wildfire risk, ocean warming, food production issues (e.g., decreased crop yields), effects on terrestrial and marine ecosystems, flooding and/or drought conditions, and altered hydrologic patterns such as changes in river flows or lake levels (Intergovernmental Panel on Climate Change 2013). California-specific climate change effects and indicators of climate change are similar to those that may be experienced globally and are discussed in *Indicators of Climate Change in California,* a report prepared by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment in 2013 (OEHHA 2013). The evaluation of such effects on the River Trunk Realignment Project or the Proposed Program is beyond the scope of this GHG analysis and not required by the State CEQA Guidelines (see Section 15064.4).

10.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

The Proposed Program would result in a significant impact on greenhouse gas emissions and energy resources if it would:

- Generate a substantial amount of GHG emissions;
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs;
- Cause wasteful, inefficient, and unnecessary consumption of energy during construction or operation, ; or
- Cause a substantial increase in energy demand and the need for additional energy resources.

With regards to the first criterion, the SJVAPCD has adopted a BMP threshold for construction-related GHG emissions based on an achievable in practice analysis of improvement over a business-as-usual scenario or 29 percent improvement. However, at this time there is not an approved BMP for this type of project nor has suitable data to establish a business-as-usual scenario been provided by the SJVAPCD. The SJVAPCD threshold has also not been updated to reflect the SB 32 2030 goal which needs to be considered given the timeline of the Program construction activities. Therefore, published mass emissions thresholds of other California air districts were reviewed and considered in developing an appropriate threshold. The applicable threshold for the Proposed Program's construction and operational emissions was determined to be 10,000 metric tons per year, which is the threshold for industrial sources used by the Santa Barbara County Air Pollution Control District (SBCAPCD) (SBCAPCD 2015) and the South Coast Air Quality Management District (SCAQMD) (SCAQMD 2008). Although quantitative construction-specific thresholds have not been determined by the SCAQMD, the SBCAPCD recommends amortizing construction emissions over the life of the project (defined as 30 years) and adding it to the operational emissions (SCAQMD 2008). In addition, where construction-specific quantitative significance thresholds have not been defined, operational significance thresholds are typically applied or construction emissions are amortized and considered along with operational emissions to

determine a project's overall significance. Therefore, for the Proposed Program and the River Trunk Realignment Project, GHG emissions have been considered less than significant if the generated GHG emissions are less than the operational threshold of 10,000 MT CO_2e/year.

With regards to the second criterion, the applicable plans and policies the following impact analysis evaluates the Program's operational-related emissions for consistency with CARB's Scoping Plan and updates, which outline the strategies that will need to be implemented for the state to meet the goals of AB 32, SB 32 and EO S-3-05. Specifically, if a proposed component would not conflict with CARB's GHG emission reduction policies, it would have a less-than-significant impact.

The last two significance criteria were considered qualitatively for the Proposed Program and the River Trunk Realignment Project.

10.4.3 ENVIRONMENTAL IMPACTS

Impact GHG-1: Generate a Substantial Amount of GHG Emissions (Significant and Unavoidable)

Program-level Components

Construction Impacts. Construction of the program-level components, including various collection system components, new outfall pipelines, and facility upgrades at the Sutter and Jennings Plants, would involve activities that would result in one-time emissions of GHGs. Changes in carbon sequestration due to land use change and tree planting would also result in one-time emissions of GHGs. GHG emissions would also be generated from construction equipment exhaust, including exhaust from haul or equipment trucks and worker commutes. Specific project-level data about the amount, use, and locations of these equipment are not available at this time, nor are specific project-level data about the construction periods for each individual CIP. In general, replacement and maintenance of existing facilities and strengthening and replacement of existing sewer pipelines would be categorically exempt from CEQA. New sewer pipelines, or extension of sewer pipelines, that have been identified in the WWMP would therefore be considered to fall below the significance threshold. For other CIPs, in the absence of specific project-level information, it has been conservatively assumed that construction activities for each WWMP component would generate GHG emissions that, in combination with the other program components, could be substantial because they would exceed the significance threshold of 10,000 MT CO_2e/year. This is considered a significant impact.

Consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from construction of WWMP components. However, it is still possible that these emissions would not be reduced below the applicable significance threshold of 10,000 MT GHG emissions and therefore the Proposed Program would result in a **significant and unavoidable** impact.

Operational Impacts. The Proposed Program would indirectly and directly generate GHG emissions through operation and replacement of pumps at lift stations, installation of new or larger emergency electrical generators, and employee vehicle trips for operation and maintenance of future facilities. Equipment used to operate the wastewater treatment plants requires electricity which results in indirect GHG emissions, and natural gas combustion for boilers results in direct GHG emissions. The wastewater treatment plants generate digester

gas which results in direct emissions of GHGs; some of the digester gas is used in boilers or flared. Anaerobic treatment processes generate fugitive methane emissions. The proposed centralized nitrification/denitrification process would also emit N_2O emissions, and discharge of the effluent water to the San Joaquin River would result in fugitive emissions of N_2O. Employee trips would be similar to existing operations for the Sutter Plant and the City's existing other wastewater maintenance and operation activities. The Proposed Program would expand tertiary treatment facilities in effort to meet upcoming NPDES discharge requirements, and recycled water would be reused for agricultural purposes through the City's participation in the North Valley Regional Recycled Water Project (see Section 19.4.1 in Chapter 19, *Other Statutory Considerations,* for additional detail about this project). Expanding tertiary treatment facilities to increase recycled water use may decrease GHG emissions in comparison to using freshly collected and distributed water. In addition, the beneficial use of the recycled water helps with a more efficient use of the water supply and is important in addressing the impacts of climate change such as reduced water supply. Emissions for emergency electrical generators would be infrequent and would not be substantial. However, in total, operation of new or larger pumps at lift stations as well as the increased capacity and improved level of wastewater treatment would potentially generate GHG emissions greater than the applicable significance threshold of 10,000 MT CO_2e per year for industrial sources. Several of the proposed stationary sources may have applicable BPS for boilers, and process heaters. Consistency with these BPS and any future BPSs should be evaluated during project-level analyses once sufficient design details are available regarding operation of the facilities to allow for such an analysis. In the meantime, this impact has conservatively been considered significant. Again, consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from operational activities under the Proposed Program. However, these emissions may not be able to be reduced below the applicable significance threshold, and no other feasible mitigation has been identified which can further reduce emissions. Therefore, this impact would be **significant and unavoidable**.

River Trunk Realignment Project

Construction of the River Trunk Realignment Project would result in one-time emissions of GHGs, and once complete, project operations such as the pump station, would generate emissions over the longer term. As shown in **Table 10-3**, combined one-time GHG emissions associated with the project's construction activities would be approximately 2,589 MT CO_2e, spread out between 2018 and 2021. These one-time emissions would not continue to occur once construction is complete. SJVAPCD recommends amortizing GHG emissions by the operational life of a project. Construction emissions equal approximately 86 metric tons per year when amortized over the project's 30-year operation period.

Operation of the River Trunk Realignment Project would generate GHG emissions from annual maintenance of emergency generators, worker vehicle trips, and from the use of electricity for the pumps at the proposed River Trunk and Shackleford Pumping Stations. The River Trunk Realignment Project's operation would generate approximately 1,015 MT CO_2e per year. Electricity use makes up 943 MT CO_2e per year of these emissions. Combining the operation emissions with the amortized one-time emissions, the total annualized emissions are 1,101 MT CO_2e per year. Because these emissions are less than the 10,000 MT CO_2e threshold, this impact would be **less than significant.**

Table 10-3. River Trunk Realignment Project GHG Emissions

Emissions Source	MT CO_2e
Construction 2018	1,325
Construction 2019	848
Construction 2020	395
Construction 2021	21
Total One-time (Construction Activities)	2,589
Construction Activity Emissions Amortized over 30-year project life	86
Operations (per year)	1,015
Total Annual Emissions (Operations + Amortized Construction)	1,101

Notes: Construction activities emissions based on CalEEMod modeling results (Appendix B).
Amortization over 30 years based on the project facility's anticipated lifetime (SJVAPCD 2015).

Overall Conclusion

As described above, the River Trunk Realignment Project's GHG emissions would not exceed significance thresholds. On the whole, however, since specific details regarding the WWMP program-level components are not yet available, construction and operation of these components have been conservatively determined to potentially generate GHG emissions that exceed the significance threshold. Therefore, the Proposed Program's impact related to increased GHG emissions would be **significant and unavoidable**.

Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs (Significant and Unavoidable)

Program-level Components

Consistency with strategies outlined in CARB's Scoping Plan and future updates are used to ensure that the state goals of AB 32, SB 32 and EO S-3-05 will be met. The RPS would reduce GHG emissions compared to the existing mix of energy sources, and would likely result in the program-level components having more than a 29-percent reduction by at least 2030. This is consistent with the emissions reductions goal of AB 32 and SB 32, as well as the policies/actions described in CARB's 2017 Scoping Plan.

In addition, individual program-level components would comply with the RST/SCS's regional CAP goals, strategies, and policies, as well as the County's general plan policies related to reduced energy use. Specifically, Proposed Program-level components would have an energy-efficient design, and utilize MID's, TID's, and PG&E's increased renewable energy sources.

WWMP components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. Therefore, these program-level components would generally comply with applicable plans, policies, and regulations, including AB 32 and SB 32, and as well as the policies/actions described in CARB's Scoping Plan. However, at this time the state is still developing strategies that will be needed to fully reach the goals of SB 32 and EO S-3-05 and new strategies may be developed that are inconsistent with the project. In addition, as described in Impact GHG-1 above, the

GHG emissions for the entire Program would be significant and, as such, may impede the state from reaching the goals of AB 32 and SB 32, and EO S-3-05, to reduce GHG emissions within California. Consulting with and permitting through the SJVAPCD would reduce this impact, but not necessarily to less-than-significant levels and may not be consistent in the future with new strategies. Therefore, this impact would be **significant and unavoidable**.

River Trunk Realignment Project

The proposed River Trunk Project would comply with the RST's regional CAP goals, strategies, and policies, as well as the County's general plan policies related to reduced energy use. Specifically, the River Trunk Realignment Project would have an energy-efficient design, and utilize Modesto Irrigation District's increased renewable energy sources. The River Trunk Realignment Project would generally be consistent with the applicable policies/actions described in CARB's Scoping Plan and would make reasonable progress toward meeting the goals of AB 32, SB 32, and EO S-3-05. Thus, the River Trunk Realignment Project would therefore comply with all applicable plans, policies, and regulations, and would result in a **less than significant impact.**

Overall Conclusion

WWMP program-level components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. However, for the reasons described above, even with these mitigation measures, the Proposed Program may impede the state from reaching the goals of AB 32, SB 32, and EO S-3-05 to reduce GHG emissions within California. No other feasible mitigation has been identified that could further reduce this impact. Therefore, the Proposed Program's overall impact would be **significant and unavoidable.**

Impact GHG-3: Cause Wasteful, Inefficient, and Unnecessary Consumption of Energy During Construction, Operation, and/or Maintenance (Less than Significant)

All Program-level Components

Construction Impacts. Construction of program-level components would require the consumption of energy (fossil fuels) for construction equipment, worker vehicles, and truck trips. However, energy consumption during construction is necessary to maintain and improve the wastewater conveyance system and wastewater treatment facilities for the City of Modesto and surrounding areas to meet future wastewater treatment and collection system needs and improve use of recycled water. These construction activities would not cause wasteful, inefficient, and unnecessary consumption of energy, or cause a substantial increase in energy demand and increase the need for additional energy resources. Therefore, the Proposed Program's effects on energy resources would be **less than significant**.

Operational Impacts. The operational activities associated with some program-level components would require the consumption of energy including fossil fuels, natural gas, and electricity. Fossil fuel use would include worker vehicle and truck trips to and from the treatment plants, pump stations and lift stations; and material hauling of biosolids and equipment used to spread biosolids on agriculture fields near the Jennings Plant. In addition, emergency generators would use diesel fuel. Natural gas is used for space heating and in boilers used at the Jennings Plant. Electricity is used for operation of pump and lift stations

as well as numerous pieces of equipment at the wastewater treatment plants. The Sutter Plant currently utilizes some of the digester biogas instead of natural gas in some boilers. In addition, in the future, the City may consider the feasibility of cogeneration technologies that use digester biogas (Carollo Engineers 2016). These operational activities would not cause wasteful, inefficient, and unnecessary consumption of energy or cause a substantial increase in energy demand and the need for additional energy resources. In addition, the design of new and replaced wastewater infrastructure will utilize the latest energy efficient design. Therefore, the Proposed Program's effects on energy resources would be **less than significant**.

River Trunk Realignment Project

The River Trunk Realignment Project's construction activities would require the consumption of energy (fossil fuels) for construction equipment, worker vehicles, and truck trips. However, the consumption of energy for the project's equipment and vehicles would be minimized by reusing excavated soils on-site and minimizing vehicle idling. **Table 10-4** shows the estimated fuel use from construction equipment, worker vehicles, and truck trips. The calculations used to develop these estimates are presented in Appendix B. This table also shows estimated fuel use during project operation.

Table 10-4. River Trunk Project Fossil Fuel Use

Source Type	Diesel Fuel Use (gallons)	Gasoline Fuel Use (gallons)
Off-road Construction Equipment[1]	783,163	
Construction Worker Vehicles[2]		29,421
Hauling Vehicles[3]	29,887	
Operational Worker Vehicles[4]		<100

[1] Fuel use for off-road construction equipment was estimated using a fuel use factor from CARB's off-road in-use engine emissions model of 0.347 pound of diesel per horsepower-hour and diesel fuel density of 7.37 pounds per gallon. Fuel use considered the total number of each equipment type.

[2] Fuel use for construction worker vehicles was estimated using fuel use estimates from EMFAC with an estimated rate of 21.7 gallons per mile.

[3] Fuel use for hauling vehicles was estimated using fuel use estimates from EMFAC with an estimated rate of 5.5 gallons per mile.

[4] During project operational and maintenance activities, workers would use less than 100 gallons, assuming less than 1 round trip per week.

The energy consumption during construction is necessary to improving the River Trunk line, which is one of the most critical trunk lines in Modesto. These construction and operational activities would not cause wasteful, inefficient, and unnecessary consumption of energy or cause a substantial increase in energy demand and the need for additional energy resources. The proposed River Trunk Project's effects on energy resources would be **less than significant**.

Overall Conclusion

Considering the WWMP components as a whole, construction and operation impacts of program-level components and the River Trunk Realignment Project would not cause

wasteful, inefficient, and unnecessary consumption of energy or cause a substantial increase in energy demand and the need for additional energy resources. In conclusion, the Proposed Program's effect on energy resources would be **less than significant**.

Impact GHG-4: Cause a Substantial Increase in Energy Demand and the Need for Additional Energy Resources (Less than Significant)

All Program-level Components

Substantial quantities of fossil fuel would not be required for program-level components since maintenance and operation vehicle trips would be similar to existing conditions. Construction activities would require some fossil fuel use for construction equipment, material hauling, and worker commuting. However, the amount of fossil fuel use would not result in the need for additional fossil fuel energy resources beyond what is projected to be available with existing resources.

Both the Sutter and Jennings Plants are major consumers of electrical power, with a combined existing demand of 1,620 kilowatts (kW) (Carollo Engineers 2016). The proposed tertiary treatment upgrades and expansion at the Jennings Plant as well as increased treatment capacity upgrades would result in increased energy demands associated with operation of equipment at the two treatment plants. The increased amount of natural gas needed at the treatment plants would not be substantial compared to current uses of natural gas such that substantial new sources of additional energy would be required, considering the projected available electricity supply from Modesto Irrigation District. In fact, the new plant would be designed to be more energy efficient than the current plant, which could result in a reduction in energy usage. In addition, the City may consider reusing digester biogas to operate a cogeneration unit if feasible or implementation of solar energy systems. If implemented in the future, the cogeneration unit would result in a decrease of electricity for the wastewater treatment facility. Since there would not be a substantial increase in energy demand or the need for additional energy resources, this impact would be **less than significant.**

River Trunk Realignment Project

The River Trunk Realignment Project would require some additional fossil fuel use for construction equipment, material hauling, and worker commuting, resulting in a minor increase in energy demand associated with construction of the project. Once the River Trunk Realignment Project is in operation, there would be some electricity use associated with the pumps, and fossil fuel use associated with emergency generators and maintenance trips. However, the use of fossil fuels and electricity would be substantial compared to that used for existing pump stations found throughout the City, considering the projected available electricity supply from MID. Therefore, there would not be a substantial increase in energy demand or the need for additional energy resources, this impact would be **less than significant.**

Overall Conclusion

While the River Trunk Realignment Project would not generate a substantial increase in energy demand, proposed upgrades and expansion of facilities at the Sutter and Jennings Plants would incrementally increase energy demands associated with operation of equipment. However, the new plant upgrades would be designed to be more energy efficient than the current plant, which could result in a reduction in energy usage. The City may also consider reusing digester biogas to operate a cogeneration unit if feasible or implementation of solar energy systems, which would result in a decrease of electricity for the wastewater treatment facility. In conclusion, the Proposed Program's impact on increased energy demands and energy resources would be **less than significant**.

Chapter 11
HAZARDS AND HAZARDOUS MATERIALS

11.1 OVERVIEW

This chapter evaluates the Proposed Program's impacts related to hazards and hazardous materials. Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if misused or released. Hazardous materials occur in various forms and can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazardous materials can include explosives, flammable and combustible substances, poisons, radioactive materials, pesticides, petroleum products, and other materials defined as hazardous under the Resource Conservation and Recovery Act of 1976 (RCRA) in 40 CFR 261. CEQA also considers hazards from proximity of projects to airports and schools, and hazards from wildfire.

Impacts are evaluated in light of existing laws and regulations governing hazards and hazardous materials, and the existing physical environmental setting as it relates to hazards and hazardous materials, as described in Section 11.2, "Regulatory Setting," and Section 11.3, "Environmental Setting."

11.2 REGULATORY SETTING

Because regulations for hazardous materials were developed over time, numerous agencies, whose jurisdictions and responsibilities sometimes overlap, are involved in regulating these materials. Federal agencies that regulate hazardous materials include USEPA and OSHA. At the state level, agencies such as the California Department of Industrial Relations, the California Occupational Safety and Health Administration (Cal/OSHA), and the California Emergency Management Agency (Cal EMA) govern the use of hazardous materials. State and local agencies often have either parallel or more stringent rules than federal agencies.

Generation, transport, and disposal of hazardous wastes is also regulated by different agencies, and USEPA is the lead federal agency overseeing these aspects of hazardous waste. The California Department of Toxic Substances Control (DTSC) has primary state regulatory responsibility, but may delegate enforcement authority to local jurisdictions that enter into agreements with the state agency.

The following is a review of federal, state, and local regulations and policies that are pertinent to the Proposed Program.

11.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

Resource Conservation and Recovery Act

The RCRA (42 USC Section 6901 et seq.), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation

of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in California.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 et seq.) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank [UST] Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the UST Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from USTs. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs]), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing. CUPAs are described in more detail below.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure Rule (40 CFR Part 112) applies to facilities with a single above-ground storage tank with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges into navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement these plans.

Renovation and Demolition of Buildings Containing Asbestos

The National Emission Standards for Hazardous Air Pollutants regulations (40 CFR Part 61, Subpart M), established under the federal Clean Air Act, require that specific practices for handling asbestos-containing building materials be followed during demolition and renovation of all structures, installations, and buildings (excluding residential buildings that

have four or fewer dwelling units). The regulations require a thorough inspection of the demolition or renovation site and notification to the appropriate state agency before any demolition or renovation of buildings that could contain a certain threshold amount of asbestos or asbestos-containing material. In addition, certain requirements must be followed when removing asbestos-containing waste. USEPA is the lead enforcement agency. The Asbestos Hazard Emergency Response Act's Model Accreditation Plan (MAP) (40 CFR, Part 763, Subpart E, Appendix C) requires that professionals working with asbestos-containing building materials be accredited under the USEPA MAP or a program at least as stringent as the USEPA MAP program.

Occupational Safety and Health Act

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances, as well as other workplace hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. 29 CFR Chapter XVII, Subpart Z, Section 1926.1101 includes regulations to prevent worker exposure to unsafe levels of asbestos during construction and demolition activities. These regulations require contractors to set up regulated areas in dealing with asbestos materials and ensure that persons entering these areas are wearing respirators.

11.2.2 STATE LAWS, REGULATIONS, AND POLICIES

The Unified Program

The Unified Program (20 Health and Safety Code [HSC] Sections 25404-25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, and it works with other state agencies and delegates its authority to local jurisdictions that enter into agreements with the state. Local agencies, including Stanislaus County, administer these laws and regulations. DTSC, the Cal/EPA, and other state agencies set the standards for their programs while local governments implement the standards. These local implementing agencies, the CUPAs, regulate/oversee the following for each county:

- Hazardous materials business plans (19 CCR Sections 2650-2660);
- California accidental release prevention plans or federal risk management plans (RMPs) (19 CCR Sections 2735-2785);
- The operation of USTs (23 CCR Sections 2610-2729) and above-ground storage tanks (20 HSC Sections 25270-25270.13);
- Universal waste and hazardous waste generators and handlers (22 CCR Division 4.5);
- On-site hazardous waste treatment (22 CCR Division 4.5);
- Inspections, permitting, and enforcement (22 CCR Division 4.5);

- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans (HMBPs) are required for businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A; California Governor's Office of Emergency Services [Cal OES] 2014). HMBPs are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees. In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers also must make material safety data sheets available to employees and document employee information and training programs.

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention program (19 Cal. Code Regs. Section 2735 et seq.) is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a RMP. This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the California Accidental Release Prevention program through review of RMPs, facility inspections, and public access to information that is not confidential or trade secret.

CAL FIRE Wildland Fire Management

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CAL FIRE) administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Pub. Res. Code Section 4442).

- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Pub. Res. Code Section 4428).

- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Pub. Res. Code Section 4427).

- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Pub. Res. Code Section 4431).

11.2.3 LOCAL LAWS, REGULATIONS, AND POLICIES

City of Modesto Urban Area General Plan

The *Modesto Urban Area General Plan* (City of Modesto 2019) guides land use and development within the City's incorporated areas. Goals and policies contained in the General Plan related to hazards and the Proposed Program include the following:

Policy VII-J[a]. Support the Local Hazard Mitigation Plan (LHMP) and ensure the LHMP will be monitored, evaluated, and updated every three years or more frequently as the need arises.

Policy VII-J[b]. Ensure that all new development is designed to reduce potential safety and health hazards.

Policy VII-J[d]. Support efforts to improve levels of emergency response.

Policy VII-M.C[2]. Design and maintain roads so as to ensure adequate access in hazardous conditions.

Policy VII-N [h]. The City shall promote public awareness of the following local routes (shown in **Figure 11-1**) for the public's use in evacuating the City in the event of an emergency:

(1) State Highways 99, 132, 219, and 108

(2) Briggsmore Avenue

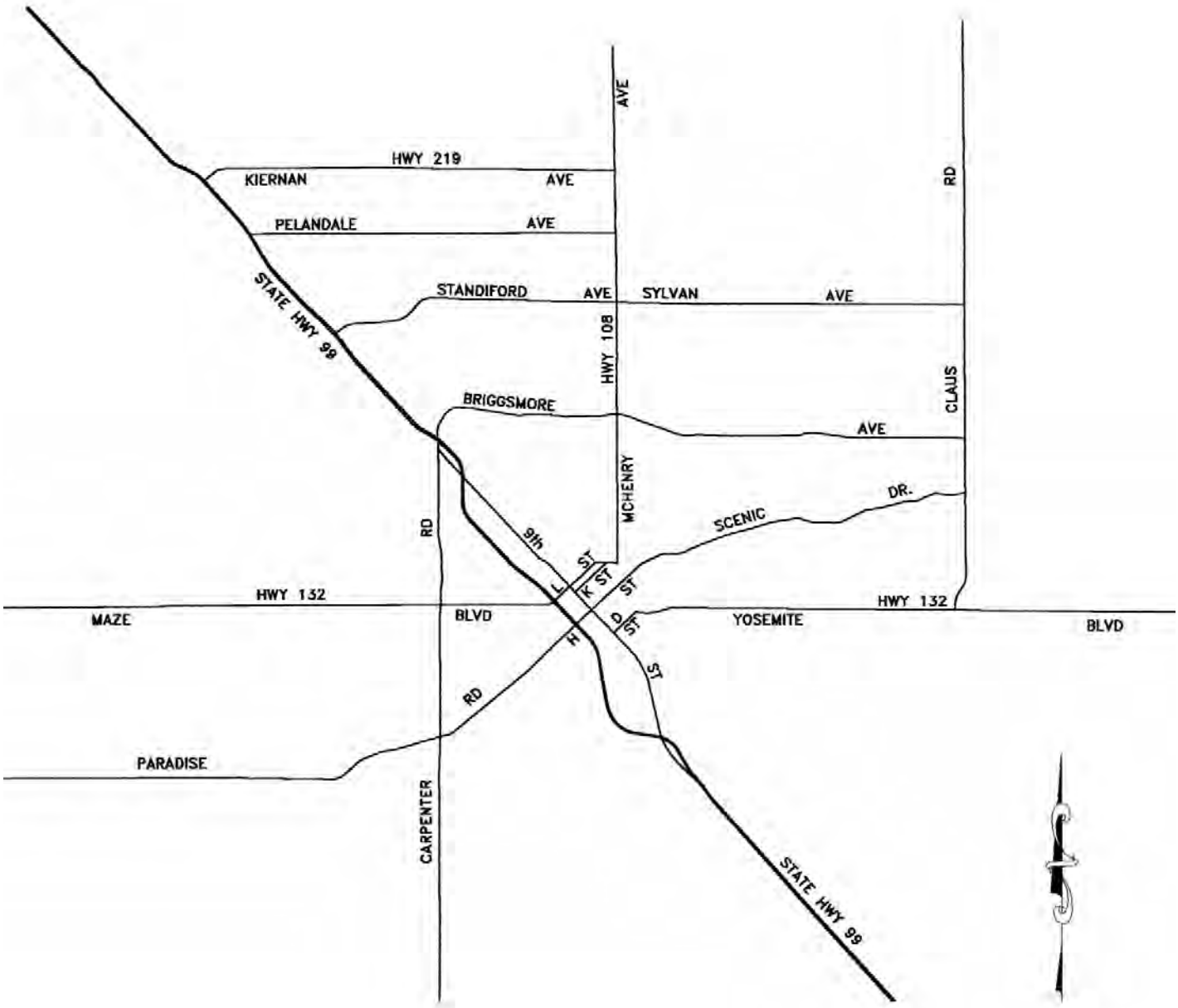
(3) Claus Road

(4) Standiford/Sylvan Avenue

(5) Scenic Drive

(6) Pelandale Avenue

(7) Ninth Street



Source: City of Modesto 2008

Figure 11-1. City of Modesto Emergency Evacuation Routes

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Wastewater Master Plan EIR

(8) Paradise Road

(9) Carpenter Road

Policy VI-E.5[b]. City plans and policies shall not interfere with any emergency evacuation and response plans. This would include the continued maintenance of adequate police and fire services, and identified emergency evacuation routes [refer to Figure 11-1 of this DEIR].

Policy VI-E.5[c]. The City shall ensure the provision of adequate and accessible evacuation routes.

Stanislaus County General Plan

The *Stanislaus County General Plan* (Stanislaus County 2016a) guides land use, development, and impact mitigation decisions in Stanislaus County. Goals and policies associated with hazards and hazardous materials include the following:

Safety Element

Goal One: Prevent loss of life and reduce property damage as a result of natural disasters.

Policy One: The County will adopt (and implement as necessary) plans inclusive of the Multi-Jurisdictional Hazard Mitigation Plan, to minimize the impacts of natural and man-made disasters.

Policy Two: Development should not be allowed in areas that are within the designated floodway or any areas that are known to be susceptible to being inundated by water from any source.

Goal Two: Minimize the effects of hazardous conditions that might cause loss of life and property.

Policy Thirteen: The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required.

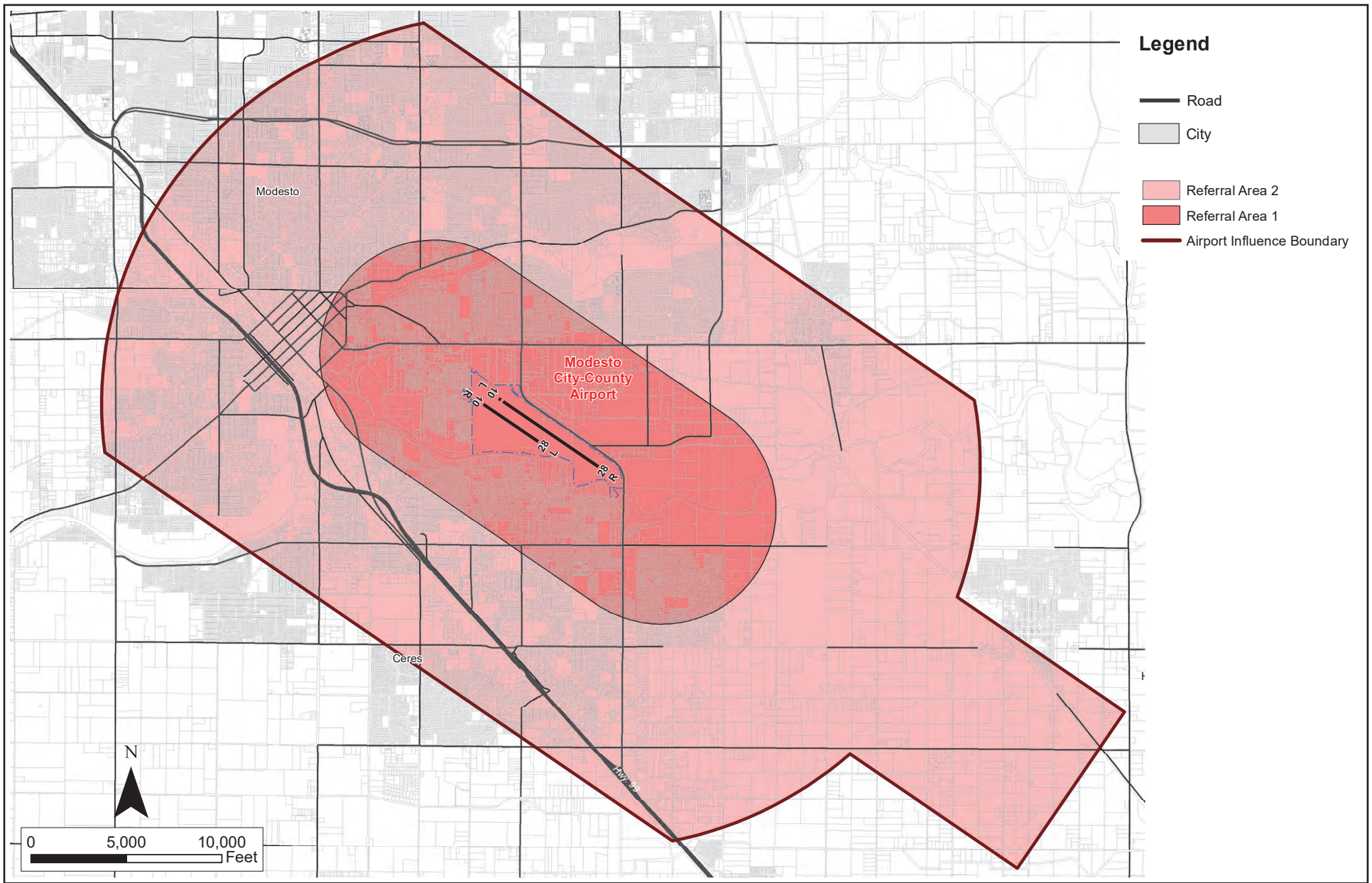
Stanislaus County Airport Land Use Compatibility Plan

The *Stanislaus County Airport Land Use Compatibility Plan* identifies compatible land uses in proximity to airports in Stanislaus County including the Modesto City-County Airport. Compatible land uses are those that will not threaten the safe operation of an airport or create hazards endangering public safety (Stanislaus County 2016b). Each airport has a designated airport influence area, which is defined by the area encompassing lands on which uses could be negatively affected by existing or future aircraft operations. As shown in **Figure 11-2,** the Modesto City-County Airport's referral area is divided into two areas: "Referral Area 1" and "Referral Area 2." Referral Area 1 encompasses locations where noise and/or safety represent compatibility concerns and airspace protection and air flight may also be concerns; and Referral Area 2 includes areas where airspace protection and/or overflight are compatibility concerns but not noise or safety. Based on review of the Plan, the eastern

portion of the River Trunk Realignment Project alignment is within Safety Zone 6 where wastewater facilities are listed as normally compatible (Stanislaus County 2016b).

Stanislaus County Hazard Mitigation Plan

The Stanislaus County Hazard Mitigation Plan is a countywide plan that identifies risks posed by disasters and ways to minimize damage from those disasters. Among other functions, the Hazard Mitigation Plan creates a decision tool for management, promotes compliance with state and federal program requirements, enhances local policies for hazard mitigation capability, and provides for inter-jurisdictional coordination (Stanislaus County Office of Emergency Services [OES] 2017).



Source: Stanislaus County 2016

Figure 11-2. Modesto City-County Airport Planning Area Boundary Map

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11.3 ENVIRONMENTAL SETTING

11.3.1 SCHOOLS

Numerous schools exist within the study area, as shown in **Figure 11-3**. These include Modesto City Schools, which include over a dozen elementary schools, four middle schools, and nine high schools (Modesto City Schools 2017), as well as schools in the Ceres Unified School District and Empire School District. Numerous Modesto schools are located within 0.25 mile of proposed components. No schools in Ceres or Empire are within 0.25 mile of Proposed Program components.

11.3.2 EXISTING HAZARDS AND HAZARDOUS MATERIALS

Both the SWRCB's GeoTracker database and DTSC's EnviroStor database were searched for up to one-quarter mile of the Program area. **Figure 11-4** shows hazardous material sites identified by these databases within 0.25 mile of the Proposed Program components. **Table 11-1** provides further information on these sites. The database searches include the following hazardous materials site lists: leaking underground storage tank cleanup sites, spills, leaks, investigation and cleanup sites, and other cleanup sites.

In general, hazardous materials contamination is most often connected with past land uses such as gas stations, dry cleaners, industrial facilities with underground storage tanks, military bases, and other sites that commonly use or store hazardous materials. The proposed Jennings Plant improvements would be constructed adjacent to the City's compost facility.

The City's existing wastewater treatment facilities also use and store hazardous materials. The Sutter and Jennings Plants have backup generators which store diesel fuel; likewise, the existing lift stations located throughout the City may include generators that store fuel. Other typical hazardous materials and chemicals stored at the plants include methane, hydrogen peroxide, ferric chloride, oil, and gasoline.

11.3.3 AIRPORTS AND PRIVATE STRIPS

The Modesto City-County Airport is located at 617 Airport Way in the southwest portion of Modesto near the Tuolumne River. As shown in Figure 11-3, several proposed components including the River Trunk Realignment Project, would be located near this airport. No other airports or private airstrips are located within two miles of the Proposed Program.

11.3.4 WILDFIRE HAZARDS

The study area is primarily urban in nature, with limited potential for wildfire hazards. The majority of the study area is unzoned for fire hazards, with several isolated patches zoned as moderate (CAL FIRE 2007). **Figure 11-5** shows wildfire risk in the Proposed Program vicinity, as mapped by CAL FIRE.

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Modesto City-County Airport

Sutter Plant

Sources: California Department of Education, Caltrans Division of Aeronautics

N

0 0.5 1 2
Miles

WWMP Study Area
Schools
River Trunk Realignment Project
Proposed Third Outfall Alignment
Sewer Line Upgrade or Rehabilitation
L New or Proposed Lift Station Improvement
P Proposed Pump Stations
Airports

Figure 11-3
Schools and Airports in the Proposed Program Vicinity

Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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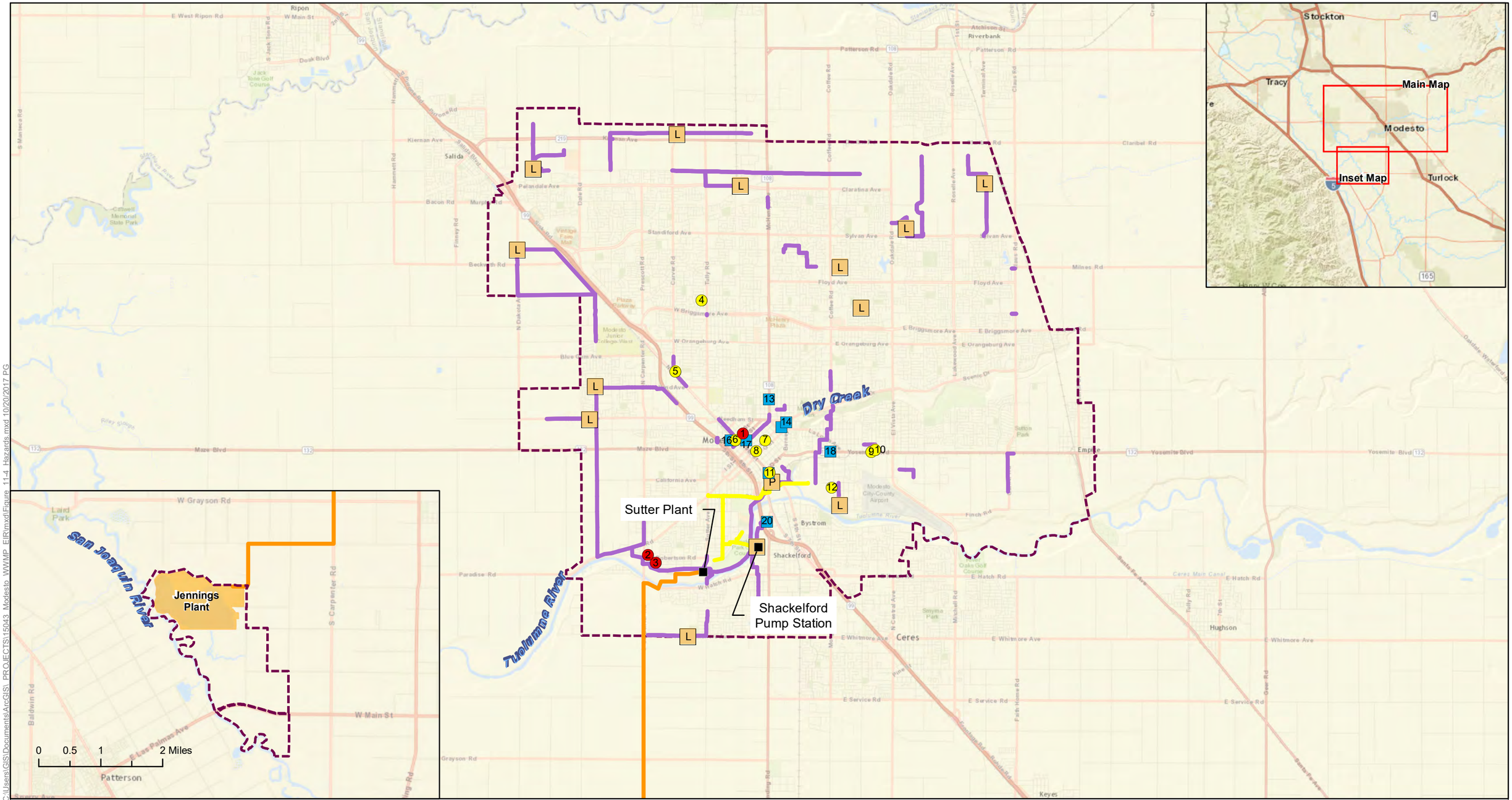

Figure 11-4
Hazardous Materials Sites within 0.25 Mile of Proposed Program Components

City of Modesto
Wastewater Master Plan EIR

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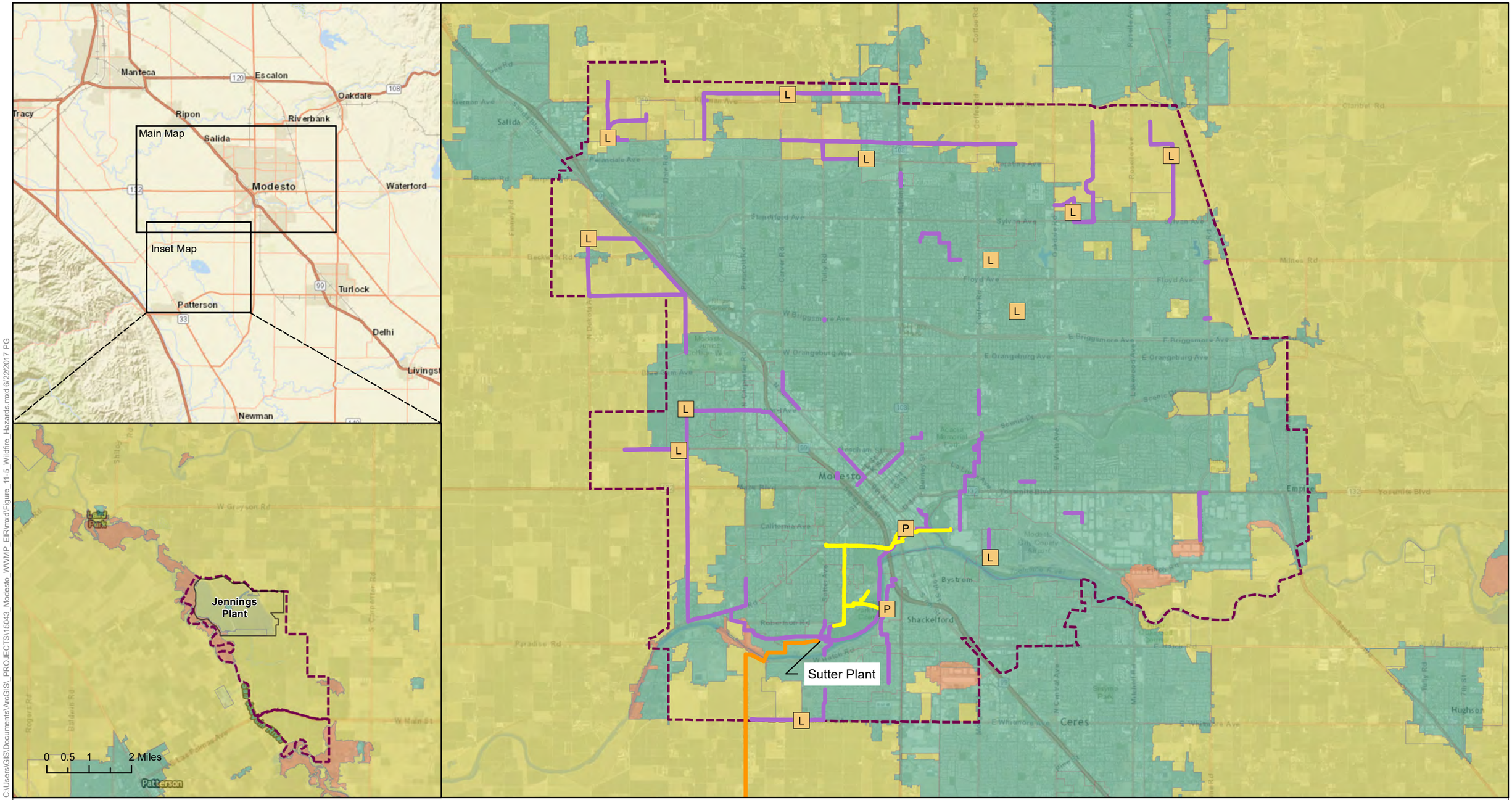

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Figure 11-5
Fire Hazard Severity Zones in the Program Vicinity

City of Modesto
Wastewater Master Plan EIR

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Table 11-1. Existing Hazardous Material Sites within 1/4-Mile of Proposed Components

Figure ID	Site/Business Name	Address	City	Site/Case Type	Lead Agency	Site Status	Past Uses	Potentially Contaminated Media
1	Modesto Convention Center	10th and L Streets	Modesto	State Response or NPL (National Priorities List)	DTSC Site Mitigation and Brownfields Reuse Program (SMBRP)	Certified	None	No media affected
2	Littell Property	1921 Vernon Avenue	Modesto	State Response or NPL	SMBRP	Certified	Junkyard	Soil
3	Elias Property	2120 Kenneth Street	Modesto	State Response or NPL	None Specified	Certified	None	Contaminated surface/structure, soil
4	Cesi Drycleaning Center	2021 Tully Road	Modesto	Evaluation	SMBRP	Active	Dry cleaning	Aquifer, indoor air, soil, soil vapor
5	Sunshine Carpet & Drapery	1645 Princeton Avenue	Modesto	Evaluation	SMBRP	Active	Dry cleaning	Aquifer, indoor air, soil, soil vapor
6	Modesto Groundwater Investigation	N/A	Modesto	Voluntary Cleanup	SMBRP	Active	Dry cleaning	Aquifer, soil, soil vapor, indoor air, groundwater well
7	The Modesto Bee	1325 H Street	Modesto	Tiered Permit	None Specified	Inactive – Needs Evaluation	None specified	None specified
8	PG&E Manufactured Gas Plant Sq-St-Mod-2	Block Bound: H, F, 10th, and Alley NE 10th	Modesto	Evaluation	None Specified	Inactive – Needs Evaluation	None specified	Soil
9	Hi Grade Drive in Cleaners	1915 Yosemite Blvd.	Modesto	Voluntary Cleanup	SMBRP	Active	Dry cleaning	Aquifer, indoor air, soil, soil vapor
10	Jerry's Drapery Service	123 Phoenix Avenue	Modesto	Evaluation	SMBRP	Active	Dry cleaning	Aquifer, indoor air, indoor air, soil, soil vapor
11	PG&E Manufactured Gas Plant Sq-St-Mod-1	Blocks of: C, D, 8th, and 10th Streets	Modesto	Evaluation	None Specified	Inactive – Needs Evaluation	Manufactured gas plant	Soil
12	Gallo Glass – South Field Landfill	615 South Santa Cruz Avenue	Modesto	Evaluation	SMBRP	Inactive – Needs Evaluation	Landfill – domestic, unknown, transportation - warehousing	Other groundwater affected uses, soil
13	Elwood's Dry Cleaner	441 McHenry Avenue	Modesto	Cleanup Program Site	Central Valley RWQCB	Open – Remediation	Dry cleaning	None specified
14	Arco – T and T	402 Downey Avenue	Modesto	LUST (Leaking Underground Storage Tank) Cleanup Site	Central Valley RWQCB	Open – Assessment & interim Remedial Action	Gas station	Aquifer
15	Modesto Polanco – Ideal Cleaners	1801 H Street	Modesto	Cleanup Program Site	Department of Toxic Substances Control	Open – Inactive	No site history available	None specified
16	Modesto Steam Laundry	1201 8th Street	Modesto	Cleanup Program Site	Central Valley RWQCB	Open – Verification Monitoring	Dry cleaning	Groundwater, soil
17	City of Modesto, Modesto Groundwater Investigation	1010 10th Street	Modesto	Cleanup Program Site	Central Valley RWQCB	Open - Remediation	Dry cleaning	Under investigation
18	Three Star Gas	1131 Yosemite Boulevard	Modesto	LUST Cleanup Site	Central Valley RWQCB	Open – Verification Monitoring	Gas station	Aquifer
19	Berberian Company Property	320 9th Street	Modesto	Cleanup Program Site	Stanislaus County	Open – Inactive	Manufactured gas plant	Under investigation
20	Crop Production Services, Crows Landing Road	541 Crows Landing Road	Modesto	Cleanup Program Site	Central Valley RWQCB	Open – Inactive	Retail distribution of agricultural products (e.g., pesticides)	None specified

Notes: LUST = Leaking Underground Storage Tank; NPL = National Priorities List; RWQCB = regional water quality control board; SMBRP = Site Mitigation and Brownfields Reuse Program.

Source: SWRCB 2017, DTSC 2017

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11.4 IMPACT ANALYSIS

11.4.1 METHODOLOGY

Impacts from the Proposed Program related to hazards and hazardous materials were evaluated qualitatively by considering aspects of the Proposed Program in relation to the CEQA significance criteria. In many instances, where the precise locations and designs of Proposed Program have not yet been developed, possible impacts are discussed more generally (at a programmatic level), and mitigation is prescribed in the event certain conditions are encountered during future project planning. In the case of the River Trunk Realignment Project, where details are known, impacts are evaluated at a greater level of detail.

11.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

The Proposed Program would result in a significant impact on hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

11.4.3 ENVIRONMENTAL IMPACTS

Impact HAZ-1: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Construction (Less than Significant)

Construction of the Proposed Program components and the River Trunk Realignment Project would involve use of heavy construction equipment, which would use hazardous materials in their operation. These materials would include fuel, grease, oil, and other materials that may be contained within the equipment and/or stored on-site by the construction contractor. Contractors may routinely transport these materials to and from the site, and dispose of the materials once they have been used. Additionally, certain existing Modesto facilities may contain asbestos, which could be released during demolition and renovation activities.

Transport, use, and disposal of hazardous materials during construction could expose workers, the public, or the environment to hazards if adequate precautions are not taken. Construction workers could inhale toxic vapors or make bodily contact with materials, which could subject them to harm. The public or the environment could be exposed to toxic substances if materials were not stored, transported, or disposed of properly. The potential for harm may depend on the site-specific characteristics at any given component site, as well as proximity to sensitive receptors or environmental resources. Construction workers also could be exposed to asbestos during demolition of existing facilities such as those planned for demolition at the Sutter Plant.

In accordance with applicable regulations, the City and its contractors would be required to identify and track hazardous waste from "cradle to grave" (see discussion of RCRA in Section 11.2.1) and provide training and personal protective equipment to workers, if necessary, to prevent exposure to hazardous substances in excess of exposure limits (see OSHA under Section 11.2.1). Additionally, the City and/or its contractors would be required to follow protocols established under the NESHAP regulations (described in Chapter 6, *Air Quality)*, which are designed to limit health impacts associated with asbestos and other hazardous substances.

Compliance with these laws and regulations described in the regulatory setting would prevent significant impacts from occurring during construction activities. The WWMP does not create unique hazards from use, storage, transport, and disposal of materials. Therefore, this impact would be **less than significant.**

Impact HAZ-2: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Operation (Less than Significant)

New and upgraded lift stations, pump stations, and proposed components at the Sutter and Jennings Plants would involve storage and use of hazardous materials. More chemicals would be stored at the Jennings Plant due to expansion of the tertiary treatment facilities and construction of new primary treatment facilities like primary clarifiers, anaerobic digesters, and dewatering facilities. The refurbished treatment plant facilities may include back-up generators that store fuel, but the existing Sutter and Jennings plants also contain this equipment and fuel; therefore, the Proposed Program would not represent a substantial change from existing conditions. New pump station facilities may store fuel for back-up

generators in case the primary power source fails. In accordance with USEPA's Spill Prevention and Countermeasure Rule (see Section 11.2.1), the City would be required to provide secondary containment structures and spill counter-measure protocols if any storage tanks exceed the threshold volume (660 gallons), but the City would provide secondary containment for all storage tanks. Likewise, the City would be required to prepare a HMBP for sites that store greater than the threshold quantities of hazardous materials (55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas).

City of Modesto workers also may use, transport, or dispose of hazardous materials during ongoing routine maintenance and repair activities. Under the WWMP, no changes to the City's hazardous materials transportation program are needed. Similar to existing conditions and consistent with City policy V-M.2[d], the City's Plant staff would not use residential streets for transporting hazardous materials used at either wastewater treatment plant. The same regulations described above under Impact HAZ-1 with respect to construction would apply to these activities to ensure that workers are not exposed to unsafe levels of toxic substances, and that hazardous materials are transported and disposed of in accordance with applicable laws.

In general, use, storage, transport, and disposal of hazardous materials under the Proposed Program would be similar to current activities related to operating and maintaining the City's wastewater system although amounts of hazardous materials would increase, and would not create a substantial hazard to the public or the environment. Therefore, this impact would be **less than significant**.

Impact HAZ-3: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Construction (Less than Significant)

As described under Impact HAZ-1, the Proposed Program would involve use, storage, transport, and disposal of hazardous materials during construction. If these materials were to be accidentally released, such as through a spill or encountering contaminated soil, it could harm workers, the public or the environment. However, compliance with all local, state, and federal regulations concerning hazardous materials would result in less-than-significant impacts. Once operational, these facilities would not result in additional hazard emissions or the use of hazardous materials near students or school facilities. Storage of onsite hazardous materials, such as diesel fuel, would require secondary containment to prevent leaks or spills, as required by federal and state regulations. This impact would be **less than significant.**

Impact HAZ-4: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Operation (Less than Significant)

As described under Impact HAZ-2, the Proposed Program would involve use, storage, transport, and disposal of hazardous materials during operation. In accordance with applicable laws and regulations, the City would be required to track any hazardous wastes generated during Program operation from "cradle to grave" and dispose of this material appropriately. The City also would be required to implement spill prevention and counter-

measures in accordance with USEPA's Spill Prevention and Countermeasure Rule for storage tanks under the Proposed Program that exceed the threshold volume, but the City would include secondary containment on all fuel storage tanks. Additionally, sites storing greater than threshold quantities of hazardous materials would require preparation of HMBPs, including an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees. Compliance with these requirements would reduce this impact to **less than significant**.

Impact HAZ-5: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within 0.25 Mile of an Existing or Proposed School (Less than Significant)

All Program-level Components

Depending on the specific WWMP component, Proposed Program activities may involve use or handling of hazardous materials within 0.25 mile of a school. As shown in Figure 11-3, numerous schools are located throughout Modesto, many of which are located in relatively close proximity to proposed lift stations and new, upgraded or rehabilitated sewer lines. The nearest school to the Sutter Plant is Evelyn Hanshaw Middle School, which is approximately 0.5 mile southeast of the treatment plant site. No schools are located in proximity to the Jennings Plant.

Use and handling of hazardous materials near schools during construction of proposed components would be as described under Impact HAZ-1 (e.g., use of fuel, grease, or related materials in construction equipment). These activities would not create a hazard, even if located in close proximity to a school, by complying with applicable regulations described in Impact HAZ-1. Construction equipment may emit some amount of TAC emissions, such as DPM from operation of diesel-fueled construction equipment; however, these emissions would be temporary.

Proposed activities would use relatively limited hazardous materials during operation and the operation of emergency generators and staff vehicle trips would emit limited amounts of TACs. Hazardous materials used at the Sutter Plant would be anticipated to be similar in type and/or quantity to hazardous materials currently used at the Sutter Plant, and no schools are located within 0.25-mile of the Sutter Plant. In addition, adherence to SJVAPCD's permitting process would ensure that TAC emissions would not create unacceptable health risks for nearby sensitive receptors, such as schools. As such, this impact would be **less than significant.**

River Trunk Realignment Project

Three schools (Modesto High School, Kirk Baucher School, and James Marshall Elementary School) would be within 0.25 mile of the River Trunk Realignment Project. Project construction activities in these areas would include trenching for installation of gravity sewer lines within the roadway. Although heavy construction equipment used in these activities may emit some amount of TACs, these emissions would be temporary and such effects are described in Chapter 6. As described above, the proposed activities would comply with applicable regulations described in Impact HAZ-1, and therefore would not present any undue risks to human health. The pipeline facilities would not emit any hazardous emissions once installed. Therefore, this impact would be **less than significant.**

Overall Conclusion

While schools are located within 0.25 mile of some Proposed Program components and the River Trunk Realignment Project, construction activities would be temporary and effects related to releases of TAC emissions are addressed in Chapter 6. By complying with applicable regulations pertaining to the safe use and handling of hazardous materials, the Proposed Program would not present any undue risks to nearby schools. The Proposed Program's overall impact would be **less than significant.**

Impact HAZ-6: Location on a Site Which Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment (Less than Significant)

All Program-level Components

As indicated in Figure 11-4, various Proposed Program elements are located within 0.25 mile of identified hazardous materials sites. In accordance with Modesto City Council Resolution 2003-66, a Phase 1 Environmental Site Assessment is required prior to the acquisition of real property. The Phase 1 Environmental Site Assessment would identify any past sources of contamination on or near a site and, if contamination is identified, may recommend performance of a more detailed Phase 2 Environmental Site Assessment, including soils testing. The City may not purchase a property on which significant contamination is discovered during the due diligence phase and which may create a significant hazard to the public or the environment. No proposed lift or pump station sites would be located within 200 feet of a documented hazardous material clean-up site. The Sutter and Jennings Plant improvements would not be constructed on any documented hazardous materials contamination/clean-up sites. Proposed pipeline improvements would generally be located within the public right-of-way and not within documented clean-up sites. Therefore, this impact would be **less than significant.**

River Trunk Realignment Project

No open hazardous materials sites are located within 100 feet of the River Trunk Realignment Project. Therefore, **no impact** would occur**.**

Overall Conclusion

Compliance with the City's Resolution 2003-66, as described above, would prevent significant impacts associated with placement of a facility on a hazardous material site from occurring. Therefore, this impact would be **less than significant.**

Impact HAZ-7: Location in an Airport Land Use Plan or within 2 Miles of a Public Airport , Resulting in a Safety Hazard for People Residing or Working in the Program Area (Less than Significant)

All Program-level Components

As shown on Figure 11-2, only one airport is located in Modesto: the Modesto City-County Airport. Several collection system components would be located within 2 miles of this airport or within the airport land use planning area, including the River Trunk Realignment Project

(see further discussion below). Under the Proposed Program, facilities may be constructed within the Modesto City-County Airport land use plan area. However, these facilities would not pose any risks to aviation. Impacts are considered **less than significant**.

River Trunk Realignment Project

Much of the River Trunk Realignment Project would be located within the *Stanislaus County Airport Land Use Compatibility Plan* planning area boundary for the Modesto City-County Airport. As shown in Figure 11-2, the eastern portion of the project is within Referral Area 2. According to the *Stanislaus County Airport Land Use Compatibility Plan* and as discussed in Section 11.2.3, wastewater facilities are considered compatible with airport uses. In general, most project components would be largely underground, and those that are not underground would not be of a significant height such as to pose a hazard for aircraft. Therefore, the Project would not create a hazard to aircraft or to people working in the area. This impact would be **less than significant.**

Overall Conclusion

While some Proposed Program components may be within 2 miles of the Modesto City-County Airport, most facilities would be belowground and any aboveground elements such as lift stations and pump stations would not pose a significant hazard for aircraft. The Proposed Program's overall impact would be **less than significant.**

Impact HAZ-8: Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan (Less than Significant)

All Program-level Components

In general, the Proposed Program would not substantially impair or interfere with an emergency response plan. The Proposed Program would be limited to upgrades/components to the City's wastewater infrastructure. As described in Chapter 2, *Program Description,* construction of Proposed Program components, such as installation of sewer pipelines, would involve trenching/excavation within the roadway. These activities could require temporary closure of one lane of traffic, which could interfere with emergency evacuation procedures or emergency vehicle access.

All projects would be required to follow the current version of the City of Modesto Standard Specifications. Section 12 of the General Provisions includes Temporary Traffic Control requirements that must be incorporated into all projects. As part of the Traffic Management Plan (TMP), the public and appropriate fire and police departments are notified in advance of temporary road closures. This ensures that any impacts on emergency protection services during construction would be **less than significant.**

River Trunk Realignment Project

The River Trunk Realignment Project would involve installation of force-main and gravity-fed sewage collection lines within Tuolumne Boulevard, Colorado Avenue, Neece Drive, and other roads in central Modesto. Trenching within these roadways could require closure of up to one lane of traffic and may temporarily cause congestion. As noted above, adherence to the City's Standard Specifications would prevent substantial impacts on emergency services from occurring due to these activities. The TMP required under Section 12 of the General

Provisions would include advance notification appropriate police and fire departments regarding temporary road closures. As such, this impact would be **less than significant.**

Overall Conclusion

Implementation of the City's Standard Specifications, which requires preparation of a TMP, would prevent substantial impacts related to interference with emergency response or evacuation. As a result, this impact would be **less than significant.**

Impact HAZ-9: Expose People or Structures, either directly or indirectly, to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires (No Impact)

The prevalent land uses in the program area are rural agricultural and developed. There are no wildlands in the program area, as shown in Figure 11-5. As such, implementation of the Proposed program would have **no impact** on wildfires.

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Chapter 12
HYDROLOGY AND WATER QUALITY

12.1 OVERVIEW

This chapter evaluates impacts of the Proposed Program on hydrology and water quality. It identifies the existing federal, state, and local laws, regulations, and policies related to hydrology and water quality that may be applicable to the Proposed Program; describes the existing physical environmental conditions in the study area; and evaluates impacts on hydrology and water quality from the Proposed Program.

12.2 REGULATORY SETTING

12.2.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections of the CWA that are potentially relevant to the Proposed Program are Sections 303(d) and 402.

Section 303(d)

Under CWA Section 303(d), states are required to identify "impaired water bodies" (i.e., those that do not meet established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for developing control plans to improve water quality. USEPA then approves the state's recommended list of impaired waters or adds and/or removes waterbodies. USEPA also reviews and approves the control plan developed for each pollutant, known as the total maximum daily load (TMDL). Section 303(d), Category 5 water body segments are segments in which at least one beneficial use is not supported and a TMDL is needed. Section 12.3.3 lists Section 303(d), Category 5 water body segments in the study vicinity.

Section 402

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the SWRCB; SWRCB, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in regard to the Porter–Cologne Water Quality Control Act. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits.

National Flood Insurance Program

Congress established the National Flood Insurance Program (NFIP) to provide property owners with access to federally-backed flood insurance protection and to reduce the destructive consequences of flooding. FEMA administers the NFIP and works closely with state and local officials to identify flood hazard areas and flood risks. FEMA's Flood Insurance Rate Maps (FIRMs) show the extent of areas within the 100-year floodplain (i.e., areas that would be inundated by the 1-percent annual chance flood), providing the basis of the NFIP regulations and flood insurance requirements (FEMA 2017).

12.2.2 STATE LAWS, REGULATIONS, AND POLICIES

Porter–Cologne Water Quality Act

The 1969 Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act) dovetails with CWA (see discussion of CWA above). It established the SWRCB and divided the state into nine regions, each overseen by its own RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 303[d] and 402. In general, the SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires that the RWQCBs develop water quality control plans (also known as Basin Plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin Plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, Basin Plans must be updated every three years.

The Proposed Program is located within the planning area/jurisdiction of the Central Valley RWQCB. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region* (Central Valley RWQCB 2016a) establishes beneficial uses for the Tuolumne River and San Joaquin River, as shown in **Table 12-1**. The Basin Plan does not identify beneficial uses for Dry Creek. In regards to groundwater, the Basin Plan states that "unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered as suitable or potentially suitable, at a minimum, for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO)" (Central Valley RWQCB 2016a).

Table 12-1. Beneficial Uses for Water Bodies Potentially Affected by the Proposed Program

Water Bodies	HUC No.	MUN	AGRICULTURE		INDUSTRY			RECREATION			FRESHWATER HABITAT		MIGRATION		SPAWNING		WILD	NAV
		AGR			PROC	IND	POW	REC-1		REC-2	WARM	COLD	MIGR		SPWN		WILD	NAV
		Municipal and Domestic Supply	Irrigation	Stock Watering	Process	Service Supply	Power	Contact	Canoeing and Rafting	Other Non-Contact	Warm	Cold	Warm	Cold	Warm	Cold	Wildlife Habitat	Navigation
Tuolumne River																		
New Don Pedro Dam to San Joaquin River	535	P	E	E				E	E	E	E	E		E	E	E	E	
San Joaquin River																		
Mouth of Merced River to Vernalis	535/ 541	P	E	E	E			E	E	E	E		E	E	E		E	
Sacramento–San Joaquin Delta																		
Sacramento–San Joaquin Delta	544	E	E	E	E	E		E		E	E	E	E	E	E		E	E

Notes: AGR = agricultural supply; COLD = cold freshwater habitat; HUC = hydrologic unit code; IND = industrial service supply; MUN = municipal and domestic supply; NAV = navigation; POW = power; PROC = industrial process supply; REC-1 = water contact recreation; REC-2 = non-contact water recreation; SPWN = spawning, reproduction, and/or early development; WARM = warm freshwater habitat; WILD= wildlife habitat.

Beneficial Use Status
E = Existing beneficial uses
P = Potential beneficial uses
L = Existing limited beneficial uses

Source: Central Valley RWQCB 2016a

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National Pollutant Discharge Elimination System Permits

Construction Activities

Most construction projects that disturb 1 acre or more of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a SWPPP. The SWPPP must include a site map and a description of the proposed construction activities; demonstrate compliance with relevant local ordinances and regulations; and present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor and report on all construction-related activities to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Dewatering Activities

Although some construction-related dewatering is covered under the General Construction Permit, the Central Valley RWQCB has also adopted a general permit for limited threat discharges to surface water, including construction dewatering discharges (Order No. R5-2016-0076 [NDPES No. CAG995002]) (Central Valley RWQCB 2016b). This permit would most likely apply to the Proposed Program if construction would require dewatering in greater quantities than that allowed by the General Construction Permit and would discharge the effluent to surface waters. The general permit for limited threat discharges to surface water contains waste discharge limitations and prohibitions similar to those in the General Construction Permit. To obtain coverage, the applicant must submit a Notice of Intent and a pollution prevention and monitoring program.

Municipal Stormwater Permitting Program

The SWRCB and RWQCBs regulate stormwater discharges from municipal separate storm sewer systems (MS4) through the Municipal Stormwater Permitting Program. Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000) and large (population of 250,000 or more) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. The City of Modesto is covered under a Phase I permit, Order R5-2015-0025. The Order requires the City to continue implementing its Storm Water Program, which includes requirements for construction projects to implement BMPs to control sediment and pollutants from construction sites. The Storm Water Program also includes a Municipal Program, which, among other things, seeks to prevent sanitary sewer overflows (SSO) or spills from entering the storm drain system (Central Valley RWQCB 2015).

Water Reclamation Requirements for Recycled Water

In 2016, the SWRCB adopted the proposed Water Reclamation Requirements for Recycled Water Use (General Order), which replaced the existing 2014-0090-DWQ General Waste Discharge Requirements for Recycled Water Use. The General Order establishes standard conditions for recycled water use and conditionally delegates authority to an Administrator to manage a Water Recycling Program and issue Water Recycling Permits to recycled water

users. Only treated municipal wastewater for non-potable uses can be permitted, such as landscape irrigation, crop irrigation, dust control, industrial/commercial cooling, decorative fountains, etc. (SWRCB 2017).

Overview of Modesto's Current NPDES Permits

Currently, the City holds an NPDES permit from the Central Valley RWQCB that authorizes tertiary effluent discharges from the Jennings Plant to the San Joaquin River. The discharge is regulated through NPDES Permit No. CA0079103, Order R5-2017-0064. The NPDES permit allows tertiary treated wastewater discharge (up to 14.9 mgd currently and up to 19.1 mgd once the City completes upgrades to its existing Jennings Plant facilities) to the San Joaquin River (Central Valley RWQCB 2017).

The City is also participating in the North Valley Regional Recycled Water Program (NVRRWP), which will provide recycled water to the Delta-Mendota Canal (DMC). The City's permit number R5-2017-0010 allows for discharge of up to 14.9 mgd of disinfected tertiary recycled water to the DMC under the NVRRWP. The treated water is conveyed from the Jennings Plant via pipeline to the DMC (NVRRWP 2017).

In addition, the City holds WDRs (Order No. R5-99-112) that authorizes discharges to agricultural lands surrounding the Jennings Plant. The WDRs allows for irrigation of land using undisinfected secondary effluent and/or cannery process water. Additionally, the City holds a biosolids discharge permit (Order No. R5-94-030), which allows for Class B biosolids to be applied as a soil amendment at the Modesto Ranch.[1]

California Toxics Rule

On May 18, 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other provisions for new water quality standards to be applied to waters in the state of California. USEPA promulgated this rule, also known as the California Toxics Rule, based on a determination that the numeric criteria were necessary in California to protect human health and the environment (USEPA 2017).

The California Toxics Rule fills a gap in California water quality standards that was created in 1994 when a state court overturned the state's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the State of California has been without numeric water quality criteria for many priority toxic pollutants as required by the CWA, necessitating the action by the USEPA. The federal criteria included in the California Toxics Rule are legally applicable in the state of California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the CWA (USEPA 2017).

Central Valley Flood Protection Board

The Central Valley Flood Protection Board (CVFPB) (formerly the State Reclamation Board) derives its regulatory authority from CCR Title 23, Waters, and, in cooperation with USACE, is the state regulatory agency responsible for ensuring that appropriate standards are met for the construction, maintenance, and protection of the Central Valley's flood control system.

[1] The Modesto Ranch is a 2,458-acre ranch owned by the City of Modesto and located at the Jennings Plant. The ranch is used for the land application of treated domestic secondary effluent, cannery process water, and anaerobically digested biosolids trucked from the Sutter Plant.

The 2017 Central Valley Flood Protection Plan Update provides an updated vision and strategy for flood system improvements within the State Plan of Flood Control (SPFC) (see below). In general, the CVFPB requires a permit for proposed work that is located within the SPFC, within 300 feet of a Designated Floodway that has been adopted by the CVFPB, or within 30 feet from the banks of a CVFPB Regulated Stream (CVFPB 2017). Designated floodways have been established on the Tuolumne River, San Joaquin River, and portions of Dry Creek. Several Program components, including the Benson Lift Station, Sutter Plant improvements, and various pipeline facilities that would cross beneath the Tuolumne River and Dry Creek, would be located within the Designated Floodway and may be subject to CVFPB jurisdiction.

State Plan of Flood Control

The SPFC (Central Valley Flood Management Planning Program 2010) provides an inventory and description of the existing State-federal flood protection system in the Central Valley of California. The State-federal flood protection system refers to the set of federally authorized project levees and related facilities for which the State has provided assurances of cooperation to the federal government. No SPFC facilities are located on the Tuolumne River in the study area, and the Proposed Program would not affect any SPFC facilities.

12.2.3 LOCAL LAWS, REGULATIONS, AND POLICIES

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019a) identifies the Stanislaus and Tuolumne Rivers, and Dry Creek, as regional parks. The River Greenway Program, which guides development within the Stanislaus River, Tuolumne River, and Dry Creek Comprehensive Planning Districts, includes the following policies that are potentially relevant to the Proposed Program and the hydrology and water quality impacts analysis:

> **Policy VII-B.7[l].** Sensitive habitats and natural areas, including wetlands and riparian corridors, will be protected and enhanced, when feasible.
>
> **Policy VII-B.7[n].** Aquatic species and habitat will be protected and enhanced, when feasible.
>
> **Policy VII-B.7[o].** The natural forces influencing the development of recreational areas, including potential flooding, prevailing winds, sun orientation, and topography will be considered during design.
>
> **Policy VII-B.7 [p].** A flood management program that provides protection from catastrophic flooding and contributes to the ecological values of the river corridor will be promoted.

Stanislaus County General Plan

The *Stanislaus County General Plan* guides land use and development in the unincorporated area of Stanislaus County (Stanislaus County 2016a). Goals and policies in the general plan related to hydrology and water quality include the following:

Conservation and Open Space Element

Goal Two. Conserve water resources and protect water quality in the County.

Policy Five. Protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

Goal Five. Reserve, as open space, lands subject to natural disaster in order to minimize loss of life and property of residents of Stanislaus County.

Policy Sixteen. Discourage development on lands that are subject to flooding, landslide, faulting, or any natural disaster to minimize loss of life and property.

Safety Element

Goal One. Prevent loss of life and reduce property damage as a result of natural disasters.

Policy Two. Development should not be allowed in areas that are within the designated floodway or any areas that are known to be susceptible to being inundated by water from any source.

12.3 ENVIRONMENTAL SETTING

12.3.1 TOPOGRAPHY AND CLIMATE

Being located in the Central Valley of Northern California, the City of Modesto and its outlying service areas are generally flat and subject to a Mediterranean climate and precipitation pattern. Summers are typically hot and dry, while winters are cool and wet. Most precipitation falls from November through April. Flows in area surface waters are typically highest during this period as well. Snowmelt may contribute substantially to flows in the Tuolumne River during the spring.

12.3.2 SURFACE WATER HYDROLOGY

The Tuolumne River is the primary surface water feature in the Modesto area, passing through roughly the center of the city. The Stanislaus River flows in an east-west direction to the north of the city, making up the northern boundary of Stanislaus County; no proposed components would be located in the immediate proximity of this river. The Tuolumne River drains to the San Joaquin River, which flows northwest through the Central Valley before joining the Sacramento River and flowing out to San Francisco Bay and the Pacific Ocean. The Sutter Plant is located along the northern bank of the Tuolumne River at the southern end of Modesto. The Jennings Plant is located along the bank of the San Joaquin River upstream of its confluence with the Tuolumne River. Dry Creek flows through northeast Modesto before discharging into the Tuolumne River. **Figure 12-1** shows surface water bodies in the study area.

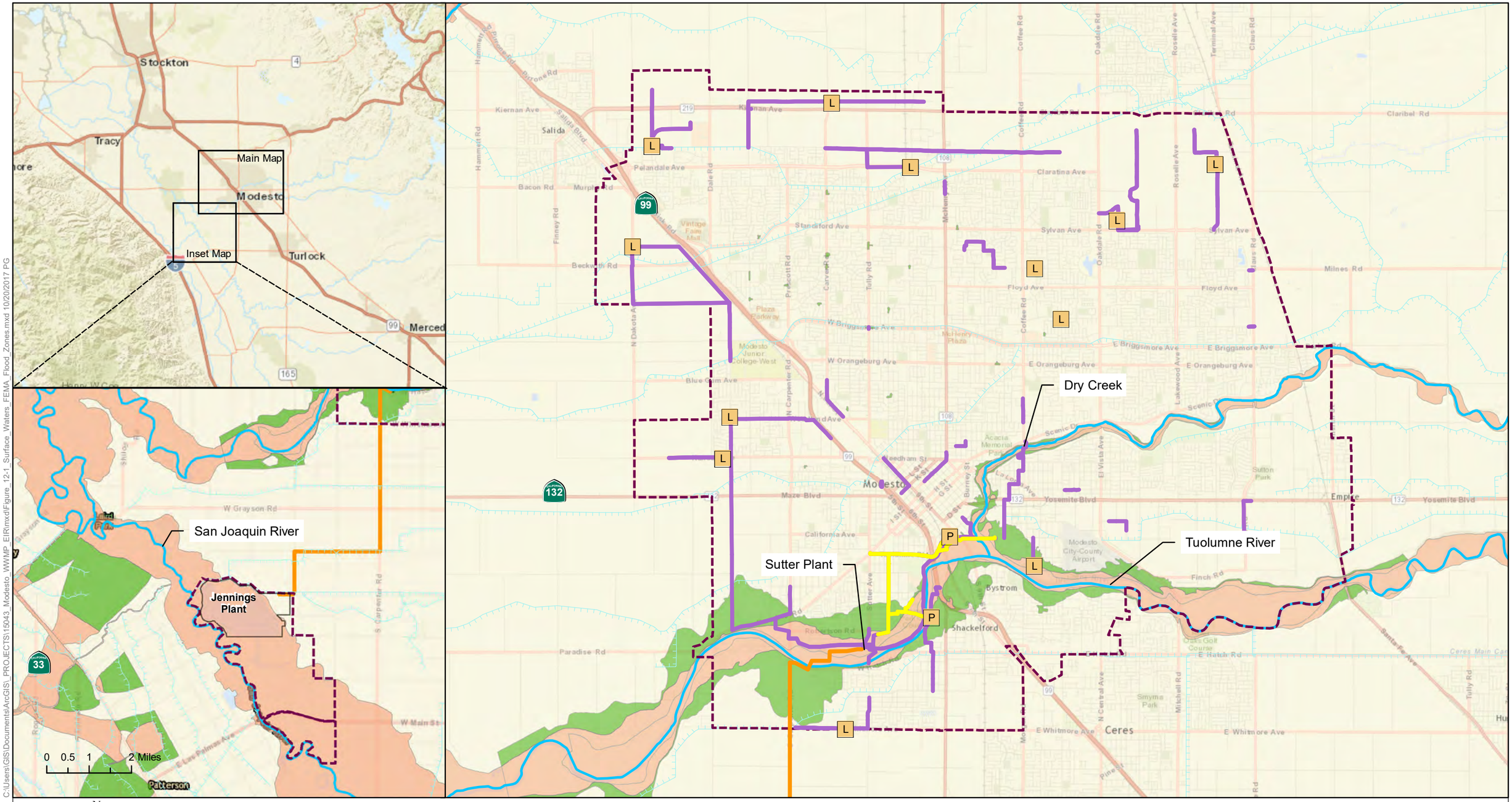

Figure 12-1
Surface Waters & FEMA Flood Zones in the Program Vicinity

City of Modesto
Wastewater Master Plan EIR

Horizon WATER and ENVIRONMENT

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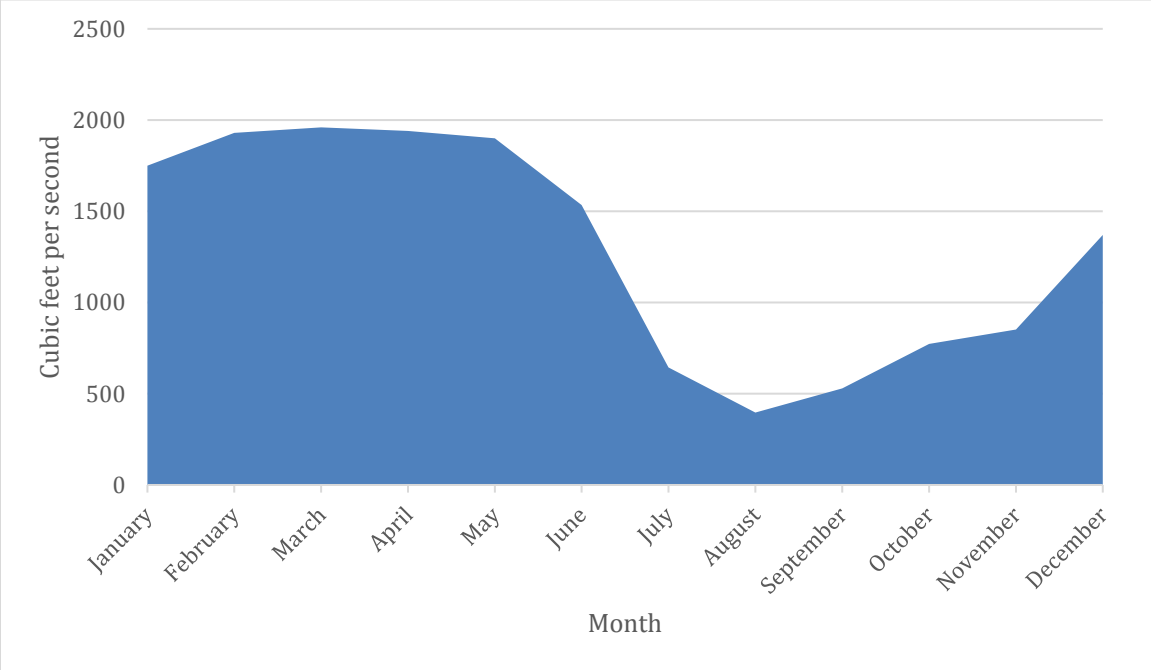
Flows in study area waters vary seasonally, roughly in line with the seasonal precipitation pattern. Flows in the Tuolumne River are also regulated by reservoirs and power plants upstream from Modesto, including Hetch Hetchy Reservoir and Don Pedro Reservoir. Don Pedro Reservoir, jointly operated by MID and TID, has a capacity of 2,030,000 acre-feet (AF) and provides flood control for the Modesto area (City of Modesto 2019b). **Figure 12-2** shows the mean monthly flow in the Tuolumne River as measured at the USGS stream gage in Modesto (USGS 11290000).

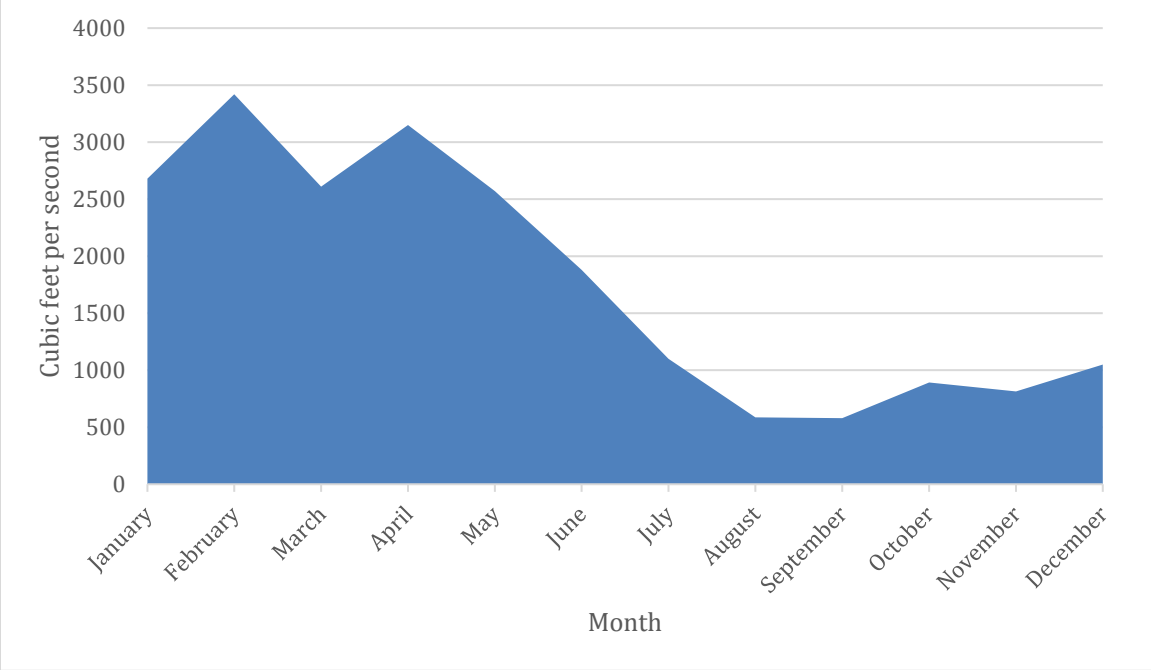
Figure 12-2. Mean Monthly Discharge at USGS Gage 11290000 (Tuolumne River at Modesto, CA), Water Years 1940-2016



Source: USGS 2017a

No stream gage exists on Dry Creek, but it can be assumed that flows follow a similar pattern. Flows in the San Joaquin River follow a somewhat different pattern, with higher peak flows in late winter/early spring, as shown in **Figure 12-3**.

Figure 12-3. Mean Monthly Discharge at USGS Gage 11274550 (San Joaquin River Near Crows Landing, CA), Water Years 1995-2016



Source: USGS 2017b

12.3.3 WATER QUALITY

Surface water quality in the San Joaquin, Stanislaus, and Tuolumne rivers is excellent at their sources in the Sierra Nevada Mountains (Stanislaus County 2016b). However, as each river flows through the San Joaquin Valley, water quality declines. Agricultural and domestic use-and-return both contribute to water quality degradation. During dry summer months, the concentration of pollutants increases, particularly in the San Joaquin River, which drains domestic and industrial wastewater for the entire San Joaquin Valley. Water quality in the Stanislaus and Tuolumne rivers declines by the time they discharge into the San Joaquin River. Comparatively, water quality declines more in the Tuolumne River than the Stanislaus River due to agricultural return flows and gas well wastes (Stanislaus County 2016b).

Table 12-2 shows CWA, Section 303(d) Category 5 (i.e., requiring a TMDL) listings for water body segments in the study area and downstream.

Table 12-2. Section 303(d), Category 5 Listings for Water Body Segments Potentially Affected by the Proposed Program

Water Body	Watershed CalWater / USGS HUC	Contaminant	Source	First Listed	TMDL Status[1]	Completion Date[2]
Tuolumne River, Lower (Don Pedro	53550000 / 18040002	Chlorpyrifos	Unknown	2012	5A	2021
		Diazinon	Unknown	2002	5A	2010
		Group A Pesticides	Unknown	2006	5A	2011

Water Body	Watershed CalWater / USGS HUC	Contaminant	Source	First Listed	TMDL Status[1]	Completion Date[2]
Reservoir to San Joaquin River)		Mercury	Unknown	2010	5A	2021
		Temperature, water	Unknown	2010	5A	2021
		Unknown Toxicity	Unknown	2006	5A	2022
San Joaquin River (Merced River to Tuolumne River)	54110000 / 18040001	Boron		2002	5B	2007
		Chlorpyrifos	Unknown	2006	5B	2007
		DDE (Dichlorodiphenyl-dichloroethylene)	Unknown	2010	5A	2011
		DDT (Dichlorodiphenyl-trichloroethane)	Unknown	2002	5A	2011
		Electrical Conductivity	Unknown	1998	5A	2021
		Group A Pesticides	Unknown	2002	5A	2011
		Mercury	Unknown	2006	5A	2012
		Temperature, water	Unknown	2010	5A	2021
		Unknown Toxicity	Unknown	2002	5A	2019
		alpha-BHC (Benzene-hexachloride or alpha-HCH)	Unknown	2002	5A	2022
San Joaquin River (Tuolumne River to Stanislaus River)	53530000 / 18040002	Chlorpyrifos	Unknown	2006	5B	2007
		DDT (Dichlorodiphenyl-trichloroethane)	Unknown	2006	5A	2011
		Diazinon	Unknown	2006	5B	2007
		Electrical Conductivity	Unknown	1998	5A	2021
		Group A Pesticides	Unknown	1994	5A	2011
		Mercury	Unknown	2006	5A	2012
		Temperature, water	Unknown	2010	5A	2021
		Unknown Toxicity	Unknown	1994	5A	2019
San Joaquin River (Stanislaus River to Delta Boundary)	54400000 / 18040002	Chlorpyrifos	Unknown	2006	5B	2007
		DDE (Dichlorodiphenyl-dichloroethylene)	Unknown	2010	5A	2011
		DDT (Dichlorodiphenyl-trichloroethane)	Unknown	2006	5A	2011
		Diuron	Unknown	2010	5A	2021
		Electrical Conductivity	Unknown	2006	5B	2007
		Escherichia coli (*E. coli*)	Unknown	2010	5A	2021
		Group A Pesticides	Unknown	2006	5A	2011

Water Body	Watershed CalWater / USGS HUC	Contaminant	Source	First Listed	TMDL Status[1]	Completion Date[2]
		Mercury	Unknown	2006	5A	2012
		Temperature, water	Unknown	2010	5A	2021
		Toxaphene	Unknown	2006	5A	2019
		Unknown Toxicity	Unknown	2006	5A	2019

Notes: TMDL = total maximum daily load.

[1] TMDL requirement status definitions: A = TMDL still required; B = being addressed by USEPA-approved TMDL; Category 5 = water body segments in which at least one beneficial use is not supported and a TMDL is needed.

[2] Completion date relates to the TMDL requirement status; a date for A = TMDL scheduled completion date; B = date USEPA approved TMDL.

Source: SWRCB 2012

12.3.4 STORMWATER

The City's storm drainage system includes approximately 77 miles of storm drain lines and 25 storm pump stations. Stormwater discharges from Modesto drain to 24 drainage basins and approximately 12 major outfalls (greater than 24 inches in diameter) to receiving waters (Tuolumne River or Dry Creek), MID laterals/drains, or rockwells. According to the City's *Storm Drainage Master Plan* (City of Modesto 2008), surface water discharges generally occur in the older parts of Modesto or those areas immediately adjacent to the Tuolumne River, Dry Creek, or irrigation canals. Approximately 40 percent of stormwater gets discharged to detention/retention basins, 20 percent of stormwater gets directed to receiving waters, 10 percent is directed to MID laterals/drains, and 30 percent goes to rockwells.

Rockwells are designed to collect surface stormwater runoff and allow it to infiltrate to the groundwater. These are rock-lined holes that are typically 6 feet in diameter and up to 50 feet deep. There are approximately 10,500 rockwells in Modesto, serving approximately two-thirds of the City's area. As a large urban area, Modesto has large areas of impervious surface, which generate increased volumes of surface runoff compared to the natural ground surface. To the extent this runoff is not captured by rockwell structures and allowed to infiltrate to groundwater, it may ultimately be discharged to nearby water bodies via the City's positive gravity stormwater drainage systems. The Tuolumne River and Dry Creek receive a large fraction of stormwater runoff from the Modesto urban area.

As described in Chapter 2, *Program Description,* many of the City's storm drain lines are interconnected with sanitary sewer lines. After storm events, these cross-connections typically increase substantially with peak flows.

12.3.5 GROUNDWATER LEVELS, FLOWS, AND QUALITY

The proposed components would primarily be located in the Modesto Subbasin of the San Joaquin Valley Groundwater Basin. This subbasin extends from the San Joaquin River east to the Sierra foothills, and from the Tuolumne River north to the Stanislaus River. Several components south of the Tuolumne River (e.g., third outfall pipeline and Jennings Plant components) also would be located in the Turlock Subbasin.

The western portions of the Modesto and Turlock subbasins generally have two principal aquifers: one above and one below the Corcoran clay[2] (Stanislaus and Tuolumne Rivers Groundwater Basin Association [STRGBA] 2005). East of the Corcoran clay, the aquifers are generally unconfined. Groundwater generally flows from east to west-southwest in the area of Modesto, following the topography of the land and differences in mean groundwater levels. Groundwater contours suggest that groundwater is discharged to the San Joaquin and Tuolumne Rivers along most reaches of the rivers.

Groundwater recharge in the region occurs primarily from percolation of applied irrigation water, as well as seepage from the Modesto Reservoir and irrigation canals (DWR 2004). Lesser recharge occurs from subsurface flows originating in the mountains and foothills along the east side of the subbasins and percolation of direct precipitation (DWR 2004). Groundwater recharge to the deeper aquifers can occur from seepage through unconfined aquifers or across the Corcoran clay, or from horizontal movement of water from the eastern portion of the subbasin (STRGBA 2005).

Groundwater levels in the Modesto area have declined over the past decades. The Modesto subbasin water level declined nearly 15 feet from 1970 through 2000 (DWR 2004), while average groundwater levels in the Turlock Subbasin declined nearly 7 feet from 1970 through 2000 (DWR 2006). Groundwater levels were locally depressed beneath and around the Modesto urban area, but completion of the Modesto Regional Water Treatment Plant in 1994 and subsequent importation of surface water supplies from the Modesto Irrigation District caused groundwater levels to rebound to some degree (STRGBA 2005). More recent data indicates that from 2007 to 2017 groundwater levels in the Modesto area decreased from 0 to 20 feet, with isolated areas of greater reductions (DWR 2017a). Some of this decrease may be attributable to the recent drought in California, which lasted in its most severe form from roughly 2013-2014, though moderate drought conditions continued for up to several years afterwards in some areas of the state, including in the Modesto area through February 2017. In 2014 in the Central Valley, total groundwater pumping was increased by 5 million acre-feet to partially compensate for a reduction in surface water deliveries to farmers of 6.5 million acre-feet in that year (Stanislaus County 2014).

Groundwater quality throughout the San Joaquin Valley region is suitable for most urban and agricultural uses; however, localized areas of high dissolved solids (TDS), nitrates, boron, chloride, arsenic, selenium, dibromochloropropane (DBCP), and radon exist (Stanislaus County 2016b). Elevated TDS concentrations may occur from recharge of streamflow originating from marine sediments or concentration of salts from agricultural practices due to evaporation and poor drainage. The major human sources of nitrates are disposal of human and animal waste products and fertilizers, but nitrates may also occur naturally. Agricultural pesticides (e.g., DBCP) and herbicides have been detected in groundwater through the region (Stanislaus County 2016b).

A groundwater characterization effort was completed at the Jennings Plant site while preparing the Report of Waste Discharge (ROWD) for renewal of the City's land discharge permits. This effort included monitoring of existing wells at the Jennings Plant site for Title

[2] The Corcoran clay is a clay layer underlying the western half of the Modesto and Turlock Subbasins. This clay layer is present at depths ranging between 50 and 200 feet below ground surface, and establishes an effective barrier to water movement between the confined and unconfined water bodies (California Department of Water Resources [DWR] 2004, 2006).

22 metals, nitrogen compounds, salinity compounds, and standard minerals, as well as taking groundwater "grab" samples at key locations using in situ groundwater sampling tools (Carollo Engineers 2016). Test results from this exercise showed elevated concentrations of the following constituents:

- Dissolved metals (arsenic, iron and manganese)
- Nitrogen
- Salinity (e.g., electrical current or total dissolved solids)
- Chloride
- Sodium

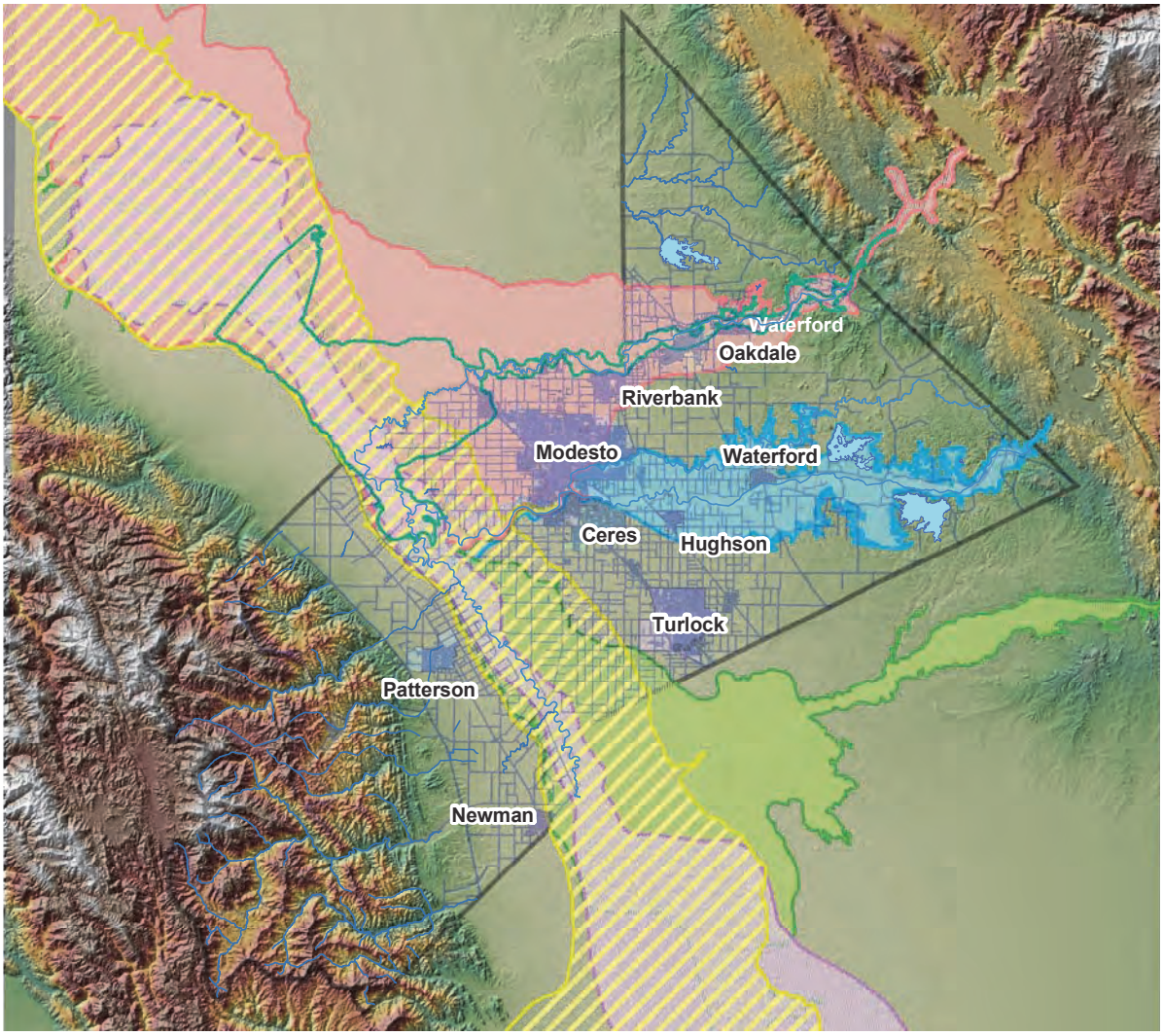
In general, the assessment could not determine whether the elevated concentrations could be attributed to effluent disposal/land application methods at the Jennings Plant or if they could be naturally occurring or caused by some other factor(s). The assessment concluded that additional analysis and monitoring were needed to better understand the extent and causes of groundwater quality issues in the Jennings Plant area (Carollo Engineers 2016).

12.3.6 FLOODPLAINS AND DAM INUNDATION AREAS

The Sutter Plant and the Jennings Plant are located within the 100-year flood (i.e., 1-percent annual chance flood) hazard zone mapped by FEMA. Several proposed components at these facilities and other collection system components would be located within the 100-year flood hazard zone. These flood zones are depicted in Figure 12-1. The Jennings Plant is protected by levees and therefore is within FEMA-designated Zone B, meaning it is in an area protected by levees from the base flood. The levees are maintained by Reclamation District No. 2091 and regularly inspected by DWR. Seepage has been noted to occur through the levees during periods of high river flows and sand boils have occurred along the levee (City of Modesto 2007). In 2016, the Reclamation District No. 2091 repaired five critical seepage areas along these levees by constructing seepage berms or seepage stability berms along 10,500 feet of the levees.

The Proposed Program is located in the Central Valley of California, approximately 70 miles from the ocean. Therefore, it would be outside of any tsunami zone.

The Stanislaus County General Plan (Figure V-3) shows that much of Modesto, including the area of the Program components, is within the inundation area for multiple dams. The figure (reproduced as Figure 12-4 here) shows that Modesto and potentially North Ceres are within the inundation area for New Melones and New Don Pedro Dams. Areas along the San Joaquin River, including the Jennings Plant, are within the inundation area for Exchequer, San Luis, and Pine Flat Dams (Stanislaus County 2010).



Map Legend:

- Lakes
- Rivers
- Streams
- Roads

Dam Inundation Areas

Dam Name

- Don Pedro
- Exchequer
- New Melones
- San Luis
- Pine Flat
- Tulloch

N

0 10 20 30 Miles

Map displays Stanislaus County with Dam Inundation Areas of regional dams.

Source: Stanislaus County 2010

Figure 12-4. Stanislaus County Dam Inundation Hazards Map

Prepared by:

Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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12.3.7 EXISTING WASTEWATER TREATMENT PLANT OPERATIONS

As described in Chapter 2, the City treats wastewater from the City, north Ceres, a portion from the community of Empire, and other "islands" in the County within Modesto that are served by agreement. Treatment facilities at the Sutter Plant consist of headworks, screening and grit removal, primary clarifiers, digesters, and sludge drying beds, and a primary effluent outfall pump station and pipeline. At the Sutter Plant, average dry weather flows (ADWF) ranged from 20.4 mgd to 20.8 mgd between 2011 and 2014. The peak flow recorded at the Sutter Plant was 72.8 mgd which occurred in December 2014 (Carollo Engineers 2016). Peak flows typically occur during large storm events.

Treated primary effluent gets routed underneath the 54-inch Primary Outfall pipeline and Cannery Segmentation flows get routed through a 60-inch pipeline. These pipelines extend approximately 6.5 miles south to the Jennings Plant where domestic effluent undergoes secondary and tertiary treatment. ADWF for domestic effluent to the Jennings Plant was 19.6 mgd (roughly 26,366 acre-feet per year) in 2016. During the canning season (July through September or early October), Cannery Segmentation flows are pumped from the Sutter Plant and sent directly to the ranch lands surrounding the Jennings Plant. Current average monthly Cannery Segmentation flows during the canning season are as high as 15 mgd (20,179 acre-feet per year). During the non-canning season, Cannery Segmentation year-round monthly flows are typically less than 2 mgd (2,690 acre-feet per year) (Carollo Engineers 2016).

As discussed in Chapter 1, *Introduction,* effluent received at the Jennings Plant undergoes a multi-step biological treatment process involving fixed film reactor towers, 300 acres of oxidation ponds, 100 acres of recirculation ponds, and storage within 1,200 acres of storage ponds. A large portion of this effluent is used to irrigate approximately 2,500 acres of agricultural lands on City-owned property. Currently, approximately 5.5 feet/year of water is applied to the Modesto Ranch (Eve, pers. comm., 2017), equating to approximately 13,520 acre-feet/year. Some of the water that is treated and stored in ponds at the Jennings Plant is also lost to evaporation and/or percolation. For 2018, such losses were projected at 5,425 acre-feet per year (Carollo Engineers 2016). Excess effluent not used for irrigation is stored, disinfected at the chlorination/dichlorination facility, and seasonally discharged (October through May) to the San Joaquin River (Carollo Engineers 2016). In 2017, the City only discharged to the San Joaquin River in March due to a breach in a primary sewer trunk line which resulted in excess wastewater volumes at the Jennings Plant. Since then, the City has discharged nominal amounts of excess effluent to the San Joaquin River and does not expect the need to discharge effluent to the San Joaquin River since operation of the NVRRWP involves delivering 14.9 mgd of tertiary treated wastewater to the DMC and sufficient capacity is available at their storage basins.

12.4 IMPACT ANALYSIS

12.4.1 METHODOLOGY

Impacts to hydrology and water quality were evaluated qualitatively based on consideration of ways in which construction and operation of the proposed components could trigger a significant impact following the CEQA significance criteria. As described through this DEIR, impacts are evaluated at a program-level of detail, except for the River Trunk Realignment Project, which is evaluated at the project level.

12.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

The Proposed Program would result in a significant impact on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

The Proposed Program would not include any new housing. Therefore, the eighth criterion above is dismissed from detailed consideration, as the Proposed Program would have no potential to place housing within the 100-year floodplain. Likewise, the Proposed Program area is generally flat and located far from the ocean or any large standing bodies of water. Therefore, the Proposed Program would have no potential to be subjected to inundation by seiche, tsunami, or mudflow, and the last criterion is dismissed.

12.4.3 ENVIRONMENTAL IMPACTS

Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality during Construction (Less than Significant with Mitigation)

All Program-level Components

Construction of the proposed components could result in discharges of poor quality water to nearby water bodies if adequate precautions are not taken. Trenching and other ground-disturbing activities could expose loose soils that could be eroded during precipitation events. Construction equipment also would use hazardous materials (e.g., fuel and diesel) that could spill during routine use, storage, transport, or disposal, and then seep into groundwater or be washed into nearby water bodies. Use of trenchless construction methods (e.g., horizontal directional drilling [HDD]) also could present hazards to water quality, such as from frac-out[3] accidents during boring activities below or near streams. Additionally, construction of Program components may require dewatering of excavations, particularly for those components adjacent to the Tuolumne River. Discharge of this water back to the river or other areas could result in adverse water quality effects if adequate precautions are not taken.

As described in Chapter 11, *Hazards and Hazardous Materials,* many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. As described in Section 12.2, the SWPPP must, among other things, present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. The SWPPP also would include spill prevention and response procedures for any hazardous materials used during construction. Compliance with this permit would minimize any impacts of Proposed Program construction activities on water quality, but construction water quality impacts of individual program components could nevertheless be significant.

For Program components whose construction would disturb less than one acre, the City of Modesto's Standard Specifications require that such smaller projects develop a Local SWPPP or Erosion Control Plan and implement stormwater BMPs during construction. The Local SWPPP must be submitted to the City of Modesto Land Development Engineering Division for review prior to obtaining a Grading or Encroachment Permit for the project. Erosion control BMPs are described in Chapter 15 of the Standard Specifications and would ensure that impacts on water quality related to erosion for Program components that disturb less than one acre would be less than significant.

[3] "Frac-out" is the inadvertent return and release to the environment of drilling lubricant during HDD. This is a potential concern when HDD is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD procedure uses bentonite slurry, which is a fine clay material that is used as a drilling lubricant. Bentonite is non-toxic and is commonly used farming practices, but benthic invertebrates, aquatic plants, and fish and their eggs can be smothered by the fine particles if bentonite is discharged to waterways (Sacramento Municipal Utility District 2003).

As described in Chapter 11, *Hazards and Hazardous Materials,* the City would maintain compliance with all local, state, and federal regulations concerning hazardous materials, which would prevent substantial water quality impacts (e.g., due to accidental spills of hazardous materials) during construction activities and ensure water quality impacts would be less than significant.

Construction of the new Cannery Segmentation and primary effluent outfall pipeline crossings (Component No. OP-1.1) and new primary effluent outfall pipeline (Component No. OP-1.2) would involve trenchless pipeline construction methods at the Tuolumne River. In the event of a frac-out during construction, adverse water quality effects could occur resulting in a significant impact. To ensure that the Proposed Program would not adversely impact water quality from trenchless pipeline installation methods beneath waterways, the City would implement **Mitigation Measure HYD/WQ-1 (Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods)**. This measure would require the City's drilling contractor to prepare and implement a frac-out contingency plan for trenchless construction methods. The plan would be designed to minimize the potential for frac-out, provide for the timely detection of frac-outs, and ensure a timely and effective response in the event a frac-out occurs (California Public Utilities Commission [CPUC] 2003). Implementation of this mitigation measure would reduce adverse water quality impacts from frac-out associated with trenchless activities to a level that less than significant.

Additionally, compliance with the General Construction Permit or the Central Valley RWQCB's general permit for low threat discharges to surface water would prevent substantial adverse impacts from dewatering activities during construction of Program components. Overall, this impact would be **less than significant with mitigation**.

River Trunk Realignment Project

Impacts from construction of the River Trunk Realignment Project would be similar to those described above for all program components. The River Trunk Realignment Project would involve construction of a pump station located at B Street and Beard Street, a new pump station east of the Tuolumne River and west of Crow's Landing Road, and gravity and force main sewer lines within Tuolumne Boulevard, Colorado Avenue, Pelton Avenue, and Neece Drive. None of these proposed facilities would be located in immediate proximity to the Tuolumne River or Dry Creek, and discharges of contaminants during construction activities would be avoided or minimized through compliance with the NPDES General Construction Permit.

The River Trunk Realignment Project also would include a new force main underneath Dry Creek, as shown on Figure 2-1, which would be installed using trenchless methods. Use of trenchless pipeline installation methods could result in a frac-out, which could significantly impact water quality and aquatic resources, but this impact would be minimized through implementation of Mitigation Measure HYD/WQ-1. As a result, this impact would be **less than significant with mitigation**.

Overall Conclusion

Construction of program-level components and the River Trunk Realignment Project could result in similar water quality impacts due to trenching, pipeline installation and other ground-disturbing activities. Both the River Trunk Realignment Project and outfall pipelines

(Component Nos. OP-1.1, OP-1.2, and OP-1.3) would involve trenchless construction methods beneath waterways and, in the event of a frac-out, adverse water quality impacts may occur. Compliance with NPDES permit requirements and the City's Standard Specifications, and implementation of Mitigation Measure HYD/WQ-1would minimize adverse effects on water quality. In conclusion, the Proposed Program's overall impact would be **less than significant with mitigation**.

Mitigation Measure HYD/WQ-1: Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.

Applies to River Trunk Realignment Project, New Tuolumne River Crossings (OP-1.1), and New Primary Effluent Outfall (OP-1.2)

The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling, microtunneling, pipe bursting) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include the following components/measures:

- Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions.

- Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route.

- Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below.

- Maintain necessary response equipment on-site or at a readily accessible location and in good working order.

- Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003):

  For a terrestrial frac-out:

  - Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud.

  - Based on consultation with CDFW (see below), either:

    - Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or

- Leave the drilling mud in place to avoid potential damage from vehicles entering the area.

- Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

For an aquatic frac-out:

- Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location).

- Based on consultation with CDFW (see below), either:

  - If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column.

  - If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain).

  - If the fracture becomes excessively large, call in a spill response team to contain and clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site.

- If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

- Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.

Impact HYD/WQ-2: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality during Operation (Less than Significant)

All Program-level Components

Operation of the Proposed Program would be similar to operation of the existing wastewater system, and would not adversely impact water quality. As described in Chapter 2, *Program Description,* the Proposed Program would increase the capacity of various sewer lines and facilities, and over time would increase the volume of wastewater treated at the Sutter and Jennings Plants. Although the volume of wastewater handled by the facilities would increase under the Proposed Program, discharges to the San Joaquin River would decrease (and cease entirely) during the period of Program implementation as a result of implementation of the NVRRWP.

The NVRRWP is a collaborative partnership between the Cities of Modesto, Turlock, and Ceres, the Del Puerto Water District (DPWD), and Stanislaus County, which would allow for tertiary effluent from the Jennings Plant to be conveyed via pipeline to the DMC, where it

would be used directly by DPWD. The first phase of construction of the NVRRWP, which involves a new pump station, pipeline and outfall structure at the DMC, is complete. The City began delivering tertiary treated wastewater in May 2018.

As of May 1, 2018, in accordance with its NPDES permit, the City is no longer allowed to discharge secondary treated wastewater to the River, and all discharges need to be treated to tertiary levels. The City projected that in 2018, exports of tertiary treated wastewater to the DMC as part of the NVRRWP would equal 16,500 acre-feet per year (Carollo Engineers 2016). Such exports would increase to roughly 20,100 acre-feet per year by 2035. Export of tertiary treated water to DPWD would reduce the amount of water available for irrigation of the Modesto Ranch lands, such that only 3 feet per year of water (7,380 acre-feet per year) (down from 5.5 feet per year under existing conditions) were estimated to be applied in 2018, increasing to 3.6 feet per year (8,935 acre-feet per year) by 2035 (Carollo Engineers 2016). As noted in Chapter 2, *Program Description,* in the near future, the Central Valley RWQCB is expected to issue a new WDR that decreases the secondary effluent BOD limit for land application (i.e., irrigation) from 300 to 40 milligrams per liter. During the Program implementation period, the City would not discharge secondary or tertiary treated wastewater to the San Joaquin River. In the sense that wastewater effluent is generally of poorer quality than natural streamflow (although NPDES requirements are protective of receiving water quality), this reduction in discharges could benefit water quality in the San Joaquin River to some degree.

Overall, the Proposed Program components would reduce the potential for violation of water quality standards or waste discharge requirements. Many of the Proposed Program components would increase wastewater collection and treatment efficiency and reliability by providing upgraded technologies and facilities. Additionally, decommissioning facilities at the Sutter Plant that are within the 100-year flood plain would decrease the chance of discharge of raw sewage or other hazardous substances during a flood event. Additionally, increasing capacity of several trunk sewer lines and disconnection of the stormwater and sewer systems will decrease potential for SSOs to occur, which would be a benefit to water quality in nearby waters. Therefore, this impact would be **less than significant.**

River Trunk Realignment Project

As described in Chapter 2, *Program Description,* part of the need for the River Trunk Realignment Project is that the existing River Trunk is subject to heavy corrosion and isolated sections of the pipeline have recently failed or are close to failure. As the River Trunk conveys nearly 50 percent of the City's domestic wastewater, and is currently aligned directly adjacent to the Tuolumne River, such failures can have significant adverse effects on water quality. In this respect, the River Trunk Realignment Project would have a beneficial impact on water quality relative to existing conditions (i.e., the new River Trunk would be less likely to fail and would be located at a safe distance from the Tuolumne River in the event that it were to fail at some point over its operation life). Therefore, this impact would be **less than significant**.

Overall Conclusion

Collectively, proposed WWMP components would reduce the potential for violation of water quality standards or waste discharge requirements. Several components would increase the reliability of the City's existing collection system and wastewater treatment system and reduce the potential for discharging raw sewage or other hazardous substances to the Tuolumne and San Joaquin Rivers during overflow events. Additionally, given that the

existing River Trunk is subject to heavy corrosion and some sections are close to failure, realigning this critical trunk line would have a beneficial impact on water quality. Therefore, the Proposed Program's overall impact regarding violations of water quality standards would be **less than significant**.

Impact HYD/WQ-3: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level (Less than Significant)

All Program-level Components

The Proposed Program would not directly use groundwater. Program components would be limited to rehabilitation of existing sewer lines or construction of new sewer lines, new pump stations and new or upgraded lift stations, treatment plant components, and related facilities. Several of these facilities (e.g., new lift and pump stations) would include new impervious surfaces such as concrete pads, which could affect existing groundwater recharge rates to some degree. New impervious surface associated with a pump or lift station is typically 5,000 square feet and no greater than 1 acre. Development of the new primary treatment and solids handling facilities at the Jennings Plant would increase impermeable surface areas by approximately 27 acres, most of which would occur due to construction of the new sludge drying beds. Because the majority of recharge in the Modesto and Turlock Subbasins occurs via percolation of applied irrigation water (and much less so via percolation of rainwater), this new impervious surface within the City boundaries and at the existing Jennings Plant would not substantially affect groundwater recharge such as to lower the local groundwater table level or result in a net deficit in aquifer volume. Additionally, because existing groundwater levels are relatively high at the Jennings Plant and the City continuously applies cannery effluent to the Modesto Ranch lands, the potential for impacts on groundwater levels in this area are limited. Therefore, this impact would be **less than significant.**

River Trunk Realignment Project

The River Trunk Realignment Project would include construction of two new pump stations: the River Trunk Pump Station and the Shackelford Pump Station. As described in Chapter 2, *Program Description,* the River Trunk Pump Station would include a circular driveway around the pump station and a paved access road leading to the pump station. Overall, the area of new impervious surface area would be approximately 2 acres. Stormwater generated on pump station sites may be handled on-site via stormwater management features, or may be conveyed to the City's stormwater or sewer systems. If it is handled on-site, it would not substantially affect groundwater recharge rates, as the water would be allowed to infiltrate into the soil and to groundwater below. If it is conveyed to the stormwater or sewer system, it could marginally decrease groundwater recharge rates at the site, as water falling on the site as precipitation would no longer be able to infiltrate into the ground. Regardless, given the small area of new impervious surfaces established as a result of the River Trunk Pump Station and Shackelford Pump Station, any decrease in groundwater recharge would not be substantial and would not result in a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, this impact would be **less than significant**.

Overall Conclusion

WWMP components would not involve use of groundwater. While some facilities including new or upgraded lift stations and pump stations would increase impervious surface areas, such areas would be approximately 1 to 2 acres at each facility and would not substantially affect existing groundwater recharge rates. At the Jennings Plant, development of new wastewater treatment facilities would increase impermeable surface areas by approximately 27 acres; however, since the majority of recharge in the Modesto and Turlock Subbasins occurs via percolation of applied irrigation water, new impervious surfaces at the Jennings Plant would not substantially affect groundwater table levels. Additionally, existing groundwater levels at the Jennings Plant are relatively high and cannery effluent is consistently applied to Modesto Ranch lands, thereby reducing the likelihood for impacts to groundwater levels at this location. In conclusion, the Proposed Program's overall effect on groundwater supplies would be **less than significant**.

Impact HYD/WQ-4: Substantially Alter the Existing Drainage Pattern of the Site or Area Such as to Result in Substantial Erosion, Siltation, or Flooding On- or Off-Site (Less than Significant)

All Program-level Components

The Proposed Program would not alter the course of any stream or river and would not substantially affect the drainage patterns at individual project sites over the long term. Many of the proposed components would be buried underground within existing streets (e.g., new and rehabilitated sewer lines) and would have no potential to alter drainage patterns. The Proposed Program would include construction of new pipeline crossings and a new third outfall pipeline across the Tuolumne River; these would be installed using trenchless methods beneath the water bodies, and would not affect the existing drainage patterns.

As described in Impact HYD/WQ-3, new and/or upgraded lift stations and pump stations would include new impervious surface areas, which would alter existing drainage patterns on-site to some degree (impervious surfaces generally increase volume and velocity of surface runoff); however, these changes would not be substantial and would not result in substantial siltation, erosion, or flooding on- or off-site. Additionally, development of new primary treatment and solids handling facilities would increase impermeable surface by approximately 27 acres. Runoff from these surfaces would discharge to surrounding undeveloped land around the Jennings Plant where it may either percolate into the soil or sheet-flow to adjacent areas or the San Joaquin River. Given the Jennings Plant's location in an agricultural/undeveloped area along the San Joaquin River, runoff generated by the new impervious surface at the Jennings Plant would be unlikely to cause substantial erosion, siltation, or flooding on- or off-site.

As described in Impact HYD/WQ-2, discharges of wastewater effluent to the San Joaquin River would cease under the Proposed Program. In accordance with the NVRRWP, tertiary treated wastewater from the Jennings Plant would be transported via pipeline to the DMC for use by DPWD. As existing discharges to the San Joaquin River are minimal and sufficient capacity is available at the plant's storage basins, this elimination of contributing flows would marginally affect (i.e., decrease) flows in the San Joaquin River. However, this change would be caused primarily by implementation of the NVRRWP and not the Proposed Program.

During construction of individual Program components, the Proposed Program could temporarily alter the drainage patterns of individual project sites. Trenching for installation of sewer lines, excavation for installation of pump and lift station structures, and related activities could temporarily change the ground surface and potentially expose loose soils to erosive forces (e.g., water, wind). These changes could result in substantial erosion on-site if adequate measures are not implemented.

For CIP projects that exceed one acre in disturbance area, compliance with the NPDES General Construction Permit would minimize erosion during construction activities. In general, the change in runoff patterns that could occur during construction would not be sufficient to result in substantial flooding on- or off-site. In addition, for Program components in close proximity to Designated Floodways or levees along the Tuolumne River, Dry Creek, or the San Joaquin River, the City would apply for appropriate encroachment permits from CVFPB prior to construction. For Program components with less than one acre of disturbance area that may not be subject to the NPDES General Construction Permit, the City's Standard Specifications would require preparation and implementation of a Local SWPPP, which would include erosion control BMPs. With adherence to these requirements, this impact would be **less than significant.**

River Trunk Realignment Project

The River Trunk Realignment Project would include construction of two new pump stations, new sewer lines underneath various streets in central Modesto, and related facilities. As described above, trenching and excavation activities during construction of this project could temporarily alter drainage patterns on-site, but these changes would not result in substantial flooding on- or off-site. Compliance with the NPDES General Construction Permit and the City's Standard Specifications would minimize erosion of exposed soils during ground-disturbing activities. The City would also be required to apply for an encroachment permit from CVFPB because the River Trunk Realignment Project would include new pipelines crossing the Tuolumne River and Dry Creek. As a result, this impact would be **less than significant.**

Overall Conclusion

Development of proposed WWMP components would not substantially alter drainage patterns such that erosion, siltation or flooding would occur on-site. Although discharges of wastewater effluent to the San Joaquin River would cease due to the NVRRWP, this change would not substantially affect San Joaquin River flows such as to result in erosion, siltation, or flooding. During construction of WWMP components, temporary ground-disturbing activities could alter drainage patterns. For components greater than one acre in disturbance area, compliance with the NPDES General Construction Permit would prevent substantial impacts from erosion by requiring implementation of erosion control BMPs. For CIP projects less than one acre in disturbance area, the City's Standard Specifications require preparation and implementation of a Local SWPPP including erosion control BMPs. These requirements would minimize the erosion effects of exposed soils. As a result, the Proposed Program's overall impact would be **less than significant**.

Impact HYD/WQ-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff (Less than Significant)

As described in Impact HYD/WQ-3, the Proposed Program would include limited areas of new impervious surface area, which could marginally increase the volume and velocity of surface water runoff at the location of certain Program components. Most components would route any stormwater generated on-site to the City's system of rockwells and positive stormwater collection features. The City would comply with its Phase I municipal stormwater permit (Order R5-2015-0025), which requires industrial/ commercial development projects greater than 1 acre to incorporate storm water measures into the design plan. Given the small amount of additional stormwater runoff that may be generated by the Proposed Program components (many of the components would be buried underground and would have no potential to generate stormwater), the Proposed Program would not exceed the capacity of existing or planned stormwater drainage systems.

These facilities also would not provide substantial additional sources of polluted runoff. It is possible that small amounts of fuel or solvents used in pump station generators or facility maintenance could be spilled and washed into the storm drain system, but this occurrence would be unlikely and any amount of polluted runoff generated by the Proposed Program would be small. The SWPPP or Local SWPPP would prevent polluted runoff from possibly being discharged to the storm drain system during construction.

The Proposed Program also would include upgrades to the City's stormwater system. The Proposed Program would disconnect the City's stormwater and sanitary systems in various locations, as well as provide other components, to provide additional capacity for the stormwater system and reduce the potential for SSOs. These components would reduce the potential for other aspects of the Proposed Program to create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems. Overall, this impact would be **less than significant.**

Impact HYD/WQ-6: Place Within a 100-year Flood Hazard Area Structures Which Would Impede or Redirect Flood Flows (Less than Significant with Mitigation)

New and Upgraded Sewer Lines, Sewer Rehabilitation Components, Stormwater/ Sanitary Sewer Disconnections, R&R Projects, and Outfall Pipelines

Once constructed, all pipelines including new and upgraded sewer lines, sewer rehabilitation components, stormwater/sanitary sewer disconnections, and other pipeline projects would be belowground and therefore would not impede or redirect flood flows. These proposed CIPs would have **no impact**.

Lift Station Components

The Benson lift station (Component No. LS #3 – Benson) would be within the mapped 100-year FEMA flood hazard area (i.e., 1-percent annual chance flood zone). While improvements to the Benson lift station are anticipated to occur within the facility's existing footprint (paved), it is possible that the facility may need to be relocated to a nearby parcel. All other planned lift station component sites would be outside the 100-year flood hazard area. As

such, proposed above-ground structures at the Benson lift station could impede or redirect flood flows in the event of a 100-year flood event, a significant impact. Depending on the degree of impedance, this could result in adverse effects on nearby properties by changing the inundation area or water flow rate during a flood event. **Mitigation Measure HYD/WQ-2 (Conduct Flood Flow Study for New Structures within the 100-year Flood Hazard Area Mapped by FEMA)**, described below, would require the City to conduct a flood flow study to determine the degree to which the lift station could impede or redirect flood flows, or affect nearby properties, and develop mitigation measures to reduce impacts, if needed. This mitigation measure would ensure that impacts on flood flows from the proposed Benson lift station components would be **less than significant with mitigation.**

Sutter Plant Components

As described in Chapter 2, *Program Description,* a number of structures and facilities at the Sutter Plant are currently located within the flood hazard area. Under the Proposed Program, these facilities would be decommissioned and moved to the Jennings Plant or flood-proofed to reduce impacts to these facilities in a flood event. This would reduce potential for these existing structures to impede or redirect flood flows. In addition, several facilities that would remain at the Sutter Plant (including the administration and laboratory building, substations, portions of the headworks facility, and pumping plant) would be floodproofed and raised to meet FEMA's 100-year flood protection standards. As such, this impact would be **less than significant.**

Jennings Plant Components

The new, above-ground Program components at the Jennings Plant (e.g., primary treatment and solids handling facilities relocated from the Sutter Plant) all would be outside of the 100-year FEMA flood hazard area and therefore would not impede or redirect flood flows. The fixed film reactors are partially within the flood hazard area, but these structures are existing and would only be modified/rehabilitated as part of the Proposed Program. The treatment and storage ponds and recirculation channel at the Jennings Plant are all within the flood hazard zone. The Cannery Segregation treatment facilities components would include activities within the 100-year flood hazard zone including installation of aerators within the recirculation channel, pond aerators, a new effluent channel berm and FFR effluent pipeline. However, these components are modifications to existing Plant facilities and would not add any substantial structures that could impede or redirect flood flows. As a result, this impact would be **less than significant.**

River Trunk Realignment Project

The River Trunk Pump Station and Shackelford Pump Station would be just outside of the FEMA 100-year flood hazard area. Therefore, these features would not substantially affect flood flow passage during a 100-year event. The remaining facilities included as part of the River Trunk Realignment Project would be buried underground (e.g., new sewer lines within existing streets) and therefore would have no potential to impede or redirect flood flows. As a result, this impact would be **less than significant.**

Overall Conclusion

Many WWMP components would be either belowground or outside of the 100-year FEMA flood hazard area. At the Sutter Plant, primary treatment facilities would be demolished after the new primary treatment facilities are constructed and operating at the Jennings Plant and

several facilities to remain at the Sutter Plant would be floodproofed to meet FEMA's 100-year flood protection standards. New facilities at the Jennings Plant that would be within the 100-year flood hazard zone involve modifications to existing facilities and would not be substantial enough to impede or redirect flood flows. In conclusion, with implementation of Mitigation Measure HYD/WQ-2, the Proposed Program's overall impact would be **less than significant with mitigation.**

Mitigation Measure HYD/WQ-2: Conduct Flood Flow Study for Benson Lift Station.

Applies to lift station component LS #3 – Benson Lift Station components

Prior to final project design, the City of Modesto and/or its contractor(s) shall conduct a study to ascertain the changes in flows that may be caused by the proposed Benson Lift Station structure in the event of a 100-year flood. The study shall model the change, if any, in inundation area that may be caused by restriction in flood flow passage caused by the structure. If the study determines that the proposed lift station may cause inundation of adjacent or upstream/downstream properties or structures during a 100-year flood event, the City shall develop mitigation measures to address this impact. Feasible mitigation measures may include construction of flood protection structures for potentially affected properties or reconfiguration of the proposed project facilities to reduce impedance or redirection of flows (e.g., elevating critical facilities such as electrical panels and underground pump vault doors to levels above flood stage). Alternatively, the City may identify an alternative site for the proposed lift station that would avoid impacts on flood flows.

Impact HYD/WQ-7: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam (Less than Significant)

As discussed in Section 12.3, virtually the entire City of Modesto, including most if not all of the proposed components, are located within the zone of potential inundation in the event of dam failure of several reservoirs (e.g., New Melones, Don Pedro, Exchequer, San Luis, or Pine Flat Dams). The Sutter and Jennings Plants also are within dam inundation areas. These dams are routinely evaluated for seismic stability by the California Division of Safety of Dams to ensure the integrity of the structures (DWR 2017b). Because the probability of dam failure is extremely low, impacts related to flooding due to failure of a dam would be **less than significant**.

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Chapter 13
LAND USE AND PLANNING

13.1 OVERVIEW

This chapter describes the setting and impacts of the Proposed Program related to land use and planning. Existing land uses in the study area and applicable land use polices and regulations for the City of Modesto and Stanislaus County are presented. This chapter also evaluates land use compatibility impacts that would result from the implementation of the Proposed Program and considers mitigation measures to reduce Program-related impacts.

The regulatory and environmental settings and impact analysis for land use and planning were developed through a review of:

- the *Stanislaus County General Plan* (2016),
- the *City of Modesto Urban Area General Plan* (2019), and
- the *Tuolumne River Regional Park Master Plan* (EDAW 2001).

13.2 REGULATORY SETTING

No federal or state laws, regulations, or policies pertaining to land use and planning are applicable to the Proposed Program.

13.2.1 LOCAL LAWS, REGULATIONS, AND POLICIES

Stanislaus County General Plan

The *Stanislaus County General Plan* (2016) applies to unincorporated lands surrounding the City of Modesto, including unincorporated lands within the City's SOI (e.g., Bret Harte and Empire). Lift Stations #3, #29, #30, #61, the River Trunk Pump Station and the Shackelford Pump Station would all be constructed on land that is designated City lands. Lift Station #59 would be built on land with the following designations: Planned Industrial designation, which allows for light industrial development, predominantly in locations lacking public sewer and/or water service; Urban Transition, which is designated to ensure that land remains in agricultural usage until urban development consistent with a city's (or unincorporated community's) general plan designation is approved; and Planned Development, which is intended for land suitable for a variety of uses. Lift Station #60 would be built on land designated as Salida Community Plan Planned Industrial and Industrial Business Park. Lift Station #39 would be built on land designated as City land, while the adjacent Lift Station #63 would be built on land with an Urban Transition/City designation. Lift Station #62 would be built on land designated as a combination of Low-Density Residential land, which is intended to provide locations for single-family detached, semi-detached, and manufactured housing dwellings; as well as City and Agricultural designations. Lift Stations #65 and #67 would be

built on land designated as Urban Transition. Sutter Plant improvements would take place on land that is designated as Open Space (Stanislaus County 2016).

The Land Use Element contains the following policies:

Policy 1. Land will be designated and zoned for agricultural, residential, commercial, industrial, or historical uses when such designations are consistent with other adopted goals and policies of the general plan.

Policy 2. Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation and enjoyment of scenic beauty.

Policy 4. Urban development shall be discouraged in areas with growth-limiting factors such as high water table or poor soil percolation, and prohibited in geological fault and hazard areas, flood plains, riparian areas, and airport hazard areas unless measures to mitigate the problems are included as part of the application.

Policy 5. Residential densities as defined in the General Plan shall be the maximum based upon environmental constraints, the availability of public services, and acceptable service levels. The densities reflected may not always be achievable and shall not be approved unless there is proper site planning and provision of suitable open space and recreational areas consistent with the supportive goals and policies of the General Plan.

Policy 6. Preserve and encourage upgrading of existing unincorporated urban communities.

Policy 7. Riparian habitat along the rivers and natural waterways of Stanislaus County shall to the extent possible be protected.

Policy 10. New areas for urban development (as opposed to expansion of existing areas) shall be limited to less productive agricultural areas.

Policy 11. Development of residential areas shall be adjacent to existing compatible unincorporated urban development or, in the case of remote development, included as part of a specific plan.

Policy 12. The expansion of urban boundaries of unincorporated communities shall attempt to minimize conflict between various land uses.

Policy 13. Expansion of urban boundaries of unincorporated communities should be based on infilling and elimination of existing "islands" and should not permit leapfrog development or create new "islands."

Policy 14. Uses shall not be permitted to intrude into or be located adjacent to an agricultural area if they are detrimental to continued agricultural usage of the surrounding area.

Policy 16. Outdoor lighting shall be designed to be compatible with other uses.

Policy 17. Agriculture, as the primary industry of the County, shall be promoted and protected.

Policy 18. Promote diversification and growth of the local economy.

Policy 19. Accommodate the siting of industries with unique requirements.

Policy 20. Nonconforming uses are an integral part of the County's economy and, as such, should be allowed to continue.

Policy 21. Facilitate retention and expansion of existing businesses.

Policy 22. Support and facilitate efforts to develop and promote economic development and job creation centers throughout the County.

Policy 24. Future growth shall not exceed the capabilities/capacity of the provider of services such as sewer, water, public safety, solid waste management, road systems, schools, health care facilities, etc.

Policy 26. Development, other than agricultural uses and churches, which requires discretionary approval and is within the sphere of influence of cities or in areas of specific designation created by agreement (e.g., Sperry Avenue and East Las Palmas Corridors), shall not be approved unless first approved by the city within whose sphere of influence it lies or by the city for which areas of specific designation were agreed. Development requests within the spheres of influence or areas of specific designation of any incorporated city shall not be approved unless the development is consistent with agreements with the cities which are in effect at the time of project consideration. Such development must meet the applicable development standards of the affected city as well as any public facilities fee collection agreement in effect at the time of project consideration.

Stanislaus County Zoning Ordinance

According to the Stanislaus County Zoning Ordinance, public utilities, including underground pipelines, are permitted in all zoning districts.

The County land where the third outfall pipeline would be built are classified in the General Agriculture zoning district. **Figure 13-1** shows the locations of this and other WWMP components relative to the County's and the City of Modesto's zoning districts throughout the study area. Permitted uses for General Agriculture (A-2) districts include agricultural uses; single-family dwelling; mobile homes; buildings, appurtenances, and uses such as custom contract harvesting or land preparation; home occupations; garage sales; and other uses related to agriculture. According to Section 21.20.030 of the Stanislaus County Code, this General Agriculture district allows development of certain uses that are not directly related to agriculture but may be necessary to serve other uses in the district. For example, development of facilities for public utilities qualifies as a "Tier Three" use that may be allowed if the Stanislaus County Planning Commission concludes that the use would not be substantially detrimental to or conflict with agricultural use of other property in the vicinity, and the parcel on which such use is requested is not located in one of the county's "most productive agricultural areas," as this term is used in the general plan; or if the character of

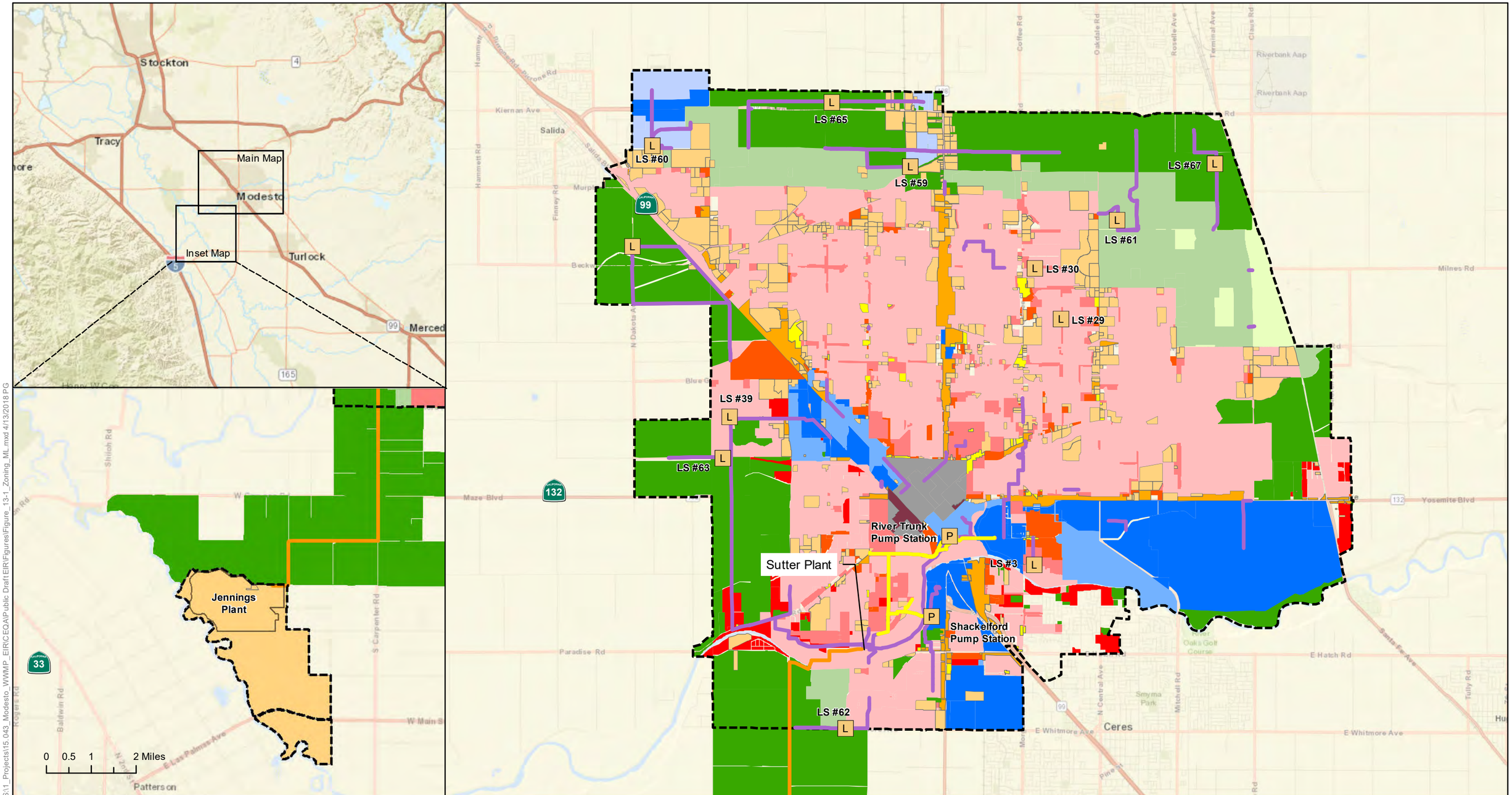
the use that is requested is such that the land may reasonably be returned to agricultural use in the future.

The Jennings Plant would be constructed on land that is zoned as Planned Development District (P-D), which, according to the Stanislaus County Zoning Ordinance, is intended to allow modification of requirements allowed by other districts and diversification in the relationship to different uses, buildings, structures, lot sizes, and open spaces. Based on these allowances, CIPs involved with the Jennings Plant would comply with the County's zoning ordinance.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (2019) serves as the City's "blueprint for future growth" and is intended to guide the physical development of the overall Modesto community. The General Plan identifies three distinct planning areas: the Downtown Area, which generally includes the City's historic downtown; the Baseline Developed area, which generally includes areas that are already developed with urban uses; and the Planned Urbanizing Area, which forms the perimeter of Modesto's General Plan Urban Area. Land use designations for Modesto lands are shown in Figure III-1, Adopted Land Use Diagram, of the *City of Modesto Urban Area General Plan* and include the following land use designations: Residential (R), Mixed Use (MU), Commercial (C), Industrial (I), Redevelopment Planning District (RPD), Village Residential (VR), Regional Commercial (RC), Business Park (BP), Open Space (OS), and land use designations of the *Salida Community Plan* (SCP). **Table 13-1** summarizes the land use designations and zoning districts of the Program-level WWMP components. The following land uses are permitted for each of these designations:

- Open Space – Planned land uses shall include low-impact recreational facilities, public ownership, low density residential, and agriculture.
- Residential – Land uses include single-family detached housing, single-family attached housing, multi-family housing, and mobile homes. Compatible uses may include schools, parks, and religious or community facilities.
- Mixed Use – Single-family residential, multi-family residential, commercial, office, and institutional uses are allowed in close proximity to each other. The guiding land use intensity is 0.35 square feet of building area per square foot of gross acreage of the site.
- Business Park – Business parks consist of light industrial and employment intensive uses. In general, these areas will have a campus-like setting, with a guiding intensity of 0.40 square feet of building area per square foot of gross area of the site.
- Regional Commercial – Land uses include but are not limited to business, medical, and professional offices other than large office campuses, neighborhood retail centers, convenience retail, highway-oriented commerce, Regional Commercial uses, and the downtown commercial districts.



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Horizon WATER and ENVIRONMENT

Figure 13-1
General Zoning Districts in the WWMP Study Area

City of Modesto
Wastewater Master Plan EIR

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- Village Residential – Villages are mixed-use, compact, pedestrian- and transit-oriented development that are intended to accommodate a variety of residential product types such as detached houses on small lots and multi-family and senior housing, in addition to village-serving (i.e., non-residential) units. The residential density within a Comprehensive Planning District is typically 6.6 to 7.5 dwelling units per gross acre. Approximately 4 percent of land designated as VR shall be devoted to commercial uses with a guiding intensity of 0.35 square feet of building per square foot of gross area of the site.

- Redevelopment Planning District – The Modesto RPD area is intended to consist of development that "will be the focal point of community life and the social, cultural, business, governmental and entertainment center of the northern San Joaquin Valley." Acceptable development will consist of housing, modern transportation systems, and vertical mixed-use development.

- Industrial – This designation provides for the full range of industrial uses, including but not limited to manufacturing, food processing, trucking, packing, and recycling. The guiding land use intensity for this designation is 0.50 square feet per square foot of gross area on an area-wide basis.

Table 13-1. City of Modesto General Plan Land Use Designations and Zoning Districts of Program-Level WWMP Components

Program-Level WWMP Component	General Plan Land Use Designation	Zoning District
Lift Station #3	Open Space	Single Family/Low Density Residential & Medium Density Residential
Lift Station #29	Residential/Mixed Use	Single Family/Low Density Residential & Medium Density Residential
Lift Station #30	Residential	Single Family/Low Density Residential & Medium Density Residential
Lift Station #39	Residential	Single Family/Low Density Residential
Lift Station #59	Business Park	Planned Industrial, Planned Development & General Agriculture
Lift Station #60	Regional Commercial	Planned Industrial & Planned Development
Lift Station #61	Village Residential	Specific Plan
Lift Station #62	Residential/Village Residential	Specific Plan, Single Family/Low Density Residential & General Agriculture

Program-Level WWMP Component	General Plan Land Use Designation	Zoning District
Lift Station #63	Residential/Business Park	Single Family/Low Density Residential & General Agriculture
Lift Station #64	Business Park	General Agriculture
Lift Station #65	Village Residential	General Agriculture
Lift Station #67	Business Park	General Agriculture
River Trunk Pump Station	Redevelopment Planning District	Limited Light Industrial & Single Family/Low Density Residential
Shackelford Pump Station	Industrial	Limited Light Industrial & Single Family/Low Density Residential

Sources: Stanislaus County Zoning Ordinance; Adopted Land Use Program as cited in City of Modesto 2019

The *City of Modesto Urban Area General Plan* (2019) provides the following policies related to land use and planning.

Chapter II – Community Growth Strategy

Policy II.B.1. Priority Development Areas. Support new development with infrastructure developed in accordance with the established Capital Improvement Program priority areas of Downtown, Kiernan Business Park, the Tivoli Specific Plan area and the South Modesto Industrial Park (north of Whitmore Ave. between Crows Landing Rd. and Morgan Rd.).

Policy II.B.3. Funding Capital Improvements. Increase and improve capital projects over time through maintaining or enhancing existing funding sources, maximizing joint-use efficiencies, and strategically prioritizing capital investments.

Chapter III – Community Development Policies

Goal III.A. Zoning Consistency. Maintain and enhance consistency between General Plan (land use designations and policies) and zoning.

Policy III.A.1. Parcel-Specific Zoning. Zoning within the incorporated City limits should be, and generally is, consistent with the General Plan Land Use Designations as presented on the Land Use Diagram. However, because these designations are broad in nature, there may be minor instances in which the existing zoning for a particular property is not consistent with the Land Use Designation for the property. These situations are still considered to be consistent with the overall goals and policies of the General Plan, and development of these properties may occur consistent with zoning. Chapter VII – Environmental Resources, Open Space and Conservation.

Policy VIII-B. Local Open Space Plan. Open space needs are broadly identified by the state legislature. It is within this scope that local jurisdictions must identify specific areas and targets of preservation, development, and/or production. Government

Code Section 65560 lists six broad categories to be designated on a local open space plan: Open space for 1) the preservation of natural resources, 2) public health and safety, 3) managed production of resources, 4) outdoor recreation, 5) buffer zones to military activities, and 6) protection of places, features, and objects. These categories will be discussed in detail as they relate to the Modesto Urban Area.

Open Space Policies – River Greenway Program

Policy VII-B.7[a]. Visual corridors of the river will be protected and enhanced.

Policy VII-B.7[b]. Visual corridors and access points on the riverfront will be recreated through redevelopment.

Policy VII-B.7[c]. Identifiable park entrances will be created. A comprehensive program of park signage and graphics will be developed.

Policy VII-B.7[d]. Adequate circulation throughout the park will be provided in order to accommodate pedestrians, bicyclists, and vehicles, as well as equestrians and boaters, if appropriate. Opportunities for park access via public transportation will be provided.

Policy VII-B.7[e]. Active and passive recreational areas with universal access will be created.

Modesto Code of Ordinances

Title 10 of the Modesto Code of Ordinances establishes zoning regulations for land within the City of Modesto's jurisdictional boundary.

For specific zoning district designations for each Program-level WWMP component, see Table 13-1. Land uses for all residential zoning districts associated with the City are meant to ensure that development will result in stable, desirable neighborhoods that are well-integrated into the City. Allowable area and density requirements are explained in-depth in Chapter 4, Article 1 – Residential Zones (R-1, R-2, R-3) of the City of Modesto Code of Ordinances. The following land uses are permitted for each of these zoning designations:

- Industrial – Land uses associated with Industrial zoning districts, including Limited Light Industrial and Planned Industrial, ensure that opportunities exist for development of industry, job creation and economic growth. Allowable area and density requirements are explained in-depth in Chapter 4, Article 3 – Industrial Zones (C-M, M-1, M-2) of the City of Modesto Code of Ordinances.

- Planned Development – Zones designated for Planned Development allow for the construction of residential condominiums, community apartment projects and stock cooperatives, mobile home parks, and cemeteries. Similar uses that are less intense than the uses specified above may be allowed pending approval. Chapter 7, Article 1 – Planned Development Zone (P-D) of the City of Modesto Code of Ordinances provides more details regarding this zoning district.

- Specific Plan – Land zoned as Specific Plan are intended to permit various land uses including residential, industrial, and commercial development through Specific Plans

that are pursuant to Government Code Section 65450, et seq. Chapter 7, Article 3 – Specific Plan (SP) Zone of the City of Modesto Code of Ordinances provides more details regarding this particular zoning district.

According to the City of Modesto Code of Ordinances Title 10, Chapter 3 – Land Use Regulations, land uses for all storm drainage facilities and minor public facilities (e.g., pumps) are permitted in all zoning districts. Public buildings and grounds are permitted in Commercial-Industrial and Industrial districts and conditionally permitted in Residential, Professional Office, and Commercial districts.

Tuolumne River Regional Park Master Plan

The TRRP Master Plan is a long-range plan for a riverfront park in southern Modesto (EDAW 2001). The plan encompasses over 500 acres including lands along a 7-mile stretch of the Tuolumne River, generally bounded by Mitchell Road to the east and Carpenter Road to the west. The TRRP Master Plan provides a long-range vision for establishing recreational facilities such as the Riverwalk, boat and fishing piers, vista points, a sports complex near the Sutter Plant, an interpretive center, trails, roadways and parking areas, all of which are intended to enhance the natural environment and create both recreational educational opportunities along the river. The TRRP Master Plan also has a riparian restoration component that calls for creating improved riparian habitat along the Tuolumne River and Dry Creek.

13.3 ENVIRONMENTAL SETTING

Proposed components would occur within Modesto and unincorporated areas of Stanislaus County. The following sections describe land uses that would be affected by proposed components.

13.3.1 MODESTO

The City of Modesto is located in central Stanislaus County, in the northern section of California's San Joaquin Valley. The Tuolumne River runs along the southern edge of the city. State Route (SR) 99 intersects the city along the north–south axis, and SR 132 intersects the city along the east–west axis. Nearby cities include Riverbank, Ripon, and Manteca to the north and Ceres, Turlock, and Merced to the south.

Before 1960, most of Stanislaus County's population lived in unincorporated areas. Today, the population of the nine incorporated cities substantially exceeds that of the unincorporated area. While the county's economic base remains predominantly agricultural, the regional economy is diversifying. Housing development has significantly increased the urbanized land area within Modesto. Because many of these new residents continue to work in the Bay Area, traffic along SR 99, SR 132, and Interstate 5 has increased noticeably.

The vast majority of land in Modesto is considered urban/built-up land. Land along the portion of the Tuolumne River that is adjacent to Modesto City-County Airport and along portions of Dry Creek that are adjacent to Central Valley Specialty Hospital and Creekside Golf Course, respectively, are classified as nonagricultural and natural vegetation lands (CDOC 2017). Throughout the City, the majority of the land is designated for a combination of residential, mixed use, and commercial (City of Modesto 2017a).

Sutter Plant

The Sutter Plant is located just north of the Tuolumne River in an undeveloped portion of the Tuolumne River Regional Park. According to the City's Adopted Land Use Diagram, the Sutter Plant is entirely within the Tuolumne River Comprehensive Planning District (City of Modesto 2019). The Dryden Park Golf Course is located immediately east of the Sutter Plant. This 18-hole golf course is comprised of approximately 142 acres of land. Directly north of the Sutter Plant is Bellenita Park, which features a baseball/softball field, picnic areas, and bathrooms on its approximately 48-acre property (City of Modesto 2017b).

The Sutter Plant, Dryden Park Golf Course, Bellenita Park and the parcel west of the Plant are designated as OS according to the City's general plan. Land uses to the north of the Plant are designated as R interspersed with areas of RPD and MU land between the intersections of Paradise Road/Beverly Drive and Paradise Road/South Martin Luther King Drive. The parcel located north of Bellenita Park (Assessor's Parcel No. 037017005) is designated as MU as well. Land uses south of the Sutter Plant and the Tuolumne River are designated R and VR (City of Modesto 2017c).

The Sutter Plant is zoned as low-density residential (R-1). Zoning for the Dryden Golf Course and the parcel to the west of the Plant are also designated as R-1. The parcels directly north of the Sutter Plant and west of Bellenita Park are not zoned because they are unincorporated County areas with residential or undeveloped land uses. The parcels that are designated as VR lands are zoned in the specific plan zone (S-P). The parcels south of the Plant that are designated as R are zoned R-1 (City of Modesto 2017d).

Primary land uses in the vicinity of the River Trunk and Sutter Plant consist of urban/built up land and vacant/disturbed land with similar classifications for lands surrounding these project sites.

13.3.2 UNINCORPORATED STANISLAUS COUNTY

Third Outfall Pipeline Alignment

The third outfall pipeline alignment would continue south on Carpenter Road, west on Keyes Road, south on Jennings Road, and then continue west and terminate at the Jennings Plant. These roads are located in unincorporated Stanislaus County and surrounded by land that is designated and zoned for agricultural uses. (Stanislaus County 2006).

Jennings Plant

The Jennings Plant and the 2,500 acres of agricultural lands to the south of the plant are situated on lands owned by the City, and are zoned as Planned Development (PD). This designation identifies properties that require subsequent site planning in the form of approval of a Planned Development. The Jennings Plant is surrounded by lands that are designated and zoned for agricultural uses. The San Joaquin River is located directly west of the Jennings Plant.

13.4 IMPACT ANALYSIS

13.4.1 METHODOLOGY

The analysis of land use and planning is generally qualitative and, pursuant to CEQA Guidelines Section 15125, describes potential inconsistencies between the Proposed Program and applicable land use policies, plans, and programs described in Section 13.2 above. Inconsistencies with land use policies are considered a significant impact only if those inconsistencies would result in significant adverse effects on the physical environment. Physical impacts on the environment that could result from inconsistency with land use plans or policies are addressed in the other resource chapters (Chapters 4 through 12 and Chapters 14 through 18), not in this land use analysis. Specifically, consistency with SJVAPCD's air quality plans is discussed in Chapter 6, *Air Quality;* consistency with the *Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region* is discussed in Chapter 12, *Hydrology and Water Quality;* and consistency with the *Congestion Management Process for the Stanislaus County Region* is addressed in Chapter 16, *Transportation and Traffic.* General consistency of the Proposed Program with the laws, regulations, and policies identified in Section 13.2, above, is discussed in Impact LU-2.

13.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

The Proposed Program would result in a significant impact on land use and planning if it would:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The third criterion is addressed in Chapter 7, *Biological Resources,* and not discussed in the following impact analysis.

13.4.3 ENVIRONMENTAL IMPACTS

Impact LU-1: Divide an Established Community (Less than Significant)

All Program-level Components

Proposed Program improvements that would occur above ground would be consistent with the City's zoning and General Plan land use designations as discussed in Section 13.2, "Environmental Setting" above. Furthermore, any pipeline improvements associated with the Proposed Program would occur underground and would therefore be exempt from complying with zoning designations as well. Some pipeline improvements would also occur in areas where such facilities already exist. New groundwater wells, storage tanks, pipelines, and new water mains would generally be constructed on the outskirts of Modesto and would facilitate redevelopment or new urban development.

For all components, construction activity would be temporary and any disturbed land would be returned to pre-construction conditions except for where new aboveground structures would be built. While construction of these components could result in temporary construction impacts to neighborhood land uses, such as temporary impacts on community traffic, air emissions, public safety, or noise, construction of these CIPs would be short-term and phased through 2035. These temporary impacts are addressed in Chapter 6, *Air Quality;* Chapter 14, *Noise and Vibration;* and Chapter 16, *Transportation and Traffic*.

Operation of proposed facilities would be consistent with and, for the most part, located adjacent to existing utility operations and would not impede access to neighboring communities.

Most components at the Jennings Plant would occur within the existing footprint of the current facility. As discussed in Chapter 5, *Agricultural Resources,* construction of new sludge drying beds would involve conversion of agricultural land immediately east of the plant. The land use designation for the surrounding land is agriculture. There are no established neighborhoods near the plant. As a result, no established communities would be divided by components at the Jennings Plant.

Most of the land surrounding the proposed third outfall pipeline is designated for agricultural uses (Stanislaus County 2006). As a result, the surrounding land is used almost exclusively for farming with some single-family residential homes. Installation of this approximately 9-mile pipeline would require open trench construction, which could generate short-term traffic delays due to partial lane closures. Such impacts are described in more detail in Chapter 16, *Transportation and Traffic.* Because the outfall pipeline would be underground and since there are no communities along the outfall pipeline alignment, this component would not physically divide established neighborhoods.

Components at the Sutter Plant would occur within the existing footprint of the facility. Construction of the new Tuolumne River crossings would entail trenchless methods, and new connecting force mains would extend south from the junction structure and southern jacking pit along Monticello Lane and connect with the existing 60-inch force mains. Note that the alignment of these outfall crossings is preliminary and subject to change due to presence of existing utilities and the alignment's proximity to sensitive receptors. This pipeline would involve open trenching along the roadway at a distance that is far enough away from the existing neighborhood community to avoid affecting travel through the neighborhood. Although there is potential for temporary increased traffic, noise, and air quality impacts to occur due to pipeline installation, these impacts are addressed in Chapter 16, *Transportation and Traffic;* Chapter 14, *Noise and Vibration*; and Chapter 6, *Air Quality,* respectively. These activities would not divide any established communities.

All other program-level components would either occur in areas where collection system structures already exist (e.g., lift station upgrades) or would be constructed underground (e.g., pipelines). New lift stations would be constructed on the outskirts of Modesto and would facilitate redevelopment or new urban development. For all components, construction activity would be temporary and any disturbed land would be returned to pre-construction conditions except for where new aboveground structures would be built. While construction of these components could result in temporary construction impacts to neighborhood land uses, such as temporary impacts on community traffic, air emissions, public safety, or noise; construction of these CIPs would be short-term and phased over the next 25 years. Operation

of these facilities would be consistent with and, for the most part, located adjacent to existing utility operations and would not impede access to neighboring communities. Direct and indirect impacts on surrounding land uses from construction-related traffic delays, air emissions, public safety hazards, and noise are addressed in other chapters of this EIR. This impact would be **less than significant**.

River Trunk Realignment Project

The River Trunk Realignment Project would involve the construction of force main and gravity system pipelines as well as two new pump stations. The River Trunk Pump Station would be constructed at the corner of B Street and Beard Street. This land is zoned as Light Industrial while its land use is designated as RPD. Currently, this parcel is vacant. The Shackelford Pump Station would be constructed on land that is designated I and is also vacant. The pipelines would traverse lands designated for mixed use and residential uses (City of Modesto 2017a). The southern force main extending from the River Trunk Pump Station would be constructed on land designated as RPD. The Shackelford force main and southern segment of the gravity pipeline system would traverse the Dryden Golf Course, which could temporarily disturb ongoing golfing activities. All other pipeline segments would be constructed within existing road rights-of-ways. As shown in Figure 2-1 in Chapter 2, *Program Description,* the gravity pipelines would be constructed in residential areas. Pipeline construction activities could temporarily disrupt neighborhood land uses. However, since all pipelines would be installed underground and because the project would improve the City's wastewater collection system, this project would increase the cohesiveness of the community. As a result, the project would not divide an established community. This impact would be **less than significant.**

Overall Conclusion

Construction of WWMP components could result in temporary impacts related to increased traffic delays, air pollutant emissions, noise and public-safety hazards; however, those impacts and proposed mitigation measures that would reduce such effects are addressed in Chapters 6, 14, and 16 of this DEIR. Once construction is complete, many WWMP components would be underground and other facilities would either be located at the Sutter and Jennings Plants. While some lift station components would be in residential areas, they would be similar in character to existing utility infrastructure in the Modesto area. The new River Trunk and Shackelford Pump Stations would also be sited away from residential areas. For these reasons, the Proposed Program's overall impact regarding division of an established community would be **less than significant**.

Impact LU-2: Conflict with Land Use Plans, Policies, or Regulations Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect (Less than Significant)

All Program-level Components

The Proposed Program would include a series of CIPs that involve repair and replacement of aging collection and wastewater infrastructure, decommissioning of wastewater treatment facilities at the Sutter Plant, and construction of new wastewater infrastructure at the Jennings Plant. The Proposed Program would also involve the construction of a third outfall pipeline that would convey wastewater from the Sutter Plant to the Jennings Plant. These CIPs would be implemented to address existing deficiencies and capacity needs for the City's

wastewater treatment system and collection system through 2035. These components would provide sufficient sewer collection and wastewater treatment services for new growth anticipated in the City's Urban Area General Plan Proposed Program

Consistency with Stanislaus County Zoning and General Plan Designations. In Salida, a new lift station (LS #60) would be constructed north of Chapman Road. This land is currently zoned and designated for Planned Industrial and Industrial Business Park land use.

As discussed in Section 13.2.1 and summarized in Table 13-1, all lift stations besides Lift Station #60 would be built on City of Modesto land and would therefore not conflict with County zoning or land use designation requirements. The third outfall pipeline would be built on land that is zoned as General Agricultural District and is designated for agricultural land use; however, the pipeline would be built underground and therefore would not conflict with agricultural uses on that land. The Jennings Plant would be constructed on land that is zoned as Planned Development and would not conflict with allowed uses under the County's zoning ordinance.

Based on the above, various Program components would be constructed on lands zoned and designated for various types of uses. Proposed wastewater infrastructure on County lands zoned for agricultural uses would constitute facilities for public utilities, and, therefore, qualify as a "Tier Three" use that is allowed within the A-2 district, subject to the approval of the Stanislaus County Planning Commission. Therefore, no conflicts with County zoning would occur under the Proposed Program.

Consistency with City of Modesto Zoning and General Plan Designations. Lift stations throughout the City of Modesto, would be built on land with various designations and zoning districts, as described in Table 13-1.

As mentioned in Section 13.3, "Environmental Setting," above, minor public facilities such as pumps and wells would be permitted in all zoning districts according the City of Modesto Code of Ordinances Title 10, Chapter 3 – Land Use Regulations. Public buildings and grounds are permitted in industrial districts and conditionally permitted in residential, professional office, and commercial districts. Thus, the above-described pump stations, lift stations and associated infrastructure would be permitted in all Modesto zoning districts. A conditional use permit may need to be submitted to the City of Modesto's Planning Department prior to development of the two pump stations.

To implement the Proposed Program, temporary and/or permanent easement acquisitions may be required to ensure the City has adequate right-of-way and access to the various CIP sites. For example, some easements may need to be acquired from Modesto Irrigation District and Turlock Irrigation District prior to constructing some sewer pipeline components.

Consistency with TRRP Master Plan. Proposed components that involve work along the Tuolumne River have the potential to temporarily conflict with the TRRP Master Plan goals and actions for riparian restoration as well as planned linkages between park planning districts such as the Gateway Parcel to the Carpenter Road Area. However, once construction of planned components such as the new Tuolumne River crossings and new primary effluent outfall pipeline, the majority of these components would be below ground and therefore would not conflict with planned riparian restoration efforts envisioned in the TRRP.

Therefore, the Proposed Program would be consistent with applicable land use plans, policies, and regulations. As a result, this impact would be less than significant.

River Trunk Realignment Project

Consistency with City of Modesto Zoning and General Plan Designations. As indicated in Table 13-1, the River Trunk Pump Station would be constructed on land zoned as Light Industrial while its land use is designated as RPD. Currently, this parcel is vacant. The Shackelford Pump Station would be constructed on land that is designated Industrial and is also vacant. The pipelines would traverse lands designated for mixed use and residential uses (City of Modesto 2017a). The southern force main extending from the River Trunk Pump Station would be constructed on land designated as Redevelopment Planning District. The Shackelford force main and southern segment of the gravity pipeline system would traverse the Dryden Golf Course, which could temporarily disturb ongoing golfing activities. All other pipeline segments would be constructed within existing road rights-of-ways. As shown in Figure 2-1 in Chapter 2, *Program Description,* the gravity pipelines would be constructed in residential areas. Pipeline construction activities could temporarily disrupt neighborhood land uses. However, since all pipelines would be installed underground, these would not conflict with the designated land uses or zoning in these areas.

Consistency with TRRP Master Plan. Because the majority of the River Trunk Realignment Project components would be belowground, the project improvements would not conflict with planned riparian restoration efforts envisioned in the TRRP Master Plan.

Therefore, the Proposed Program would be consistent with applicable land use plans, policies, and regulations. As a result, this impact would be less than significant.

Overall Conclusion

Construction of program-level WWMP components would be generally consistent with County, City, and TRRP land use plans, policies, and regulations, although some proposed wastewater infrastructure on County lands zoned for agricultural uses would require approval of the Stanislaus County Planning Commission as a "Tier Three" use that is allowed within the A-2 district. The River Trunk Realignment Project would be consistent with City and TRRP land use plans, policies, and regulations. As a result, this impact would be **less than significant.**

Chapter 14
NOISE AND VIBRATION

14.1 OVERVIEW

This chapter describes the existing noise environment in the vicinity of the Proposed Program, presents relevant noise and vibration regulations, identifies sensitive noise and vibration receptors that could be affected by the Proposed Program, and evaluates the noise and vibration impacts of the Proposed Program. Mitigation measures are prescribed to reduce significant noise and vibration impacts. Technical information used in preparing this chapter is provided in **Appendix E**.

14.2 NOISE AND VIBRATION CONCEPTS AND TERMINOLOGY

14.2.1 NOISE

In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

- **Decibel (dB)** is a measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude.
- **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Maximum sound level (L_{max})** is the maximum sound level measured during a given measurement period.
- **Minimum sound level (L_{min})** is the minimum sound level measured during a given measurement period.

- **Equivalent sound level (L_{eq})** is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound level during that same period.

- **Day-night sound level (L_{dn})** is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.

- **Community noise equivalent level (CNEL)** is the energy average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels between 10:00 p.m. and 7:00 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. **Table 14-1** presents approximate noise levels for common noise sources, measured adjacent to the source.

Table 14-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Notes: Caltrans = California Department of Transportation; dBA = A-weighted decibel.

Source: Caltrans 2009

14.2.2 VIBRATION

Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies. The normal frequency range of most groundborne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration information for this analysis has been described in terms of the peak

particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations attenuate much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough groundborne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

14.3 REGULATORY SETTING

14.3.1 FEDERAL LAWS, REGULATIONS, AND POLICIES

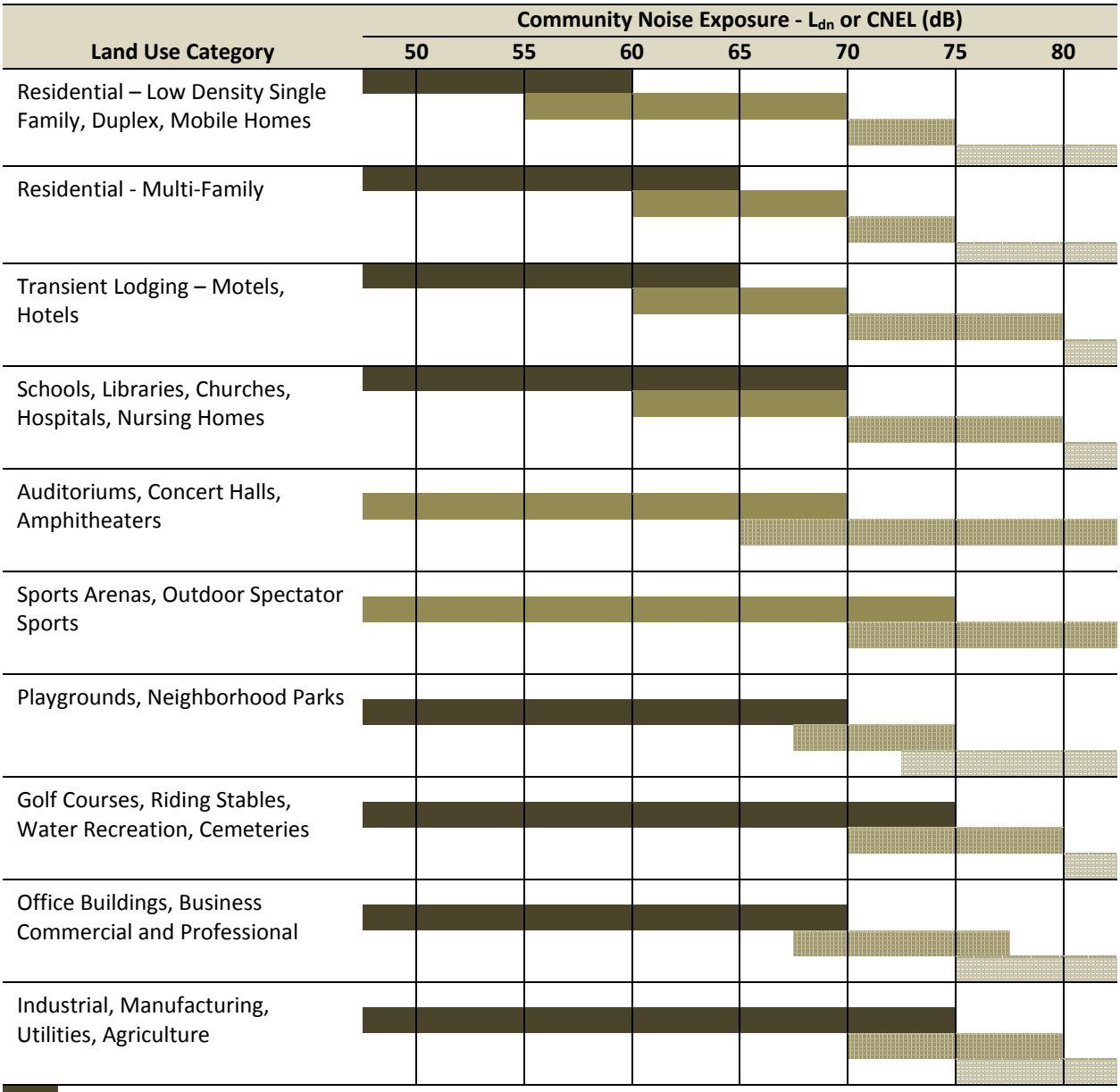
No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Program. However, the Federal Transit Administration (FTA) *Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment* state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA L_{eq} should be used for residential areas (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings extremely susceptible to vibration damage (FTA 2006). The groundborne vibration annoyance level is 65 VdB for buildings where vibration would interfere with interior operations, 72 VdB for residences, and 75 VdB for institutional land uses with primarily daytime uses.

14.3.2 STATE LAWS, REGULATIONS, AND POLICIES

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table 14-2**.

Table 14-2. State Land Use Compatibility Standards for Community Noise Environment



Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable	New construction or development generally should not be undertaken.

Notes: CNEL = community noise equivalent level; dB = decibel; Ldn = day-night sound level.
Source: California Governor's Office of Planning and Research 2017

14.3.3 LOCAL LAWS, REGULATIONS, AND POLICIES

Stanislaus County General Plan 2015

Stanislaus County addresses noise impacts through its General Plan and Municipal Code. The Noise Element of the *Stanislaus County General Plan 2015* (Stanislaus County 2016) utilizes noise exposure information to identify existing and potential noise conflicts through the Land Use Planning and Project Review processes. The Noise Element establishes exterior noise level standards and maximum allowable noise exposure from stationary noise sources at noise-sensitive land uses.

Goal Two: Protect the citizens of Stanislaus County from the harmful effects of exposure to excessive noise.

Policy Two: It is the policy of Stanislaus County to develop and implement effective measures to abate and avoid excessive noise exposure in the unincorporated areas of the County by requiring that effective noise mitigation measures be incorporated into the design of new noise generating and new noise sensitive land uses.

Implementation Measure 1: New development of noise-sensitive land uses will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels to the following levels:

(a) For transportation noise sources such as traffic on public roadways, railroads, and airports, 60 [dBA] Ldn (or CNEL) or less in outdoor activity areas of single family residences, 65 [dBA] Ldn (or CNEL) or less in community outdoor space for multi-family residences, and 45 [dBA] Ldn (or CNEL) or less within noise sensitive interior spaces. Where it is not possible to reduce exterior noise due to these sources to the prescribed level using a practical application of the best available noise-reduction technology, an exterior noise level of up to 65 Ldn (or CNEL) will be allowed. Under no circumstances will interior noise levels be allowed to exceed 45 Ldn (or CNEL) with the windows and doors closed in residential uses.

(b) For other noise sources such as local industries or other stationary noise sources, noise levels shall not exceed the performance standards contained within Table IV-24 [reprinted as **Table 14-3** below].

Implementation Measure 2: New development of industrial, commercial or other noise generating land uses will not be permitted if resulting noise levels will exceed 60 [dBA] Ldn (or CNEL) in noise-sensitive areas. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will not be permitted if resulting noise levels will exceed the performance standards contained within Table IV-24 [Table 14-3 below] in areas containing residential or other noise sensitive land uses.

Table 14-3. Maximum Allowable Noise Exposure from Stationary Noise Sources

	Daytime 7a.m. to 10 p.m.	Nighttime 10 p.m. to 7 a.m.
Hourly L_{eq}, dBA	55	45
Maximum level, dBA	75	65

Note: Each of the noise level standards specified in Table IV-24 [Table 14-3] shall be reduced by five (5) dBA for pure tone noises, noise consisting primarily of speech or music, or for recurring impulsive noises. The standards in Table IV-24 [Table 14-3] should be applied at a residential or other noise-sensitive land use and not on the property of a noise-generating land use. Where measured ambient noise levels exceed the standards, the standards shall be increased to the ambient levels.

Source: Stanislaus County General Plan, Noise Element, Table IV-24 (2016)

Policy Three: It is the objective of Stanislaus County to protect areas of the County where noise-sensitive land uses are located.

Implementation Measure 1: Require the evaluation of mitigation measures for projects that would cause the Ldn at noise-sensitive uses to increase by 3 dBA or more and exceed the "normally acceptable" level, cause the Ldn at noise-sensitive uses to increase 5 dBA or more and remain normally acceptable, or cause new noise levels to exceed the noise ordinance limits (after adoption).

Stanislaus County Municipal Code

Noise generating sources in Stanislaus County are also regulated under the Municipal Code, Chapter 10.46 (Noise Control) (Stanislaus County 2017). Property line and construction noise limits are established in this ordinance. Property line noise limits apply to noise generation from one property to an adjacent property with the existence of a sensitive receptor (if no receptor, an exception or variance to the standards may be appropriate). These standards do not apply to construction noise that occurs between 7 a.m. and 7 p.m. The following are the applicable portions of the Stanislaus County Noise Control Ordinance, and **Table 14-4** and **Table 14-5** (reprinting Tables A and B of the ordinance) highlight the applicable noise limits.

Table 14-4. Exterior Noise Level Standards

Land Use Zone	Maximum A-Weighted Sound Level as Measured on a Sound Level Meter (L_{max})	
	7:00 a.m. to 9:59 p.m.	10:00 p.m. to 6:59 a.m.
Noise Sensitive	45	45
Residential	50	45
Commercial	60	55
Industrial	75	75

Source: Stanislaus County Code, Chapter 10, Table A.

Table 14-5. Cumulative Duration Allowance Standards

Cumulative Duration	Allowance Decibels
Equal to or greater than 30 minutes per hour	Table 6 plus 0 dBA
Equal to or greater than 15 minutes per hour	Table 6 plus 5 dBA
Equal to or greater than 5 minutes per hour	Table 6 plus 10 dBA
Equal to or greater than 1 minute per hour	Table 6 plus 15 dBA
Less than 1 minute per hour	Table 6 plus 20 dBA

Source: Stanislaus County Code, Chapter 10, Table B.

Section 10.46.050 Exterior Noise Level Standards

A. It is unlawful for any person at any location within the unincorporated area of the county to create any noise or to allow the creation of any noise which causes the exterior noise level when measured at any property situated in either the incorporated or unincorporated area of the county to exceed the noise level standards as set forth below:

1. Unless otherwise provided herein, the following exterior noise level standards shall apply to all properties within the designated noise zone:

2. Exterior noise levels shall not exceed the following cumulative duration allowance standards:

3. Pure Tone Noise, Speech and Music. The exterior noise level standards set forth in Table A [Table 14-4 of this DEIR] shall be reduced by five dB(A) for pure tone noises, noises consisting primarily of speech or music, or reoccurring impulsive noise.

4. In the event the measured ambient noise level exceeds the applicable noise level standard above, the ambient noise level shall become the applicable exterior noise level standard.

Section 10.46.060 Specific Noise Source Standards

E. Construction Equipment. No person shall operate any construction equipment so as to cause at or beyond the property line of any property upon which a dwelling unit is located an average sound level greater than seventy-five decibels between the hours of seven p.m. and seven a.m.

Section 10.46.070 Vibration. Operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at one hundred fifty feet from the source if on a public space or public right-of-way is prohibited. For the purpose of this section, "vibration perception threshold" means the minimum groundborne or structure-borne vibration motion necessary to cause a reasonable person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects, or a measured motion velocity of 0.01 in/sec over the range of one to one hundred Hertz.

Section 10.46.080 Exemptions. The following sources are exempt from the provisions of this chapter:

J. Public Entity or Public Utility Activity. This chapter [Section 10.46 of the Municipal Code] shall not apply to construction or maintenance activities performed by or at the direction of any public entity or public utility.

Stanislaus County Airport Land Use Compatibility Plan

The Stanislaus County Airport Land Use Compatibility Plan (ALUCP) contains airport compatibility policy maps of three airports in Stanislaus County, including the Modesto City-County Airport. The ALUCP document provides planning area boundary maps and noise contours, presents airport land use background information, and discusses existing and potential noise conflicts in the area (Stanislaus County Airport Land Use Commission 2016). Figure 11-2 in Chapter 11, *Hazards and Hazardous Materials,* of this DEIR provides a copy of the Modesto City-County Airport Planning Area Boundary Map.

City of Modesto Urban Area General Plan

The following policies of Chapter VII, Environmental Resources, Open Spaces and Conservation, of the *City of Modesto Urban Area General Plan* (City of Modesto 2019) are applicable to the Proposed Program:

Noise Mitigation Policies – Baseline Developed Area

All development projects located within the Baseline Developed Area (and Redevelopment Area) shall be required to incorporate the following measures into the project.

Policy VII-G.3[g]. At noise-sensitive land uses, increases in noise should not exceed 3 dBA where any other noise threshold or standard would be exceeded, and/or 5 dBA where noise levels would otherwise fall within acceptable limits, for the existing conditions scenario as compared to the buildout scenario.

Policy VII-G.3[h]. Additional study and/or mitigation for outdoor recreation areas will be required if: ◦ For single-family dwellings, noise exceeds 65 dBA Ldn in one or

more backyards; ◦ For multi-family dwellings, noise exceeds 65 dBA Ldn at common recreation areas, such as swimming pools or play areas or at private patios and balconies; or, ◦ For other uses, noise exceeds the level considered "conditionally acceptable" as shown on [General Plan] Table VII-2.

Policy VII-G.3[i]. Limit trucking to specific routes, times, and speeds that minimize adverse effects on sensitive receptors.

Policy VII-G.3[n]. For construction activities involving high-powered vibratory tools or pile driving within 200 feet of an existing structure, demonstrate that project construction would not exceed the Caltrans construction vibration thresholds to ensure that no damage to sensitive structures would occur.

Modesto Municipal Code

The following sections of the Modesto Municipal Code in Title 4, Chapter 9, "Noise Regulations," are applicable to the Proposed Program:

Section 4-9.103 – Enumeration. The following specific acts, subject to the exemptions provided in Section 4-9.104, are declared to be public nuisances in violation of Section 4-9.102, namely:

(a) The loud and raucous discharge into the open air of the steam of any steam equipment or exhaust from any stationary internal-combustion engine.

(b) The loud and raucous operation or use of any of the following before 7:00 a.m. or after 9:00 p.m. daily (except Saturday and Sunday and State or federal holidays, when the prohibited time shall be before 9:00 a.m. and after 9:00 p.m.):

(1) A hammer, or any other device or implement used to pound or strike an object.

(2) An impact wrench, or other tool or equipment powered by compressed air.

(3) A hand-powered saw.

(4) Any tool or piece of equipment powered by an internal-combustion engine such as, but not limited to, chain saw, backpack blower, and lawn mower. Except as included in subsection (a)(6) below, motor vehicles, powered by an internal-combustion engine and subject to the California Vehicle Code, are excluded from this prohibition.

(5) Any electrically powered (whether by alternating current electricity or by direct current electricity) tool or piece of equipment used for cutting, drilling, or shaping wood, plastic, metal, or other materials or objects, such as, but not limited to, a saw, drill, lathe, or router.

(6) Any of the following: heavy equipment (such as but not limited to bulldozer, steam shovel, road grader, back hoe), ground drilling and boring equipment (such as but not limited to derrick or dredge), hydraulic crane and boom equipment, portable power generator or pump, pavement equipment (such

as but not limited to pneumatic hammer, pavement breaker, tamper, compacting equipment), pile-driving equipment, vibrating roller, sand blaster, gunite machine, trencher, concrete truck, and hot kettle pump.

(7) Any construction, demolition, excavation, erection, alteration, or repair activity.

In the case of urgent necessity and in the interest of public health and safety, the Chief Building Official may issue a permit for exemption from the requirements within subsection (b) of this section. Such period shall not exceed three (3) working days in length while the emergency continues but may be renewed for successive periods of three (3) days or less while the emergency continues. The Chief Building Official may limit such permit as to time of use and/or permitted action, depending upon the nature of the emergency and the type of action requested.

(c) The loud and raucous use or operation of any radio, amplifier, phonograph, stereo, compact disc or tape player, loudspeaker, bullhorn, megaphone, or other device for the producing or reproducing of sound.

(d) Loud and raucous yelling, shouting, talking, whistling, or singing between the hours of 10:00 p.m. and 7:00 a.m. on any day.

(f) The loud and raucous use of any drum, guitar, horn, or other musical instrument or device.

Section 4-9.104 – Exemptions. The term "loud and raucous noise" as used in this chapter does not include noise or sound generated by the following:

(d) Activities on or in publicly owned property and facilities, or by public employees while in the authorized discharge of their responsibilities, are exempt provided that such activities have been authorized by the owner of such property or facilities or its agent or by the employing authority.

14.4 ENVIRONMENTAL SETTING

14.4.1 REGIONAL AND LOCAL NOISE SETTING

Sensitive land uses generally include those that where exposure to noise and vibration would be a nuisance, as well as uses where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both noise levels (interior and exterior) and vibration levels. Other sensitive land uses include schools, hospitals, convalescent facilities, parks, hotels, places of worship, libraries, and other uses where low noise and vibration levels are essential. Many, if not all, of these sensitive land uses can be found in the immediate vicinity of proposed components throughout Modesto and unincorporated Stanislaus County. While specific sensitive receptors may change or move over the life of the Proposed Program, Figure 11-3 in Chapter 11*, Hazards and Hazardous Materials;* Figure 13-1 in Chapter 13, *Land Use*; and **Figure 14-1** below show the locations of schools, zoned residential areas, and other existing sensitive receptors with respect to Proposed Program components and the River

Trunk Realignment Project alignment. These figures provide a general context of the proximity of Proposed Program components to sensitive receptors.

Sensitive Receptors near the River Trunk Realignment Project

The western and southern portions of the River Trunk Realignment Project are located in close proximity to numerous homes. As shown in Figure 14-1, residential uses are predominantly located along Tuolumne Boulevard, Colorado Avenue, and Pelton Avenue, and generally are approximately 30-40 feet from the River Trunk Realignment Project. Other residential receptors in proximity to the River Trunk Realignment Project include homes on Merced Avenue and Calaveras Avenue, which are 170 and 250 feet from the pipeline alignment.

A church, school, and a daycare are located near the alignment at the intersection of Calaveras Avenue and Tuolumne Boulevard. **Table 14-6** summarizes the locations of these sensitive noise receptors relative to the River Trunk Realignment Project.

Table 14-6. Non-residential Sensitive Receptors in the Vicinity of the River Trunk Realignment Project

Sensitive Receptor	Address	Distance from River Trunk Realignment Project
The Universal Church	133 Tuolumne Blvd., Modesto	190 feet
Kirk Baucher School	140 Calaveras Ave., Modesto	280 Feet
Tuolumne Christian Daycare	133 Tuolumne Blvd., Modesto	260 feet

14.4.2 EXISTING NOISE AND VIBRATION SOURCES

The Proposed Program study area covers a large area and dominant noise sources vary depending on location. In general, noise sources include industrial facilities (e.g., canneries), agricultural activities, railroads, air traffic (near the Modesto City-County Airport), and vehicular traffic, in particular near highways and major transportation corridors. Railroad lines operated by multiple companies and SR 99, 132, 108, and 219 create elevated ambient noise levels and pass through large portions of the study area. The Modesto City-County Airport's planning area boundary and noise contours overlap sections of the Program area (Stanislaus County 2016).

The Proposed Program components include new and/or improvements to wastewater collection and treatment infrastructure, lift stations, pumps, and emergency generators. The noise environment varies across the study area and is described generally in the City's 2008 Final Master Environmental Impact Report for the Modesto General Plan Update (referred to here as 2008 General Plan EIR), the noise section of which is incorporated by reference and summarized here. Figure V-3-2 in the 2008 General Plan EIR shows the projected traffic noise levels at General Plan buildout in 2025 generated by traffic, the airport, and the railroads. Stationary sources, such as industries, are discussed qualitatively.

As the City's 2008 General Plan EIR discusses, traffic on highways State Route (SR) 99, SR 132, and SR 108, various arterial streets, and other streets in particular truck routes, the railroads, and the Modesto City-County Airport would cause elevated noise levels greater than 75 dBA Ldn at buildout of the General Plan. Within a relatively short distance away from the highways, arterials, and railroads, the average noise levels typically drop to 65 dBA Ldn or lower. Noise levels in some commercial and industrial areas are described in the 2008 General Plan EIR in Table V-3-1 which indicates measured noise levels in some commercial and industrial areas were between 65 and 74 dBA. Measured noise levels in residential areas ranged from 54 to 70 dBA, based on the 2008 General Plan EIR's Table V-3-1. Based on Figure V-3-2 in the City's 2008 General Plan EIR, residences along Tuolumne Boulevard, between Paradise Avenue and North 9th Street, would experience noise levels that generally ranged from 60 to 65 dB.

The specific Proposed Program components, in particular the wastewater pipelines, would be located in almost all areas of the City and would be within the range of all noise levels indicated in the 2008 General Plan EIR.

C:\Users\GIS\Documents\ArcGIS_PROJECTS\15043_Modesto_WWMP_EIR\mxd\Figure_14-1_Sensitive_Receptors_Trenching.mxd 10/30/2017 PG

N

0 250 500 1,000
Feet

Trenching Segments

90 dBA Zone

Figure 14-1
Proximity of Sensitive Receptors to Trenching Activities
River Trunk Realignment Project

Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan EIR

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Areas outside of the City's 2008 General Plan EIR scope (i.e., the new primary effluent outfall connecting the Sutter Plant to the Jennings Plant and the Jennings Plant itself) would have similar noise contour trends around traffic on highways, arterial streets, railroads, airports, and industrial areas as described for the City.

Existing Noise and Vibration Sources near the River Trunk Realignment Project

The eastern portion of the River Trunk Realignment Project would be in an industrial area of Modesto, and the eastern terminus is located at the Gallo Winery production facility's parking lot. As mentioned above, the central and southern portions of the River Trunk Realignment Project would be in a predominantly residential area of Modesto. Existing sources of noise and vibration in the vicinity of this project include a Union Pacific railroad line, SR 99, and the Modesto City-County Airport which is located approximately 1.4 miles to the east. Multiple food processing and industrial facilities are within a half-mile of the River Trunk Realignment Project.

14.5 IMPACT ANALYSIS

14.5.1 METHODOLOGY

The following impact analysis used a combination of qualitative and quantitative approaches to analyze impacts associated with the Proposed Program. Construction-related noise effects associated with the River Trunk Realignment Project were determined using a quantitative approach, since greater project-level detail was available for this program component at the time this DEIR was prepared. Construction and operation impacts of all Program-level components were determined using a qualitative approach. In addition, operational impacts of the River Trunk Realignment Project were also estimated using a qualitative approach. The qualitative analysis uses distances to sensitive receptors, project information and design, and information provided by City of Modesto staff.

For the River Trunk Realignment Project, construction-related impacts were assessed by applying the FTA's *Transit Noise and Vibration Impact Assessment* methodology (FTA 2006). This methodology assumes that the two loudest pieces of construction equipment (using the construction equipment list from California Emissions Estimator Model [CalEEMod]) would operate simultaneously at the same location under full power, assuming the following:

- full power operation for a full 1-hour,
- there are no obstructions to the noise travel paths,
- typical noise levels from construction equipment, and
- both pieces of equipment operate at the center of the project site.

Using these assumptions, the noise levels at specific distances can be obtained using the following equation:

$$L_{eq}(equip) = EL_{50ft} - 20log_{10}(D/50)$$

Where:

L_{eq} (equip) = the noise emission level at the receiver at distance D over 1 hour

EL_{50ft} = noise emission level of a particular piece of equipment at a reference distance of 50 feet

D = the distance from the receiver to the piece of equipment in feet

To add the two loudest pieces of equipment together, the following equation applies:

$$L_{total} = 10\ log_{10}(10^{\frac{L1}{10}} + 10^{\frac{L2}{10}})$$

Where:

L_{total} = the noise emission level of two pieces of equipment combined

L_1 = the noise emission level of equipment type 1

L_2 = the noise emission level of equipment type 2

Noise levels at the Proposed Program's nearest sensitive receptors generated by construction equipment were estimated by using the FTA reference guide (FTA 2006).

14.5.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on noise and vibration if it would:

- Expose persons to or generate a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Substantially permanently increase ambient noise levels in the project vicinity above levels existing without the project;
- Substantially temporarily or periodically increase ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or

- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

For the Proposed Program, the significance of noise effects is based on a comparison between predicted noise levels and noise criteria defined by Stanislaus County and the City of Modesto. For the Proposed Program, noise impacts would be significant if existing or proposed noise-sensitive land uses would be exposed to noise levels in excess of the County of Stanislaus General Plan Noise Element (Stanislaus County 2016), Stanislaus County Municipal Code standards, City of Modesto General Plan Noise Element (City of Modesto 2019), or City of Modesto Noise Ordinance, described in Section 14.3, "Regulatory Setting," or if implementing the Proposed Program would increase ambient noise levels at noise-sensitive land uses in excess of those described above.

The following considerations apply to the first four significance criteria:

- **Noise impacts from operation of Proposed Program facilities:** For all affected noise-sensitive uses, noise that would be generated by operation of proposed facilities would be significant if it would cause the overall exterior noise level to exceed the "normally acceptable" noise standard compatible with exterior land uses or if it would result in an increase of ambient noise levels by 10 dBA.

- **Noise impacts from increased daily traffic:** For all affected noise-sensitive uses, noise generated by an increase in daily traffic volumes caused by the Proposed Program would be significant if it would cause the overall exterior noise level to exceed the "normally acceptable" noise standard compatible with exterior land uses, exceed the interior noise standard, or result in an increase of ambient noise levels by 10 dBA.

- **Exposure of sensitive receptors to, or generation of, excessive vibration levels:** Short- and long-term vibration impacts would be significant if project construction or operation would result in the exposure of sensitive receptors to, or would generate, vibration levels that exceed Caltrans' recommended standard of 0.2-0.3 in/sec PPV for the prevention of structural damage to non-engineered timber and masonry or engineered concrete and masonry buildings or the FTA's vibration standards of 72 VdB regarding human response for residential uses (i.e., annoyance), or 65 VdB for human perception, at any nearby existing sensitive land uses.

- **Temporary, short-term noise impacts from construction:** Temporary, short-term noise impacts caused by construction are exempt from noise ordinances described in the Stanislaus County Municipal Code Specific Noise Source Standards Subsection E (Section 10.46.060, "Construction Equipment") and the City of Modesto Code Ordinances (Section 4-9.103, "Enumeration"). Program-related construction noise levels greater than the FTA significance threshold of 90 dBA at residential and noise-sensitive land uses would be considered to result in a temporary noise impact.

The final criterion has been dismissed from this analysis because the Proposed Program does not include any components within the vicinity of a private airstrip; therefore, no impact would occur and this topic is not discussed further.

14.5.3 ENVIRONMENTAL IMPACTS

Impact NOI-1: Expose Persons to Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or in the Applicable Standards of Other Agencies (Less than Significant with Mitigation)

All Program-level Components

As described in Chapter 2, *Program Description,* construction activities would generally occur Monday through Friday between 7:00 a.m. and 5:00 p.m., excluding City-observed holidays. Nonetheless, since the construction timeframes and schedules for each individual CIP have not yet been determined, future construction activities have potential to expose people (particularly residential receptors) to noise levels exceeding the above-listed timeframe and other standards in the local general plan and noise ordinances. This impact is considered significant. Construction of all program-level components would be required to follow applicable local laws, and the City's contractor(s) would be required to adjust the times of construction accordingly. Stanislaus County and the City of Modesto municipal codes contain some exemptions for noise from construction and maintenance activities performed by, or for, public utilities and facilities (e.g., a special exemption permit allowed by Modesto Municipal Code Section 4-9.103[b][6]).

With implementation of **Mitigation Measure NOI-1 (Employ Noise-Reducing Construction Practices)** and **Mitigation Measure NOI-2 (Limit Nighttime Construction Noise)**, the City's contractor(s) would be required to ensure that construction activities occur in a manner consistent with local noise standards when operating during allowable daytime hours outlined above. Therefore, this impact would be **less than significant with mitigation**.

Once construction is complete, program-level components involving pipeline replacement or rehabilitation would not generate excess noise levels. In addition, because there are limited sensitive receptors in close proximity (i.e., less than 1,000 feet) to the Jennings Plant, future components planned at the Jennings Plant would not expose people to noise levels in excess of local standards. However, operation of proposed lift station components and Sutter Plant components would generate ongoing noise levels in areas that could expose people to noise levels in excess of established noise levels without mitigation. The Proposed Program's lift stations would all be underground but some would include aboveground facilities such as back-up generators that would generate noise. Some of the Proposed Program's lift station components would be located in residential areas of Modesto. Currently, the level of design detail for proposed lift station and Sutter Plant facility components is not sufficient to conduct a quantitative noise analysis; thus, operational noise impacts for these components are conservatively considered to be significant.

For the Sutter Plant components, **Mitigation Measure NOI-3 (Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components)** requires a detailed noise study to determine whether appropriate measures have been implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the project-level noise analysis shows that relevant thresholds (10-dB increase) would be exceeded at the Sutter Plant, **Mitigation Measure NOI-4 (Employ Noise-Reducing Methods during Operations)** would be implemented for the Sutter Plant. For lift station components, Mitigation Measure NOI-4 would also require implementation of noise-reducing methods so that noise from lift stations does not exceed City or County noise-level standards at adjacent residences.

In conclusion, implementation of Mitigation Measures NOI-1, NOI-2, NOI-3, and NOI-4 would reduce noise levels for construction and operation of the WWMP program-level components, This impact would be **less than significant with mitigation**.

River Trunk Realignment Project

While construction timeframes have been generally established for the River Trunk Realignment Project, the possibility exists that project construction activities could occur outside the construction hour timeframe due to weather constraints and other unexpected delays that sometimes arise during construction projects. This impact is considered significant. Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce this impact to **less than significant with mitigation** during the construction phase.

Operation of the River Trunk Pump Station and the Shackelford Pump Station would generate noise through the operation of equipment (e.g., pumps, emergency generators) and periodic maintenance-related vehicle trips. However, noise associated with equipment operation would not be substantial since the pumps would be located underground in enclosed structures that would mute any generated sounds, and the backup generators would be sound-buffered and would be operated infrequently, primarily in the event of power outages or for periodic maintenance. In addition, since there are no residential receptors in close proximity (800 feet) to either pump station, operation of the River Trunk Realignment Project would not expose persons to noise levels in excess of the standards established in applicable noise ordinances. Therefore, this impact would be **less than significant** during the operation phase.

Overall Conclusion

Considering the WWMP components as a whole, construction-related noise impacts would be reduced with implementation of Mitigation Measures NOI-1 and NOI-2. Design details for some program-level components (e.g., new/upgraded facilities at the Sutter Plant) have not yet been developed such that a quantitative operational noise analysis can be conducted at this time. Implementation of Mitigation Measure NOI-3 would ensure that a detailed project-level noise analysis is completed for future Sutter Plant components. Mitigation Measure NOI-4 would ensure that noise-reducing design measures are incorporated into lift station designs and, if necessary, the Sutter Plant's design. In conclusion, implementation of these mitigation measures would reduce noise levels associated with the Proposed Program's construction and operation, and noise levels would not be in excess of standards established in the relevant noise ordinances and policies. Therefore, this impact would be **less than significant with mitigation**.

Mitigation Measure NOI-1: Employ Noise-Reducing Construction and Maintenance Practices.

Applies to all Program-level components and the River Trunk Realignment Project

The following measures will be implemented by the City or its contractor(s) to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected:

- Locate stationary equipment as far as practical from noise-sensitive land uses;

- Use electrified or otherwise quieter equipment when practical;
- Use sound-control devices on equipment that are more effective than devices originally provided on the equipment;
- Use noise-reducing enclosures around noise-generating equipment; and
- Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission.

When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.

Mitigation Measure NOI-2: Limit Nighttime Construction Noise.

Applies to all Program-level components and the River Trunk Realignment Project

When feasible, the City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays unless a special exemption permit allowed by Modesto Municipal Code Section 4-9.103(b)(6) is obtained.

Mitigation Measure NOI-3: Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components.

Applies to proposed Sutter Plant components

The City or its contractor(s) shall prepare a project-level noise analysis for operation of proposed Sutter Plant components. The detailed noise study should show that appropriate mitigation measures will be implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the analysis demonstrates that significant operational noise impacts are likely to occur, Mitigation Measure NOI-4 shall be implemented. Alternately, the City can assume that the impacts would be significant and implement Mitigation Measure NOI-4 without first conducting a noise study under Mitigation Measure NOI-3.

Mitigation Measure NOI-4: Employ Noise-Reducing Methods During Operations.

Applies to lift station components and potentially Sutter Plant components

The City or its contractor(s) shall implement noise-reducing methods so that noise from lift stations does not exceed City or County noise-level standards at adjacent residences. This measure shall also be implemented to achieve City or County noise-level standards for Sutter Plant components if deemed necessary per Mitigation Measure NOI-3. Example measures may include, but are not limited to, the following:

- Locate stationary equipment as far as practical from noise-sensitive land uses;

- Use electrified or otherwise quieter equipment when practical;
- Use sound-control devices on equipment that are more effective than devices originally provided on the equipment;
- Install permanent barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (terrain and structures) to block sound transmission;
- Limit operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas; and
- Use sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available.

Impact NOI-2: Expose Persons to Excessive Groundborne Vibration or Groundborne Noise Levels (Less than Significant with Mitigation)

Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receptor. Impact construction activity, including the use of pile drivers and similar equipment, may be perceived hundreds of feet away and can cause damage to susceptible buildings located over 100 feet away. Multiple components of the River Trunk Realignment Project would involve the use of pile drivers and loaded trucks, both of which are substantial sources of construction-related vibration. Such equipment, particularly loaded trucks, would likely be used during construction of Proposed Program-level components, which would involve travel along residential roads in Modesto.

Table 14-7 summarizes construction equipment that would be used during construction of the River Trunk Realignment Project that would generate major sources of vibration and the distances at which various vibration thresholds would be met.

Table 14-7. Construction Equipment and Vibration Distances

Equipment	PPV at 25 feet	Distance to PPV of 0.2 in/sec	Distance to PPV of 0.3 in/sec	Noise Vibration Level at 25 feet	Distance to Noise Vibration of 72 VdB[1]	Distance to Noise Vibration of 65 VdB[1]
Pile Driver	1.518	97 feet	74 feet	112 VdB	539 feet	922 feet
Clam Shovel Drop	0.202	25 feet	19 feet	94 VdB	135 feet	232 feet
Loaded Trucks	0.076	13 feet	10 feet	86 VdB	73 feet	125 feet

Notes: Calculations are provided in Appendix E.
[1] This is the human perception threshold. 65 VdB is the groundborne vibration annoyance level for buildings with sensitive interior operations, and 72 VdB is the groundborne vibration annoyance level for residents.

Multiple sensitive receptors (primarily residences) along the River Trunk Realignment Project route are located within the calculated vibration perception and annoyance threshold

distances. As a result, vibration effects on sensitive receptors would be significant. Given the short duration of construction in any given location, implementation of **Mitigation Measure NOI-5 (Implement Vibration Reduction Measures)** would reduce construction-related impacts from vibration to a less-than-significant level.

Operational noise would be generated from mechanical equipment such as pumps and maintenance vehicle trips. This type of activity would generate vibration levels that are much lower than the levels generated during construction. Because of the distance between the operating equipment and nearby sensitive receivers, vibration levels would result in a less-than-significant noise impact during operation.

Given the temporary nature of vibration resulting from construction activities and the implementation of Mitigation Measures NOI-5, this impact would be **less than significant with mitigation.**

Mitigation Measure NOI-5: Implement Vibration Reduction Measures.

Applies to River Trunk Realignment Project and other Program-level components

The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:

- Ensure proper tuning of vibration-causing equipment.
- Use vibration damping devices to the extent feasible.
- Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings.
- Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- Use electric stationary equipment (e.g., generators) where feasible.
- Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.

Impact NOI-3: Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program (Less than Significant with Mitigation)

New and Upgraded Sewers, Sewer Rehabilitation, Stormwater/Sanitary Disconnections, R&R Components, Outfall Pipeline Components

Once installed, all new and upgraded sewer lines, sewer rehabilitation components, stormwater/sanitary disconnections, R&R projects, and outfall pipelines would be belowground and would not generate noise. These program-level CIPs would not permanently increase ambient noise levels and therefore would result in **no impact**.

Lift Station Components, Sutter Plant, and Jennings Plant Components

Aside from components involving new, rehabilitated or replaced pipelines, operation of other proposed components would result in permanent sources of noise that could be substantial. This would include operation of large industrial equipment associated with the wastewater treatment plants that may generate high noise levels without implementation of proper noise mitigation measures such as sound attenuation enclosures and other barriers. Because there are limited sensitive receptors in close proximity (i.e., less than 1,000 feet) to the Jennings Plant, future components planned at the Jennings Plant would not be likely to increase ambient noise levels in excess of local standards. In addition, the operation of the belowground lift stations and the periodic operation of backup generators at the lift stations would not result in a permanent ambient noise level change. Traffic-related noise for the Proposed Program's maintenance and operation activities would not be a permanent noise source because maintenance trips to lift stations would be periodic, and the personnel change (approximately 60) from the Sutter Plant to Jennings Plant would result in a small increase in trips to and from the Jennings Plant, as well as a small decrease in trips to and from the Sutter Plant. However, future noise levels of the Sutter Plant's wastewater facilities would be significant.

Mitigation Measure NOI-3 requires Sutter Plant components to undergo a detailed noise study to show that appropriate measures have been implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the project-level noise analysis shows that relevant thresholds (10-dB increase) would be exceeded at the Sutter Plant, Mitigation Measure NOI-4 would be implemented for the Sutter Plant. Mitigation Measure NOI-4 and its noise-reducing measures would ensure that the Proposed Program's operations comply with applicable noise standards and would not cause the overall exterior noise level to exceed the "normally acceptable" noise standard compatible with exterior land uses or result in an increase of ambient noise levels by 10 dBA. Thus, the Proposed Program's operation-related increase in ambient noise would not be substantial. This impact would be **less than significant with mitigation**.

River Trunk Realignment Project

As described in Impact NOI-1, the River Trunk Realignment Project's pump stations would be designed such that all pumps would be belowground and/or enclosed; thus, operation of these pumps would not permanently increase ambient noise levels. In addition, the operation of the buried proposed pipelines and the periodic operation of backup generators at the pump stations would not result in a permanent ambient noise level change. Therefore, this impact would be **less than significant**.

Overall Conclusion

Considering the WWMP components as a whole, while operation of belowground components (lift stations), components far from sensitive receptors (Jennings Plant), periodic operation of back-up generators, and the River Trunk Realignment Project would not result in a permanent increase in ambient noise levels, the Sutter Plant's wastewater treatment facilities would result in a permanent increase in ambient noise levels. Implementation of Mitigation Measure NOI-3 and, if necessary, Mitigation Measure NOI-4 would ensure that operation of new and upgraded facilities would not result in substantial permanent increases in ambient noise levels. In conclusion, the Proposed Program's effects on ambient noise levels would be **less than significant with mitigation**.

Impact NOI-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program (Significant and Unavoidable)

All Program-level Components

Temporary and periodic increases in noise levels associated with the Proposed Program's construction activities, periodic maintenance activities, and associated periodic truck traffic, would increase ambient noise levels above the ambient noise levels existing without the Proposed Program. However, implementation of Mitigation Measures NOI-1 and NOI-2, which include several construction noise-reducing measures and limit nighttime construction, would reduce short-term noise impacts to a level that is **less than significant with mitigation**.

River Trunk Realignment Project

The River Trunk Realignment Project includes the construction of two pump stations and the installation of roughly four miles of pipeline, much of which passes through residential areas of Modesto. In order to more accurately analyze the noise impacts of construction of the River Trunk Realignment Project, the noise evaluation was divided into the following four sub-projects based on location and equipment usage:

- River Trunk Pump Station
- Shackelford Pump Station
- Pipeline Trenching
- Pipeline Construction Involving Horizontal Drilling and Drill Pits

Following the methodology discussed in Section 14.4.3, the two loudest pieces of equipment specified for the four River Trunk Realignment Project components were used to model noise levels during construction. For each project component, **Table 14-8** below provides information on the loudest pieces of equipment, sound levels at 50 feet, distance to noise thresholds, and noise levels at the nearest sensitive receptors. Due to the geographical scale and close proximity to numerous sensitive receptors, additional information on the pipeline segments that involve trenching is displayed in Figure 14-1.

Table 14-8. River Trunk Realignment Project Construction Noise Levels

Project Component	Loudest Pieces of Equipment	dBA at 50 ft.	Distance to 90 dBA (ft.)	dBA at Nearest Sensitive Receptor
River Trunk Pump Station	Pile Driver Loaded Truck	101.6	191	77.6 (Residences C. St.)
Shackelford Pump Station	Pile Driver Loaded Truck	101.3	183	74.4 (Residences Pueblo Ave.)
Pipeline Segments Involving Horizontal Drilling & Pile Drivers	Pile Driver Paver	101.2	182	85.6 (Residences Calaveras Ave.)
Other Pipeline Segments	Loaded Truck Excavator	89.8	49	Greater than 90 dBA (See Fig. 14-1)

Source: Modeling conducted by Horizon in 2017 (Appendix E). The 90 dBA distance relates to the FTA-recommended daytime threshold of 90 dBA for residential areas.

Construction activities would likely exceed noise thresholds at individual sensitive receptors along the pipeline route. For several components of the River Trunk Realignment Project, construction activities would raise ambient noise levels above 90 dB, the FTA significance threshold at residential and noise-sensitive land uses, for the nearest residences. Approximately 156 residential land parcels would be exposed to noise levels exceeding the 90 dBA threshold. These noise levels would be disruptive to nearby sensitive receptors because noise levels would substantially exceed existing ambient noise levels, which generally range along Tuolumne Boulevard from 60 to 65 dBA (as shown in the City's 2008 General Plan EIR) and likely at similar noise levels within other areas of the River Trunk Realignment Project area (Figure 14-1) depending on the proximity to traffic-related noise or other noise sources. This impact would be significant.

Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce the noise levels during construction to the extent feasible; however, noise impacts may still exist for sensitive receptors located near the River Trunk Realignment Project, and the impact would remain **significant and unavoidable**.

Overall Conclusion

Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce temporary construction noise effects associated with program-level components and the River Trunk project. However, these measures may not fully reduce construction noise impacts for sensitive receptors near the River Trunk alignment. Thus, even with implementation of Mitigation Measures NOI-1 and NOI-2, the Proposed Program's temporary impacts related to increases in ambient noise levels would be **significant and unavoidable**.

Impact NOI-5: Expose People Residing or Working in the Program Area to Excessive Noise Levels Associated with a Public Airport (Less than Significant)

The Modesto City-County Airport's planning area boundary and noise contours overlap sections of the Program study area (Stanislaus County 2016). However, the Program-level

components within areas affected by airport-related noise (i.e., the CNEL noise zones policy areas shown in the Noise Zones Policy Map for Modesto City-County Airport [Stanislaus County 2016]), would be limited to upgraded or replaced sewer pipelines, and new or upgraded pump stations or lift stations. These types of components would not require workers to be onsite during operation, and thus would only result in temporary exposure of City employees or contractors to airport-related noise exclusively during temporary construction and maintenance activities.

The Sutter and Jennings wastewater treatment plants, where City employees would primarily be onsite to perform operational activities, are not located within the vicinity of the airport noise impact zones. Therefore, since no sensitive receptors would be located in the airport noise impact zones once any construction activities are complete, this impact would be **less than significant.**

Chapter 15
POPULATION AND HOUSING

15.1 OVERVIEW

This section describes the Proposed Program's impacts related to population and housing. The environmental setting and impact analysis for population and housing were developed through a review of:

- *Stanislaus County General Plan* (2016a) and Housing Element (2016b);
- *City of Modesto Urban Area General Plan* (2019) and Housing Element (2015);
- *Ceres General Plan 2035* (2018)
- California Department of Finance's (DOF's) City and Unincorporated Areas Estimates documents (DOF 2016a, 2016b, and 2016c); and
- *U.S. Census Bureau American Fact Finder* (U.S. Census Bureau 2010a—c, 2015a—f, and 2016).

15.2 REGULATORY SETTING

There are no federal or state laws, regulations, and/or policies that are applicable to the Proposed Program. The following section describes local population and housing laws, regulations and/or policies that would be applicable to the Proposed Program.

15.2.1 LOCAL LAWS, REGULATIONS, AND POLICIES

Stanislaus County General Plan

The Stanislaus County General Plan (Stanislaus County 2016a) contains the following goals and policies related to population and housing.

Land Use Element

Goal One. Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.

Policy Five. Residential densities, as defined in the General Plan, shall be the maximum based upon environmental constraints, the availability of public services, and acceptable service levels. The densities reflected may not always be achievable and shall not be approved unless there is proper site planning and provision of suitable open space and recreational areas consistent with the supportive goals and policies of the General Plan.

Implementation Measure

1. Residential development shall not be approved at the maximum density if: (1) it threatens riparian habitat; (2) growth-limiting factors such as high water table, poor soil percolation, geological fault areas, and airport hazard areas exist; (3) development is in a designated floodway or does not meet the requirements of Chapter 16.50 of the County Code; (4) it conflicts with the Airport Land Use Compatibility Plan; (5) there is lack of, or inadequate, sanitary sewer or public water service; or (6) environmental impacts, including traffic, cannot be mitigated.

Policy Six. Preserve and encourage upgrading of existing unincorporated urban communities.

Housing Element

Goal Four. Designate sufficient sites for all types of residential development required to meet projected housing needs.

Policies

- The County shall identify unincorporated areas with adequate infrastructure and limited environmental concerns that are most suited for housing, especially lower-cost and higher-density housing.
- The County shall identify specific methods and provide assistance to improve infrastructure in residential areas.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (2019) implements a community growth strategy that emphasizes policies regulating the quality, quantity, and direction of urban growth. These policies have resulted in a compact urban form, with few infill parcels remaining, neighborhoods offering a diversity of housing types and higher-than-average densities, and a geographic balance with new growth occurring on all sides of the community. The Urban Area General Plan recognizes that, while significant public facility deficiencies may result from these policies in the short term, their resolution is still deemed manageable over the long term.

Policy II.A.3. Development Follows Annexation

Annex residential growth and development within the Modesto Urban Area General Plan boundary before development occurs.

Policy II.A.4. Direct Growth Inward

Direct urban growth to areas currently served with City services.

Goal II.B. Development Priorities and Financing

Establish priority areas for new development and identify reasonable and certain financing for capital projects consistent with applicable City policies and standard operating procedures.

Policy II.B.1. Priority Development Areas

Support new development with infrastructure developed in accordance with the established Capital Improvement Program priority areas of Downtown, Kiernan Business Park, the Tivoli Specific Plan area and the South Modesto Industrial Park (north of Whitmore Ave. between Crows Landing Rd. and Morgan Rd.).

Policy II.B.3 Funding Capital Improvements

Increase and improve capital projects over time through maintaining or enhancing existing funding sources, maximizing joint-use efficiencies, and strategically prioritizing capital investments.

Policy II.C.3 Unincorporated "Island" Annexations

Annex unincorporated County islands, generally located in the south and west areas of Modesto, into the City limits only after a Public Improvement Agreement (PIA) is established between the City and County. Certain conditions contained within the PIA, such as those regarding funding and construction of infrastructure systems, must be satisfied prior to annexation.

The PIA establishes the infrastructure systems that must be constructed, which typically include water, wastewater, storm drainage, fire hydrants, streets and streetlights. Other infrastructure components may be necessary on an area-by-area basis. The PIA also documents the applicable tax-share agreement between the City and County, and certain other project-specific details.

Housing Element 2015-2023

The *City of Modesto Housing Element 2015-2023* (2017a) is an element of the General Plan that aims to develop a coordinated and comprehensive housing strategy that promotes the production of safe, decent, and affordable housing within the community. The Housing Element identifies strategies and programs that focus on matching housing supply with need, maximizing housing choice throughout the community, assisting in the provision of affordable housing, removing governmental and other constraints to housing investment, and promoting fair and equal housing opportunities. Chapter 2, *Program Description,* of this document provides an analysis of the City's demographics, housing characteristics, and existing and future housing needs.

City of Ceres General Plan

While no proposed improvements would be located in Ceres, due to the City of Ceres' proximity to Modesto and because the Proposed Program could have indirect effects on population and housing in Ceres through providing wastewater service to north Ceres, the following policies from the *Ceres General Plan 2035* (2018) may be relevant to the Proposed Program:

Policy 2.A.2. Prioritize Growth in SOI. Prioritize growth within the Ceres Sphere of Influence. Permit development outside of the Sphere of Influence only when there is a demonstrated need for additional land and there is less than a five-year supply of appropriately designated land within the existing Sphere of Influence, in accordance with Stanislaus Local Agency Formation Commission (LAFCO).

Policy 2.A.3. Compact Footprint. Promote compact development patterns, mixed land uses, and higher development intensities and limit "leap forg" development to conserve agricultural land, reduce vehicle trips, and improe air quality.

15.3 ENVIRONMENTAL SETTING

15.3.1 POPULATION

In 2010, Stanislaus County had a population of approximately 514,453 (Stanislaus County 2016a as cited in Stanislaus County 2016b). As of January 1, 2015, this number rose to 532,297, of which the unincorporated areas accounted for 113,772 persons. Population growth by 2025 is projected to reach over 637,000 according to the Stanislaus Council of Governments (StanCOG), which represents an increase of approximately 20 percent from the County's 2015 population estimate, with the majority of growth projected to occur in incorporated cities (City of Modesto 2017a).

Modesto is the largest city in Stanislaus County. Since 1990, the City has grown by an estimated 21.6 percent from 164,730 in 1990 to 210,341 as of 2015 (California Department of Finance [DOF] 2015 as cited in City of Modesto 2017a; StanCOG 2016). Between 2000 and 2010, the population growth rate declined as the City's population grew at an average annual rate of 0.6 percent from about 188,900 to 201,165. More recent projections estimate that the City's population was at 211,903 in 2016, which represents a 0.9 percent increase from 2015 (DOF 2016a).

The City of Ceres had an estimated population of 47,754 as of January 2017 (DOF 2017). The City's population is projected to increase from the current population by an estimated 23,021 persons by 2050 (StanCOG 2016).

The community of Empire is located adjacent to Modesto's eastern boundary and is an unincorporated community of Stanislaus County (Stanislaus County 2016b). The community had an estimated population of 4,394 in 2015 and is projected to grow by 1,796 persons by 2050 (StanCOG 2016).

Table 15-1 provides a breakdown of past population estimates and future projections from 2015 through 2050 for Modesto, Ceres, Empire, and unincorporated Stanislaus County.

Table 15-1. Population Growth Trends for the Cities of Modesto and Ceres, Empire, and Unincorporated Stanislaus County

Jurisdiction	2015	2020	2025	2030	2035	2040	2045	2050	Change (2015-2050)**	
									Number	Percent Increase
Modesto	210,341	220,865	232,622	244,662	256,545	268,176	279,460	290,555	+80,214	27.6
Ceres	48,029	51,049	54,424	57,879	61,290	64,628	67,866	71,050	+23,021	32.4
Empire	4,394	4,630	4,893	5,163	5,429	5,689	5,942	6,190	+1,796	29.0
Unincorporated Stanislaus County*	113,772	117,807	121,843	125,879	133,753	141,627	N/A	N/A	+27,855	19.7
Totals	376,536	394,351	413,782	433,583	457,017	480,120	N/A	N/A	132,886	26.5

Notes: N/A = Estimates are not available for these years for unincorporated Stanislaus County area.
** Change calculations for unincorporated Stanislaus County are for 2015-2040.

Sources: *StanCOG 2016; *StanCOG 2040 Regional Growth Forecast as cited in Stanislaus County 2016c*

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15.3.2 HOUSING

Housing availability within the unincorporated portions of Stanislaus County is limited for the number of employed persons that work in the county. Based on 2010 estimates, the housing to jobs ratio in the County was 0.54, with 68,086 employed jobs to 36,684 housing units available. The housing to jobs ratio is projected to decrease steadily through 2030, and is projected to decline to 0.47 by then (StanCOG 2040 Demographic Forecast, as cited in Stanislaus County 2016b). However, the number of new homes permitted is increasing steadily, with 420 new homes being permitted in 2014 compared to 244 in 2010.

The City of Modesto makes up the largest portion of housing in the County with approximately 75,816 units as of 2017 (DOF 2017). As of 2016, the approximate housing vacancy rate was approximately 6.7 percent with about 70,613 units occupied of a total 75,715 units in the City. The average household size was 2.96 persons.

For the City of Ceres, the total number of housing units compared to Modesto were significantly less, totaling 13,807 in 2017. This is a 134-unit increase from 2010 estimates, which determined the number of households to be 13,673 (DOF 2017). The vast majority of housing stock is single-family units, which comprised approximately 76 percent of the City of Ceres' stock in 2014 (City of Ceres 2016).

Empire had an estimated housing unit count of 1,333 in 2015. 40 of these units were considered vacant, accounting for a vacancy rate of 3.0 percent (U.S. Census 2015g). This number is down by 5.4 percent from the vacancy rate in for the Community in 2010 (8.4 percent). However, the number of total housing units decreased by 14 units since then (U.S. Census 2010c). **Table 15-2** shows housing unit growth trends for the cities of Modesto and Ceres and the Community of Empire from 2015 to 2050.

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Table 15-2. Housing Unit Growth in Modesto, Ceres, and Empire (2015-2050)

City	2015	2020	2025	2030	2035	2040	2045	2050	Change (2010-2050)		
									Number	Percent Increase	Average Percent Increase
Modesto	72,897	77,383	81,861	86,253	90,184	94,105	97,742	101,314	+28,417	28.0	+0.8
Ceres	13,577	14,624	15,670	16,695	17,613	18,528	19,377	20,211	+6,634	32.8	+0.9
Empire	1,287	1,371	1,456	1,539	1,614	1,688	1,756	1,824	+537	29.4	+0.8

Source: *StanCOG 2016; *Stanislaus County 2016b*

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Table 15-3 lists the County's regional housing needs allocation for the cities of Modesto and Ceres, as well as for the entire unincorporated portion of Stanislaus County. Each value represents the number of dwelling units needed through 2023, while the classifications are organized by the following income categories: extremely/very low, low, moderate, and above moderate. Based on the Housing Element, between June 2014 and June 2015, 36 units were built in Modesto; therefore, as of 2015, the remaining housing need is roughly 6,325 units.

Table 15-3. Regional Housing Needs Allocation of Stanislaus County (2014-2023)

	Extremely/ Very Low	Low	Moderate	Above Moderate	Total	RHNA Share	Existing Housing Units
Modesto	773/773	991	1,100	2,724	6,361	29.8	75,711
Ceres	311/311	399	446	1.104	2,571	12.1	13,725
Unincorporated Stanislaus County	269/269	345	391	967	2,241	10.5	36,117
County Total	2,615/2,610	3,350	3,670	9,085	21,330	100	180,165

Note: Regional allocation is based on existing proportions of housing in each jurisdiction and continuing those proportional relationships into the future.

Source: *StanCOG 2014*

15.3.3 WORKFORCE

Employment numbers in Stanislaus County were projected to reach 171,375 jobs by 2015 (Caltrans 2015). Similarly, projected job growth is projected to rise to 236,749 jobs by 2040. As of 2015, the unemployment rate was 10.4 percent, ranking 45th out of the state's 58 counties. This number is projected to decrease to 7.8 percent by 2020. **Table 15-4** represents a more in-depth projection of employment numbers for the County between 2015 and 2040.

Employment numbers for the City of Modesto totaled approximately 56,000 jobs in 2015. This number is projected to increase to approximately 59,250 by 2020 and 62,500 employees by 2025. From 2010 to 2040, the number of jobs within the City is projected to increase by 0.91 percent annually (StanCOG, 2014 RTP Appendix J, as cited in City of Modesto 2017a). In contrast, unemployment rates in 2015 dropped to 7.4 percent, compared to a 10.5 percent unemployment rate in 2014 (City of Modesto 2017a). The majority of jobs in the City are in the service industry (39.7 percent of the occupational distribution). The second highest ranking of jobs are in the sales and office industry, comprising 22.3 percent of the City's jobs. The construction and extraction industry makes up 6.3 percent of the jobs in the City, while production and transportation account for 15.5 percent (2013 U.S. Census as cited in City of Modesto 2017a).

Employment numbers for the City of Ceres were at a total of 18,043 jobs in 2012. This number is an increase from 2010 numbers, which were 13, 098. The majority of jobs are in the trade, wholesale, and retail sector, which accounted for 19.7 percent of the share of jobs in 2012 (City of Ceres 2016).

Table 15-4. Economic Forecast for Stanislaus County (2015-2040)

	2015	2020	2025	2030	2035	2040
Population[1] (people)	534,605	559,097	585,812	612,925	637,626	658,010
Employment[2] Growth (jobs)	171,375	184,250	197,125	209,999	222,874	235,749
Unemployment[3] Rate (percent)	10.4	7.8	7.8	7.6	7.5	7.1

Sources: *[1,3] Caltrans 2015; [2] City of Modesto 2017a*

15.4 IMPACT ANALYSIS

15.4.1 METHODOLOGY

The methods for this analysis included a review of relevant documents, statistics, and policies about the City of Modesto and Stanislaus County's housing and employment data. The evaluation is based on the Proposed Program's effects on housing and population in Modesto and Stanislaus County.

15.4.2 CRITERIA FOR DETERMINING SIGNIFICANCE

Based on the State CEQA Guidelines Appendix G Environmental Checklist, the Proposed Program would result in a significant impact with regard to population and housing if it would:

- Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

15.4.3 ENVIRONMENTAL IMPACTS

Impact PH-1: Induce Substantial Unplanned Population Growth, Both Directly and Indirectly, during Construction (Less than Significant)

Neither the River Trunk Realignment project nor the Proposed Program-level improvements would directly or indirectly induce substantial population growth during construction. Construction of each improvement would be temporary and of relatively short duration. For example, all three phases of the River Trunk Realignment project are anticipated to start in spring 2018 and would be fully completed over a 30-month period. The overall implementation of the WWMP would be phased over a 25-year period where construction

activity associated with each project would be temporary and last one to five years. As described in the setting section above, the construction/extraction industry in the City accounts for roughly 6.3 percent of the City's work force (2013 U.S. Census, as cited in City of Modesto 2017a). Additional construction staff can also be obtained from neighboring cities throughout the County, the Central Valley, or the San Francisco Bay Area if needed. As such, there is sufficient availability of local existing construction companies and staff to support construction of proposed improvements. Construction crews would be capable of commuting to and from the project sites throughout the time that project construction activities would occur. Therefore, an increased demand for housing to accommodate these workers would not occur due to construction. As a result, this impact would be **less than significant.**

Impact PH-2: Displace Substantial Numbers of People or Existing Housing, Necessitating the Construction of Replacement Housing Elsewhere (No Impact)

The Proposed Program involves construction of various CIPs in the City of Modesto and in portions of Stanislaus County. Pipeline improvements in residential areas, including sewer line replacement and rehabilitation and construction of the gravity pipelines for the River Trunk Realignment Project, would be located within existing road rights-of-way. Other portions of the River Trunk Realignment Project would occur on vacant lands. As such, these improvements would not displace existing homes or people. Any roadways that require trenching would be returned to pre-construction conditions after construction as well. As a result, residents who use these roads to access their homes would not be displaced from their homes during construction; traffic-related impacts of construction are analyzed in Chapter 16, *Transportation and Traffic*.

Upgrades to existing lift stations such as the Benson Lift Station and Rose-Celeste Lift Station would be conducted at existing locations. Therefore, these improvements would have no impact on existing housing. Construction of new lift stations (see Figure 2-1 and Table 2-3) would occur in areas that are located away from any housing or neighborhoods, or would occur along the edges of established neighborhoods on properties that are vacant and/or owned by the City. Therefore, these new lift stations would not cause displacement of housing.

In addition, all improvements planned at the Sutter and Jennings Plants would occur on land currently used for wastewater treatment purposes. The new outfall pipeline, new outfall pipeline crossings at the Tuolumne River, and sliplining of the Cannery Segregation Line would not affect existing homes. The majority of the new outfall pipeline would be installed within roadway rights-of-way in unincorporated Stanislaus County and would not displace any people or housing.

As a result, the Proposed Program would have **no impact** related to housing displacement and would not require construction of replacement housing.

Impact PH-3: Long-term Inducement of Unplanned Substantial Population Growth, Both Directly and Indirectly (Less than Significant with Mitigation)

As noted above, the Proposed Program includes upgrading the City's collection and treatment systems to provide improved wastewater service to the City of Modesto, north Ceres, the community of Empire, and other areas serviced by the City. The Program would not directly induce growth as it does not entail construction of new housing. However, by upgrading the

City's collection and wastewater treatment systems to provide more wastewater service, the Proposed Program would remove an obstacle to planned development that would support population growth. Although this growth would be consistent with projected growth evaluated in adopted general plans including the recently amended *City of Modesto Urban Area General Plan* (2019), such growth could not occur without the proposed wastewater collection system and treatment improvements addressed in this EIR.

As summarized in Section 15.3, "Environmental Setting," above, between 2015 and 2050, the City's population is projected to grow from 210,341 to 290,555 at an annual average growth rate of 0.8 percent (StanCOG 2016). Based on information from DOF and for the purposes of developing the Wastewater Master Plan, population estimates for 2015 through 2035 (the planning period for the Proposed Program) were developed for the City's sewer service area, which includes a portion of north Ceres, the unincorporated community of Empire, and other unincorporated areas of Stanislaus County. These projections are presented in **Table 15-5** and assume an annual average growth rate of 1.3 percent per year.

Table 15-5. Projected Population for City's Sewer Service Area

Year	Estimated Sewer Service Population
2015	209,200
2020	223,100
2025	238,000
2030	253,900
2035	270,900
2040	288,972
2045	308,250
2050	328,814
2055	350,750
2057	359,929

Note: Extrapolation to buildout year of 2057 is based on an assumed 1.3 percent population increase between 2035 to 2057 (Eve, pers. comm. 2017). As noted in Chapter 2, the Wastewater Treatment Master Plan used a planning horizon year through 2035, while the Collection System Master Plan used a buildout scenario through the year 2057.

Source: *DOF estimates, as cited in Carollo Engineers 2016.*

Based on the estimates provided above, the total increase in population within the sewer service area is estimated to increase by 61,700 people between 2015 and 2035. This accounts for both growth within the City as well as Ceres and the community of Empire. According to the City's 2015 Urban Growth Policy Review Update and the City's Collection System Master Plan (Carollo Engineers 2016), growth within Modesto is assumed to occur on vacant industrial, commercial, and residential areas within the City's SOI and planning area, including the Beard Industrial District, Kiernan/Carver North CPD, Beckwith-Dakota CPD, North McHenry Business Park, among other planning districts.

New growth facilitated by the Proposed Program would result in associated physical environmental impacts; this could include aesthetic effects, conversion of farmland, air pollutant and greenhouse gas emissions, conversion of habitat, impacts on cultural or tribal cultural resources, increased point source or nonpoint source water pollution, use and possible releases of hazardous materials, noise, traffic, additional demands for public services and utilities such as police protection, fire protection, schools, parks, wastewater treatment, solid waste disposal, energy, etc.

Growth-inducing and secondary impacts are addressed by the policies of general plans of Stanislaus County, Ceres, and Modesto. These policies ensure that development within the planned growth areas occur as demand arises and services are available, and that utilities are sized appropriately to serve such development. The general plans mitigate for impacts through advanced planning and the implementation of growth management strategies, the provision of adequate public services and utilities such as wastewater collection and treatment, and the protection of open space and habitat areas.

In conclusion, proposed improvements to the City's wastewater collection and treatment system would remove an obstacle to urban development and population growth within the study area. This development would occur in accordance with general plans and thus would not result in unplanned or disorderly growth. Nevertheless, the Program would remain growth-inducing and the impacts of growth inducement, and the secondary environmental effects of induced growth, are considered significant.

The policies contained in general plans, as well as the mitigation measures contained in this DEIR, would reduce the secondary effects of growth to a level of insignificance. Individual development improvements would also be required to comply with CEQA, which may result in additional mitigation for growth and its effects. For these reasons, this impact is considered to be **less than significant with mitigation.**

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Chapter 16
TRANSPORTATION AND TRAFFIC

16.1 Overview

This chapter evaluates impacts of the Proposed Program on transportation and traffic. Impacts are evaluated in light of existing laws and regulations governing transportation and traffic, and in consideration of the goals and policies in applicable jurisdiction's general plans; the existing roadway system and transportation infrastructure is described; and impacts of the Proposed Program are analyzed.

The following sources of information were used in preparing this chapter:

- Transportation Research Board's *Highway Capacity Manual* (HCM) Transportation Research Board 2000, 2010);
- *City of Modesto Urban Area General Plan* (City of Modesto 2019);
- *Stanislaus County General Plan* (Stanislaus County 2016);
- *City of Ceres General Plan (2018)*; and
- *Congestion Management Process for the Stanislaus County Region* (StanCOG 2010).

16.1.1 Transportation and Traffic Terminology

The following are definitions of key transportation and traffic terms used in this section, based on the HCM (Transportation Research Board 2000).

Level of Service. The level of service (LOS) is a qualitative measure describing operational conditions within a traffic stream, based on service measures, such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience.

Peak-hour LOS for roadway segments in Modesto is evaluated by comparing the traffic volume with its vehicle capacity (the volume-to-capacity ratio) and correlating the result to a letter grade to represent the levels of congestion, as follows (City of Modesto 2018)

1. LOS A: free flow, low traffic volumes, and drivers can maintain their desired speed with little to no delay. Volume-to-capacity ratio: 0.6 or less.
2. LOS B: stable flow, operating speeds beginning to be restricted by traffic conditions. Volume-to-capacity ratio: 0.61 to 0.7.
3. LOS C: stable flow, but speeds and maneuverability are more closely controlled by higher volumes. Volume-to-capacity ratio: 0.71 to 0.8.

4. LOS D: approaching unstable flow; tolerable operating speeds which are, however, considerably affected by operating conditions. Volume-to-capacity ratio: 0.81 to 0.9.

5. LOS E: unstable flow with yet lower operating speeds and stoppages of momentary duration. Volume-to-capacity ratio: 0.91 to 1.0.

6. LOS F: stopped flow, which may occur for short or long periods. These conditions usually result when vehicles are blocked by a restriction downstream. Volume-to-capacity ratio: greater than 1.0.

Daily levels of service are calculated based on the per lane volume threshold for each level of service capacity as presented in **Table 16-1**.

Table 16-1. Per-Lane Roadway Segment Capacities

Type of Roadway Segment	Hourly Capacity[a,c]	Daily Volume Threshold[b,c]				
		LOS A	LOS B	LOS C	LOS D	LOS E
Freeway Mainline	2,000	8,000	12,750	18,750	23,130	25,000
Expressway – Class A	1,500	5,630	9,380	13,120	15,750	18,750
Expressway – Class B	1,250	4,690	7,820	10,940	13,130	15,630
Expressway – Class C	1,000	3,750	6,250	8,750	10,500	12,500
Principal Arterial (6 lanes)	850	3,190	5,320	7,440	8,930	10,630
Minor Arterial (4 lane facility with center left-turn lane)	925	810	2,190	3,930	6,820	11,560
Minor Arterial (4 lanes)	750	660	1,780	3,190	5,530	9,380
Minor Arterial (2 lane facility with center left-turn lane)	925	810	2,190	3,930	6,820	11,560
Major Collector (4 lane facility)	700	2,450	4,110	5,780	6,910	8,750
Downtown Collector	700	2,450	4,110	5,780	6,910	8,750
Minor Collector (2 lane facility with center left-turn lane)	925	810	2,190	3,930	6,820	11,560
Minor Collector (2 lanes)	650	570	1,540	2,760	4,800	8,130
Local Roadway	500	440	1,190	2,130	3,690	6,250
Rural Road	900	790	2,140	3,830	6,640	11,250

[a] Vehicles per through lane per hour.
[b] Vehicles per lane per day. Peak hour capacity 8 percent of daily capacity based on a review of peak hour to daily counts on over 200 roadway segments in the City.
[c] Hourly and daily calculated based on the method presented in the Highway Capacity Manual (HCM) (Transportation Research Board 2010). LOS is assessed based on the volume in relationship to the capacity threshold. For example, a freeway lane carrying 18,700 vehicles on a daily basis would be classified as LOS C as it is between the LOS B and LOS C threshold; if the volume was 19,000 vehicles a day, it would be classified as LOS D.

Note: These are generalized capacities that can be adjusted based on local roadway conditions, including the percentage of turning traffic, intersection spacing, driveway spacing, levels of pedestrian activity, provision of on-street parking, adjacent land use types and other factors.

Source: City of Modesto 2018

16.2 Regulatory Setting

No federal laws, regulations, or policies relate to transportation and traffic and the Proposed Program.

16.2.1 State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. The state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance. Caltrans also issues encroachment permits for activities (e.g., installation of a pipeline or any structure) within the state highway rights of way.

16.2.2 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019) guides land use and development in the City's incorporated area. The following policies are potentially relevant to the Proposed Program's traffic analysis.

Policy V.C.1. Transportation Study Thresholds. Figure II-1 delineates the functional geographic areas (Downtown, Baseline Developed Area, Planned Urbanizing Area) of the city described below. For CEQA purposes, the following are Modesto's thresholds for performing transportation studies.

Downtown Area: This area is exempt from automobile Level of Service (LOS) standards and no traffic impact analysis will be required for new development.

Baseline Developed Area: If a proposal is consistent with the Urban Area General Plan, no traffic impact analysis will be required. If a general plan amendment is needed, a traffic impact analysis may be required if the proposal would result in at least 100 peak hour trips above and beyond what was assumed in the analysis for the Urban Area General Plan Master Environmental Impact Report, if determined to be necessary. LOS "D" is the significance threshold.

Planned Urbanizing Area: In new specific plan areas that are outside city limits, a traffic study may be required if project-related traffic, as measured in Average Daily Trips, is expected to be at least ten percent (10%) greater than anticipated to result from the General Plan land use designations. The purpose of such a study would be to determine the amount of feasible automobile-oriented and non-auto-oriented mitigation associated with the project. Once a specific plan has been approved and the area annexed to the city, traffic study policies for the Baseline Developed Area will apply. LOS "D" is the significance threshold.

Policy V.C.6. Prioritizing Transportation Investments. Strive to achieve quality of service, as depicted in Table V-2 (FDOT Figure 1-2, 2009) for each non-automobile travel mode appropriate to the location in the City. Downtown Area: Pedestrian and bus quality of service should be A/B. Bicycle quality of service should be C/D or better. (Air quality, public health, energy conservation, environmental justice) Baseline Developed Area: Pedestrian quality of service should be C/D on arterial streets and A/B on local and collector streets. Bicycle quality of service should be A/B

on local and collector streets, C/D on arterial streets, and E/F on expressways. Bus quality of service should range from C/D to E/F, depending upon boardings. Consider improving accessibility along impacted routes by implementing Transportation Demand Management strategies. (Air quality, public health, energy conservation, environmental justice)

City of Ceres General Plan

The *Ceres General Plan 2035* (2018) includes the following transportation policy that is relevant to the Proposed Program:

> **Policy 3.A.2. Level of Service**. Develop and manage the roadway system to maintain Level-of-Service ("LOS") C or better on secondary collectors and local streets and "LOS" D or better on primary collectors, arterials, expressways, and freeways. One service level deviation may be permitted at locations where land development or transportation improvement projects support other goals from the General Plan including transit, active transportation, and economic development. Exceptions may also be allowed in areas where the City finds that the improvements or other measures required to achieve the "LOS" standards are unacceptable because of right-of-way limitations, physical impacts on surrounding properties, adverse effects on other travel modes, and/or the visual aesthetics of the required improvement and its impact on community identity and character.

Stanislaus County General Plan

The *Stanislaus County General Plan* (Stanislaus County 2016) guides land use and development in the unincorporated area of Stanislaus County. The General Plan contains the following policy:

Circulation Element

> **Policy Five.** Transportation requirements shall be considered during planning, design and construction of commercial and industrial development to address safety, mobility, and accessibility needs.

Additionally, the County General Plan states that as a matter of policy, the County strives to maintain LOS D or better for motorized vehicles on all roadway segments and a LOS of C or better for motorized vehicles at all roadway intersections.

Congestion Management Process for the Stanislaus County Region

The 2009 *Congestion Management Process for the Stanislaus County Region* (CMP) provides a blueprint for transportation planning in Stanislaus County. The performance measures of the CMP support mobility, air quality, land use, and economic objectives, and are used to determine whether projects are to be included in the CMP's CIP for consideration for inclusion in the Regional Transportation Plan (RTP) (StanCOG 2010). Objectives and policies of potential relevance to the Proposed Program include the following:

> **Objective I.** Improve Mobility for People and Freight

Policies:

- Street and road improvements should be designed to optimize the use of existing facilities as a potential alternative to new construction.

- All feasible Transportation System Management, Transportation Demand Management strategies and required Transportation Control Measures shall be implemented to reduce congestion and improve air quality.

Objective III. Preserve and Enhance Environmental Quality

Policies:

- The environmental impacts, both short-term and long-term, of transportation decisions shall be appropriately analyzed and considered, and adverse impacts mitigated wherever possible.

Stanislaus Council of Governments Regional Transportation Plan/Sustainable Communities Strategy

The Stanislaus Council of Governments' (StanCOG) *2014 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS)* is a regional transportation planning document that seeks to bridge the gap between land use and transportation planning, recognizing the significant connection between these two areas and its impact on the region's quality of life (StanCOG 2014). The plan also addresses recent requirements, such as Senate Bill 375, which calls for reductions in greenhouse gas emissions from the transportation sector, as well as new federal mandates under the Moving Ahead for Progress in the 21st Century Act (MAP-21). The RTP/SCS identifies the following goals:

Goal 1. Mobility & Accessibility. Improve the ability of people and goods to move between desired locations; and provide a variety of transportation choices.

Goal 2. **Social Equity.** Promote and provide equitable opportunities to access transportation services for all populations and ensure all populations share in the benefits of transportation improvements and provide a range of transportation and housing choices.

Goal 3. **Economic and Community Vitality.** Foster job creation and business attraction, retention, and expansion by improving the quality of life through new and revitalized communities.

Goal 4. **Sustainable Development Pattern.** Provide a mix of land uses and compact development patterns; and direct development toward existing infrastructure, which will preserve agricultural land, open space, and mature resources.

Goal 5. **Environmental Quality.** Consider the environmental impacts when making transportation investments and minimize direct and indirect impacts on clean air and the environment.

Goal 6. **Health & Safety.** Operate and maintain the transportation system to ensure public safety and security; and improve the health of residents by improving air quality and providing more transportation options.

Goal 7. **System Preservation.** Maintain the transportation system in a state of good repair, and protect the region's transportation investments by maximizing the use of existing facilities.

16.3 Environmental Setting

Proposed components would occur within or along numerous roadways within Modesto and outlying areas served by the City of Modesto. Other components would be constructed at the Sutter Plant and the Jennings Plant and along nearby roads. The proposed third outfall pipeline would be constructed within the following roads located south of the Tuolumne River: Carpenter Road, Keyes Road, and Jennings Road.

Modesto is a developed urban area consisting of residential, commercial, and industrial uses. Outlying areas are dominated by agricultural land uses. Regional transportation access is provided by SR 99, which runs roughly northwest-southeast through the study area. Other major transportation routes include SR 132, SR 108, and SR 219. SR 132 runs east-west along Maze Boulevard, D Street and Yosemite Avenue, and connects with SR 99 and Interstate 580 to the west. SR 108 runs in a north-south fashion along McHenry Avenue, providing direct access to adjacent land uses. SR 219 runs east-west along Kiernan Avenue to the north of Modesto and connects with SR 108 to SR 99. **Figure 16-1** shows roads and highways in the study area.

Several roadway segments in Modesto operate at congested LOS, as shown in **Table 16-2**.

Table 16-2. Roadway Segments with Existing (2014) Daily Level of Service of E or F

Roadway Segment	Cross Street	Classification	Lanes	Volume	Daily LOS
Claribel	McHenry to Coffee	Rural	2	16,300	E
Claribel	Coffee to Oakdale	Rural	2	13,800	E
Oakdale	Claribel to Claratina	Rural	2	17,900	E
Oakdale	Claratina to Sylvan	Arterial	4	23,200	E
Standiford	SR 99 to Prescott	Arterial	4	39,200	F
Standiford	Prescott to Carver	Arterial	4	34,700	E
Sylvan	McHenry to Coffee	Arterial	4	33,400	E
Claus	Sylvan to Floyd	Rural	2	18,900	E
Floyd	Coffee to Rose	Collector	2	13,300	E
Briggsmore	Prescott to SR 99	Arterial	6	66,700	F
Carpenter	SR 99 to Woodland	Arterial	4	37,200	E
El Vista	Scenic to Encina	Arterial	4	32,300	E
La Loma	Scenic to Yosemite	Collector	2	14,300	E
Paradise	Beverly to Chicago	Collector	3[1]	15,500	E

Roadway Segment	Cross Street	Classification	Lanes	Volume	Daily LOS
Crows Landing	7th Street to SR 99	Arterial	2	13,700	E
Crows Landing	SR 99 to Hatch	Arterial	4	30,500	E
Carpenter	Paradise to Hatch	Collector	3[1]	19,200	E
Hatch	Crows Landing to Jim Way	Collector	3[1]	17,600	E

Notes: 1. Roadway has one travel lane in each direction, plus a center two-way left-turn lane. LOS is based on thresholds for Minor Collector (2 lane facility with center left-turn lane) with capacity threshold based on two lanes.

Source: City of Modesto 2018

Existing transit service in the study area includes various bus and rail service providers in Modesto, Ceres, Empire and surrounding areas in Stanislaus County. Modesto Area Express (MAX) provides transit service to the Modesto Urban Area, Empire, and nearby areas of Stanislaus County (excluding Ceres) (MAX 2017). Ceres Area Transit serves the City of Ceres. Stanislaus Regional Transit (StaRT) is a regional public transit service that takes passengers from Modesto to surrounding cities and communities including Oakdale, Hughson, Turlock, and Patterson. The Greyhound provides intercity and long distance public transit service; a Greyhound bus stop is located in downtown Modesto. Train service includes Amtrak and Altamont Commuter Express (ACE) connections.

Numerous bicycle paths and routes exist throughout the study area.

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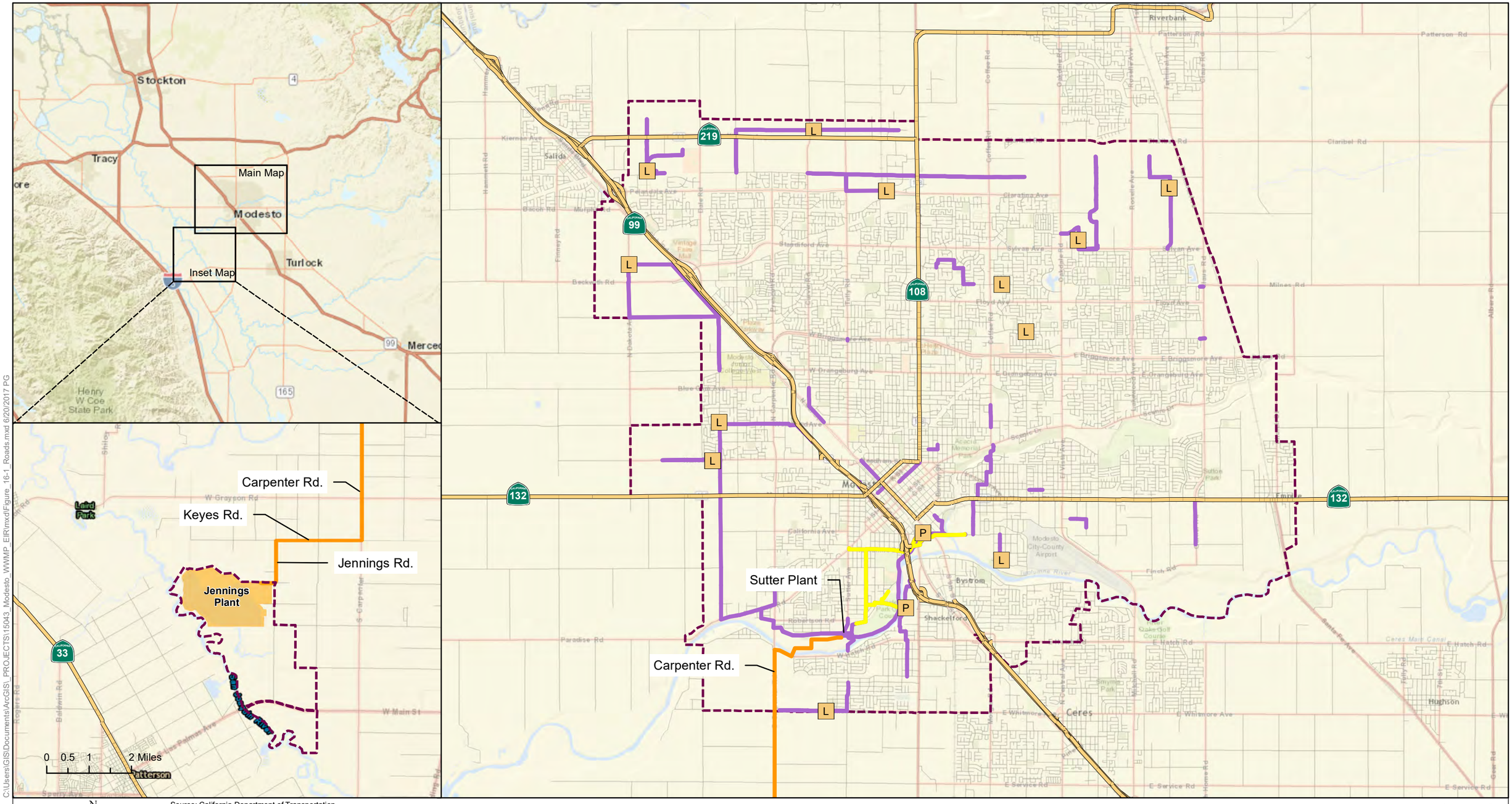
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Modesto
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Turlock
Merced
Henry W Coe State Park
Carpenter Rd.
Keyes Rd.
Jennings Rd.
Jennings Plant
Laird Park
Sutter Plant
Carpenter Rd.
Riverbank
Salida
Ceres
Hughson
Denair
Empire
Oakdale
Patterson
Patterson Rd
Claribel Rd
Milnes Rd
Bystrom
Shackelford
Paradise Rd
Robertson Rd
Finch Rd
Sylvan Ave
Floyd Ave
Briggsmore Ave
Orangeburg Ave
Whitmore Ave
Service Rd
Hatch Rd
Kiernan Ave
Bacon Rd
Beckwith Rd
Stanford Ave
Claratina Ave
Pelandale Ave
Blue Gum Ave
W Main St
W Grayson Rd
Sperry Ave
Lone Palm Ave
Ceres Main Canal
Modesto City-County Airport
Acacia Memorial Park
Oak Glen Golf Course
Smyrna Park
Sutter Park
Vintage Faire Mall
Modesto Junior College West
Hammett Rd
Fowler Rd
Crows Landing Rd
Carpenter Rd
Keyes Rd
Jennings Rd
Coffee Rd
Oakdale Rd
Roselle Ave
Claus Rd
Dale Rd
Finney Rd
Briggsmore Ave
Orangeburg Ave
Floyd Ave
Whitmore Ave
Service Rd
Hatch Rd
Albers Rd
Geer Rd
Santa Fe Ave
Rogers Rd
Baldwin Rd
Shiloh Rd
Hills Ferry Rd
Crane Rd
Gratton Rd
Fulkerth Rd
Tully Rd
Turlock Irrigation District Main Canal
Modesto Irrigation District Canal
Ceres Main Canal
Main Canal
Lateral No. 2
Lateral No. 4
Lateral No. 5
Lateral No. 6
Lateral No. 7
Lateral No. 8
Lateral No. 9
Lateral No. 10
Lateral No. 11
Lateral No. 12
Lateral No. 13
Lateral No. 14
Lateral No. 15
Lateral No. 16
Lateral No.

1

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16.4 Impact Analysis

16.4.1 Methodology

Because specific construction details related to most individual CIPs are not yet available, construction-related impacts to transportation and traffic were evaluated primarily qualitatively based on consideration of ways in which construction of the Proposed Program components could affect existing roadway operations and LOS. The impacts of traffic generated during construction of the River Trunk Realignment Project were evaluated quantitatively and qualitatively. The operation of the Proposed Program would have limited potential to generate trips over the long-term, and a quantitative analysis was not conducted for Program operation. Secondary impacts related to traffic and transportation from new growth and development accommodated by the Proposed Program are discussed in Chapter 15, *Population and Housing*.

16.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on transportation and traffic if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Result in inadequate emergency access;

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such features.

The third criterion above is eliminated from detailed consideration because the Proposed Program would have no potential to affect air traffic patterns. Program components would be limited to capital upgrades to the City's wastewater collection and treatment system. Therefore, the Program would not increase air traffic levels or change the location or routes of air travel.

16.4.3 Environmental Impacts

Impact TR-1: Conflict with Applicable Circulation Plans, Ordinances, or Policies Establishing Measures of Effectiveness for the Performance of the Circulation System (Less than Significant)

All Program-level Components

The Proposed Program would not include any housing or commercial uses that would directly increase population or add vehicle trips. The Proposed Program would be limited to upgrades to existing wastewater infrastructure, to address existing needs and accommodate future growth in the City and outlying areas served by the City's wastewater collection and treatment system. Please refer to Impact PH-3 in Chapter 15, *Population and Housing,* for discussion regarding the Program's secondary traffic effects due to accommodating growth.

Trips generated by the Proposed Program during operation would be limited to routine maintenance and repair visits to facilities by City staff. As some personnel (approximately 60) would be transferred from the Sutter Plant to the Jennings Plant, there may be a small increase in trips to and from the Jennings Plant, as well as a small decrease in trips to and from the Sutter Plant. These numbers of employees and commute trips would not be sufficient to meaningfully affect roadway performance or conflict with any plans, ordinances, or policies for the circulation system, such as the City of Modesto, City of Ceres, or Stanislaus County General Plans.

During construction of individual components, the Proposed Program would temporarily increase traffic and congestion in the immediate area of the component. Construction of facilities would involve use of heavy equipment and transport of materials/hauling of debris, which could contribute to localized congestion. Construction of Program components also would involve trenching within the roadway, which could require temporary closure of up to one lane of traffic. Demolition of the Sutter Treatment Plant would generate approximately 14,000 cubic yards of building material waste, most or all of which would require transport via truck to a landfill or hazardous waste facility for disposal. Additionally, dredging of the digestion pits of Facultative Ponds Nos. 1 and 2 and the Recirculation Channel at the Jennings Plant would generate approximately 16,000 dry tons of solids that would require disposal at a landfill. During construction of the numerous collection system and wastewater treatment plant components, the increase in haul truck trips and construction worker trips could increase congestion on local roads. In addition, as shown in Figure 2-19, several components are planned to occur within the same general timeframe. Since the construction schedules of individual components have not yet been determined, it is possible that construction of several proposed components would overlap in duration. As such, the increase of haul trips and worker trips could result in temporary exceedances of LOS C or D (see Table 16-1).

All projects would be required to follow the current version of the City of Modesto Standard Specifications. Section 12, Public Convenience and Safety, of Chapter 7, General Provisions, of the specifications includes Temporary Traffic Control requirements, including preparation of a traffic management plan (TMP) that must be incorporated into all projects. As part of the TMP, the public and appropriate fire and police departments would be notified in advance of temporary road closures. The TMP also would include implementation of appropriate traffic control measures (e.g., temporary barriers, use of flaggers, etc.) to allow for the safe passage of vehicular and pedestrian traffic through and within the Project site. In addition, the City

requires that emergency vehicles would be provided access through any temporary construction work areas. These measures would reduce impacts on vehicle movement and roadway LOS during construction activities. By complying with these standard specifications, the temporary congestion and traffic delays that could result from some Proposed Program construction activities would not substantially conflict with goals and policies in the City of Modesto General Plan, Stanislaus County General Plan, or CMP for the Stanislaus County Region. As such, this impact would be **less than significant.**

River Trunk Realignment Project

The River Trunk Realignment Project would include construction of the River Trunk Pump Station at B Street and Beard Street, the Shackelford Pump Station to the east of the Tuolumne River near Crow's Landing Road, new gravity pipelines and force main sewer lines. The pipelines would be installed primarily beneath B Street, Tuolumne Boulevard, Colorado Avenue, Pelton Avenue, and Neece Drive. With the exception of Tuolumne Boulevard, these are all two-lane streets. Tuolumne Boulevard is a four-lane road with a center turn-lane.

As described in Chapter 2, *Program Description,* construction of the River Trunk Realignment Project would occur in three general phases but pipeline construction activities will overlap with pump station construction activities. Construction activities would occur over a 30-month period, starting in summer 2018 and ending by the end of 2020. Construction of proposed components would generate short-term increases in vehicle trips by construction workers and construction vehicles on area roadways.

As presented in Table B-1 in **Appendix B** (which provides air quality modeling results for the Proposed Program), the River Trunk Project would generate an estimated 8,252 hauling trips, and approximately 29,565 construction worker trips over the duration of construction. During the most active period of construction when all three construction phases would overlap (0-12 months from the construction start date), this would equal approximately 324 trips per day.[1]

As shown in Table 16-2, none of the roadways on which construction activities would take place (i.e., B Street, Tuolumne Boulevard, Colorado Avenue, Pelton Avenue, and Neece Drive) are included on the list of Modesto roadways with existing LOS E or F. The proposed staging/work areas for the River Trunk Realignment Project are located adjacent to Tuolumne Boulevard at 7th Street, as shown on Figure 2-1. Vehicles accessing the site (e.g., on-haul and off-haul trucks, worker vehicles) would likely use SR-99 and exit at Tuolumne Boulevard. Existing traffic has been measured on Tuolumne Boulevard from SR-99 to 7th Street to have a Daily Traffic Volume of 13,100 vehicles (City of Modesto 2018).

As Tuolumne Boulevard is a 4-lane arterial road with a center turn lane, this daily traffic volume translates to 3,275 vehicles per lane, which equates to LOS C (Table 16-1). The addition of 324 trips per day during the peak construction period would equal a total of 3,599 vehicles per lane, which would not change the existing LOS. Even assuming that the number of vehicle trips due to the River Trunk Project may be somewhat higher during certain periods of construction, it would take an additional 331 vehicle trips to reduce existing

[1] Note: this calculation assumes that total construction truck and worker vehicle trips would be evenly spread over the scheduled construction duration period. In reality, this may not be the case, and periods of peak material deliveries or material off-hauling may have somewhat greater daily trip numbers.

conditions to LOS D on this road segment, and approximately 3,200 additional trips to result in LOS E. These numbers of trips would not be reached solely by River Trunk Project construction activities.

While the majority of construction vehicle trips would be to and from the Project staging areas, a certain number of trips would follow the Project alignment, transporting materials, equipment, and personnel to various points along the proposed pipeline alignment and to the River Trunk Pump Station and Shackelford Pump Station sites. Existing daily traffic information was not available for the roads along the Project alignment, but, as noted above, none of these roads are identified as being at LOS E or F (Table 16-2). Trenching within these roadways (i.e., B Street, Tuolumne Boulevard, Colorado Avenue, Pelton Avenue, and Neece Drive) for installation of proposed pipelines could cause delays and localized congestion during the construction period, but implementation of the City's Standard Specifications, which require preparation and implementation of a TMP, would minimize these impacts. As a result, this impact would be **less than significant.**

Overall Conclusion

Construction of WWMP components including the River Trunk Realignment Project would involve pipeline installation work in public roads which would require temporary lane closures. In addition, haul truck trips and construction worker trips would result in short-term increases in congestion on local roads of each WWMP component. However, in accordance with the City's Standard Specifications, a TMP would be prepared to minimize impacts on existing roadways, including pedestrian, bicycle, and transit mobility. (See Impact TR-5 for additional discussion of impacts on alternative transportation modes.) The number of trips that would be generated by the River Trunk Realignment Project would not result in worsening LOS on the applicable road segment. Additionally, the temporary congestion that could result from construction of Proposed Program components would not substantially conflict with any policies of the City of Modesto General Plan, Stanislaus County General Plan and CMP, and the StanCOG RTP/SCS. As such, the Proposed Program's overall impact is considered **less than significant.**

Impact TR-2: Conflict with an Applicable Congestion Management Program (Less than Significant)

All Program-level Components

As described in Impact TR-1, the Proposed Program itself would not generate substantial long-term vehicle trips. To the extent that the Proposed Program components would accommodate growth, this growth would follow the respective jurisdiction's general plan (see Impact PH-3 in Chapter 15, *Population and Housing,* for further discussion).

Trips generated during operation of program-level components would primarily be limited to routine operation and maintenance trips to facilities by City staff, and would be similar to existing conditions. As some personnel (approximately 60) would be transferred from the Sutter Plant to the Jennings Plant, there may be a small increase in trips to and from the Jennings Plant, as well as a small decrease in trips to and from the Sutter Plant. Overall, these changes would not be sufficient to produce a meaningful effect on the existing roadway system. Operation of proposed components would not result in any significant effect on existing LOS or conflict with objectives, policies, or performance standards in the CMP for Stanislaus County.

During construction of individual program-level components, depending on their location and nature, some components could result in temporary congestion and traffic. Trenching within the roadway for collection system and sewer rehabilitation components may require temporary closure of up to one lane of traffic, which could create localized delays. Likewise, movement of construction equipment and materials for construction of lift stations may marginally affect existing traffic conditions. Demolition of existing structures at the Sutter Plant could generate substantial quantities of waste materials (approximately 14,000 cubic yards), some or most of which may require transport via trucks to the landfill for disposal. Additionally, dredging of digestion pits at facultative ponds and the recirculation channel at the Jennings Plant would generate approximately 16,000 dry tons of solids that would require disposal. Trucks hauling this debris to the landfill could temporarily increase congestion on nearby streets and highways.

These construction-related traffic impacts would not be considered to conflict with the County CMP, because the effects would be temporary and would not affect the long-term performance of the roadway system. This impact would therefore be less than significant. Additionally, preparation and implementation of a TMP in accordance with the City's Standard Specifications regarding temporary traffic controls to ensure public convenience and safety would further reduce construction impacts from the WWMP program-level components. This impact would be **less than significant**

River Trunk Realignment Project

As described under Impact TR-1, the River Trunk Realignment Project would include installation of new sewer lines along several roadways in Central Modesto, including B Street, Tuolumne Boulevard, Colorado Avenue, Pelton Avenue, and Neece Drive. Trenching activities for installation of these features could cause temporary traffic and congestion, potentially resulting in deterioration of LOS along these roadways and at intersections. Because these impacts would be temporary, however, and the River Trunk Realignment Project would not add people to the area or generate trips over the long term, this would not be considered a conflict with the County's CMP. These impacts would therefore be less than significant. These impacts also would be further reduced through implementation of a TMP, as required under the City's Standard Specifications. This impact would be **less than significant.**

Overall Conclusion

Construction of WWMP components would involve pipeline installation work in public roads which could require temporary lane closures and could increase traffic delays. In addition, haul truck trips and construction worker trips could result in short-term increases in congestion on local roads of each WWMP component. Such increases would not be permanent and would be minimized through implementation of a construction TMP; therefore, the Program would not conflict with the County CMP and this impact would be less than significant. In conclusion, the Proposed Program's overall impact would be **less than significant.**

Impact TR-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses (Less than Significant)

The Proposed Program would not change the design or configuration of any public road. As described in Chapter 2, *Program Description,* proposed components would be limited to

upgrades to the City's wastewater collection and treatment system. Therefore, the Proposed Program would not result in an increase in hazards due to a design feature.

During construction of individual components (e.g., new or rehabilitated sewer lines and stormwater/sanitary sewer disconnections), construction activities could temporarily create hazards from trenching within the roadway, which could result in a significant impact. As described in Impact TR-1, this potential impact would be minimized through implementation of a TMP, prepared pursuant to the City's Standard Specifications, which would require backfilling of trenches at the end of the work day and erection of temporary barriers to separate motorists from potential hazards. Temporary use of construction equipment in the roadway would not be considered an incompatible use, and would not pose a substantial hazard given adherence to the City's Standard Specifications. Over the long-term, the Proposed Program would not introduce any new land uses that could create potential for use of incompatible equipment on roadways.

Therefore, this impact would be **less than significant.**

Impact TR-4: Result in Inadequate Emergency Access (Less than Significant)

The Proposed Program would not alter the permanent design or configuration of any public roadway. In accordance with the California Fire Code, the Proposed Program would provide for fire apparatus and emergency vehicle access to new proposed facilities (e.g., lift stations), as appropriate. During construction of individual components, trenching and use of heavy equipment within roadways would reduce roadway capacity and potentially impede emergency vehicle movement and access if appropriate traffic controls are not implemented.

As described in Impact TR-1, the City would prepare and implement a TMP in accordance with its Standard Specifications. This plan would include comprehensive traffic control measures (e.g., lane closure procedures) and a requirement to notify public safety personnel in advance of construction activities. The TMP also would require advance notification of any owner of a private driveway whose access would be temporarily disrupted during Project construction activities, and to limit disruption of private driveways to no more than one hour, as feasible. With implementation of this measure, emergency vehicle access would be maintained during construction of proposed components. Therefore, this impact would be **less than significant**.

Impact TR-5: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Features (Less than Significant)

All Program-level Components

Program-level components would not permanently alter any roadways, bicycle lanes, sidewalks, or other non-motorized transportation facilities. Many of the proposed components would be buried underground (e.g., new and upgraded sewer lines). Where features would be built above-ground, these features would be on parcels out of the road right-of-way. Construction of program-level components could temporarily interfere with bicycle, pedestrian, and transit vehicle movement (e.g., from trenching for installation of facilities) without adequate controls, and therefore result in a temporary conflict with Policy V-B.6[f] in the City's general plan. In some instances, it is possible that construction of

individual components may require temporary closure of a bicycle lane or sidewalk, or blockage of a transit stop.

In accordance with the City's Standard Specifications, the City would implement a TMP, which would require advance notification to transit agencies regarding construction activities within the roadway. Additionally, as described in Impact TR-1, the TMP would be required to provide for and maintain temporary traffic control measures to allow for the safe passage of vehicular, bicycle, and pedestrian traffic through and within the Project site, as well as make provisions for pedestrian, bicycle, and traffic access at all school sites. With implementation of the TMP, impacts on public transit, bicycle, and pedestrian facilities would be **less than significant.**

River Trunk Realignment

Limited bicycle lanes, bicycle paths, or transit routes exist along the proposed River Trunk Realignment Project alignment. Sidewalks do exist along most Project roadways that provide for pedestrian mobility. Roselawn Avenue is a designated bicycle-friendly road where it crosses Tuolumne Boulevard. There also is a transit stop at the intersection of Roselawn Avenue and Tuolumne Boulevard. Additionally, there are several bike trails between South 7th Street and 9th Street which could potentially be temporarily affected by Project construction activities. As noted above, the City would implement a TMP, which would include temporary traffic control measures to allow for the safe passage of vehicular, bicycle, and pedestrian traffic through and within the Project site. Additionally, the City's Standard Specifications require that the TMP make provisions for pedestrian, bicycle, and traffic access at all school sites. Implementation of the TMP would ensure that any impacts to pedestrian, bicycle, and transit facilities would be **less than significant.**

Overall Conclusion

Construction of proposed WWMP components could temporarily interfere with bicycle and pedestrian movement to some degree and cause transit delays due to pipeline installation work that occurs in public roads. Without adequate measures, such construction activities could thereby temporarily conflict with the Policy V-B.6[f] in the City's Urban Area General Plan, which calls for maintaining high levels of service for all transportation modes (vehicle, transit, pedestrian, and bicycle). However, implementation of the TMP would minimize this impact and avoid substantial conflicts with this policy. In conclusion, the Proposed Program's overall impact would be **less than significant**.

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Chapter 17
UTILITIES AND SERVICE SYSTEMS

17.1 Overview

This chapter describes the setting and impacts on utilities and service systems, including solid waste facilities, from the Proposed Program. Resources used to prepare this section include information and regulations from the various service providers, as referenced below:

- *City of Modesto Urban Area General Plan* (City of Modesto 2019a);
- *Stanislaus County General Plan* (Stanislaus County 2016);
- City of Modesto 2015 *Urban Water Management Plan* (West Yost Associates 2016); and
- State regulations.

17.2 Regulatory Setting

17.2.1 Federal Laws, Regulations, and Policies

There are no federal laws, regulations, and policies regarding utilities and service systems that are relevant to the Proposed Program.

17.2.2 State Laws, Regulations and Policies

California Integrated Waste Management Act of 1989 and AB 341

The California Integrated Waste Management Act of 1989 (Pub. Res. Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Pub. Res. Code Section 41780). In 2011, the Governor approved AB 341, which sets an even more ambitious goal of 75 percent recycling, composting, or source reduction of solid waste by 2020 in effort to decrease California's reliance on landfills. The state, acting through the California Department of Resources Recycling and Recovery (CalRecycle), determines compliance with this mandate. Per capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act (CalRecycle 2017).

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Pub. Res. Code Sections 42900–42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

Urban Water Management Planning Act

California Water Code Section10610 et seq. requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (af/yr), prepare an urban water management plan (UWMP). UWMPs must be submitted to DWR for approval every five years.

Urban water management plans must identify and quantify available water supplies and current and projected water use and demands, and plan for maintaining adequate water supply reliability during normal, dry, and multiple dry water years.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act is described in Chapter 12, *Hydrology and Water Quality*, of this DEIR, and would be applicable to the Proposed Program.

17.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

Chapter V, Community Services and Facilities, of the *City of Modesto Urban Area General Plan* (20019a) discusses the City's applicable planning goals and policies related to water supplies, water use, water management planning programs and documents, and the City's water distribution and treatment system infrastructure management are provided below. In addition, the City's policies relevant to other utilities, such as wastewater, storm drainage, and solid waste include the following:

Water Policies:

Goal VI.A. Ensure a consistent, reliable, high-quality water supply for the City of Modesto's residents and businesses.

> **Policy VI.A.3.** All new connections to the public water system are to have meters installed. In addition, on or before January 1, 2025, all existing municipal and industrial service connections are to have water meters installed.

> **Policy VI.B.2.** Prepare and maintain a Water Master Plan. Update the Water Master Plan, as needed, to incorporate changes in growth projections, water supplies, and demands.

> **Policy VI.B.3.** Encourage the optimum beneficial use of water resources within the City. Strive to maintain an adequate supply of high-quality water for urban uses. At a minimum, potable water supplies delivered to water customers shall conform to the primary maximum contaminant levels as defined in State law.

> **Policy VI.B.5**Construct, operat, maintain, and replace water infrastructure facilities in a manner that will provide the best possible service to the public. Ensure that infrastructure is installed before or concurrently with development. Take a comprehensive approach to financing, using a blend of special taxes, benefit assessments, and other methods to ensure that infrastructure installation occurs in a timely manner.

Wastewater Policies:

Goal VI.D. Strive to meet increasingly strict wastewater regulations in a cost-effective manner. The City's wastewater treatment facilities will conform to standards for wastewater and biosolids treatment and disposal, as established by the Central Valley Regional Water Quality Control Board, in compliance with applicable federal and state laws.

Policy VI.D.1. Consider reclaiming wastewater as a means to optimize the region's water resources, reduce discharge from the treatment plant, reduce the risk of fines and reduce costs associated with producing water from new / additional sources.

Policy VI.D.2. Comply with the Central Valley Regional Water Quality Control Board requirement to cease all discharge of wastewater that is treated at less than tertiary levels by May 1, 2018.

Policy VI.D.3. Consider reuse of wastewater treatment byproducts, such as biosolids and digester gas, which can reduce costs associated with treatment plant operations.

Policy VI.D.4. Pursue the near-term expansion of the wastewater treatment and disposal capacity of the Jennings Road Treatment Plant.

Policy VI.D.5. Pursue the long-term relocation of the Sutter Avenue Primary Treatment Plant, to the Jennings Road site, in order to consolidate operations and reduce treatment plant flooding risks.

Policy VI.D.6. Construct, operate, maintain, and replace wastewater facilities in a manner that will provide the best possible service to the public. In developing implementation plans, consider rehabilitation of essential existing facilities, expansion to meet current excess demand, and the timely expansion for future demand.

Policy VI.E.1. Allocate the City's wastewater system capacity to existing and future residential, commercial, and industrial customers. Discharges from environmental cleanup sites may be issued conditional discharge permits subject to the availability of excess treatment capacity. In accordance with federal and state regulations, discharges to the wastewater system may not, or may not threaten to, upset or interfere with, the wastewater system.

Policy VI.E.2. Require wastewater infrastructure master plans for the specific public infrastructure or when otherwise pertinent to provision of service at adopted service levels for the specific plan areas or other projects depending on site issues and location.

Policy VI.E.9. Strive to use land application of biosolids as the most environmentally beneficial reuse of this resource, rather than the disposal options of landfilling or incineration.

Policy VI.E.10. Develop methods to discontinue use of the sanitary system to temporarily drain stormwater runoff, and eliminate cross-connections between the wastewater and stormwater infrastructure systems.

Policy VI.E.16. Prepare and implement an update to the City's Wastewater Master Plan (WWMP), and complete an EIR for the updated WWMP. The updated WWMP should account for the UAGP, zoning revisions, updated growth projections, updated sewer demand information, regulatory requirements, and identify new capital improvement projects. The WWMP should involve several improvements to the City's collection system and upgrades to the Sutter and Jennings treatment plants. The objectives of the updated WWMP may include the following:

- Implement the City's economic goals and Urban Area General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
- Continue the City's policy of providing affordable and attractive wastewater rates.
- Repair and replace aging wastewater infrastructure.
- Ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's Sphere of Influence.
- Provide an adequate funding mechanism to pay for necessary improvements.
- Require new development to pay for infrastructure necessary to serve it.
- Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system improvements, the objectives of the updated WWMP may include:

- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event, and where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To extend service to new customers.
- To replace, repair, or rehabilitate existing trunk sewers, and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant improvements, the objectives may include the following:

- To reduce flooding impacts at the Sutter Plant site and increase treatment process operational flexibility and efficiencies by constructing new primary

treatment and solids handling facilities at the Jennings Plant and remove primary treatment and handling facilities from the Sutter Plant.

- To increase the capacity of the outfall connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.

- To increase treatment systems efficiency, reliability, and functionality for both domestic and cannery process stream flows.

- To increase treatment operational opportunities through new systems or system alterations to remain in compliance with existing Central Valley RWQCB's NPDES requirements and plan for potential future permitting regulations.

Storm Drainage Policies:

Goal VI.F. Establish and maintain an operating storm drainage system that protects people and property from flood damage.

Policy VI.G.2. Construct, operate, maintain, and replace storm water drainage facilities in a manner that will provide the best possible service to the public, as required by federal and state laws and regulations. In developing implementation plans, consideration shall be given to rehabilitation of existing facilities, remediation of developed areas with inadequate levels of drainage service, and timely system expansion for future development.

Solid Waste Policies:

Policy VI.L.1. Continue to comply with all requirements of Assembly Bill 939, which mandates the diversion of solid waste of 50% by 2000, by way of source reduction, recycling, composting, and transformation.

Policy VI.L.3. Continue to comply with Stanislaus County's Hazardous Waste Management Plan.

Policy VI.L.5. To meet the waste disposal demands of the growing population, continue to seek alternative waste disposal methods for solid waste, including transformation, composting, and alternative energy conversion technologies.

Policy VI.L.6. In addition to the Solid Waste Disposal policies in place [as outlined above], consider implementing local land use incentives and zoning/building code modifications to encourage source reduction, recycling, and composting, and to provide adequate space for containers. Such measures to be considered include a Construction and Demolition Recycling Ordinance, an ordinance and incentive program for Green Building Projects, and mandatory recycling for commercial/industrial waste and organics recycling per AB 341 and AB 1826.

17.3 Environmental Setting

17.3.1 Water Service

Water Supply and Treatment

The City of Modesto is the primary domestic water purveyor in Stanislaus County, serving not only the City of Modesto, but also Salida; North Ceres and Walnut Manor in Ceres; Grayson; Del Rio (Hillcrest); and defined areas in North, South, and Central Turlock. The City of Modesto currently distributes treated surface water supplied by MID through the Modesto Regional Water Treatment Plant (MRWTP), and groundwater pumped from City owned and operated wells, to serve the water demands of its customers. The City, in conjunction with MID, expanded its water supply when the MRWTP Phase 2 Expansion became operational (May 2016) with an additional 30 mgd of capacity to help meet demand north of the Tuolumne River. The MRWTP has total capacity of 60 mgd, or 67,200 acre-feet per year (MID 2017a). In addition, there are a limited number of private wells operating within the City limits that provide water for parks, golf courses, industry, and agricultural uses (City of Modesto 2016). Water supply needs include residential, agricultural, industrial uses, as well as emergency (fire) and drought supplies.

From the MRWTP, treated surface water is supplied to municipal customers within the City limits and some contiguous developed County areas north of the Tuolumne River, including the communities of Empire and Salida. The treated surface water place of use is defined by the overlap of the MID water service boundary with the City of Modesto Municipal Water System service area north of the Tuolumne River. Areas served by the City of Modesto that lie outside the MID water service boundary (i.e., south of the Tuolumne River), including the communities of Grayson, parts of Ceres and Turlock, and the portion of the Modesto system south of the Tuolumne River, are served exclusively by groundwater. The County community of Del Rio is also served only by groundwater. The recently completed MRWTP expansion is intended to help reduce the City's reliance on groundwater pumping and help meet demand north of the Tuolumne River.

While the areas south of the Tuolumne River are within the TID service area, TID currently serves only agricultural customers with surface water, and does not supply water for municipal uses. However, TID is working with the Stanislaus Regional Water Authority (SRWA) on the proposed Surface Water Supply Project (SWSP), described in more detail in Section 18.4, "Cumulative Impacts," which (if approved) would supply treated Tuolumne River water as an additional source of potable water for the cities of Turlock and Ceres (City of Turlock 2012).

In 2015, total water supply for the City was 47,459 acre-feet (AF), with 15,401 AF of Tuolumne River surface water purchased from MID and 32,058 AF pumped from groundwater. **Table 17-1** summarizes projected water supplies for 2020-2040. These projections are based on normal water years (City of Modesto 2016).

Table 17-1. Projected Water Supplies

Source	Projected Water Supply (af/yr)				
	2020	2025	2030	2035	2040
Surface water (from MID)	44,800	48,533	52,267	56,000	59,733
Groundwater	24,664	26,369	28,073	29,778	31,483
Total	69,464	74,902	80,340	85,778	91,216

Notes: AF = acre-feet; af/yr = acre-feet per year; MID = Modesto Irrigation District.
All groundwater volumes are reasonably available volumes. Total right or safe yield of groundwater is 53,500 AF for all years.

Source: City of Modesto 2016 (Table 6-20)

Sources of Surface Water

MID and TID obtain surface water supply from the Tuolumne River, stored in the Don Pedro Reservoir, which they jointly own. This water is obtained under TID and MID's pre-1914 water rights. From Don Pedro Reservoir, MID releases water through its power generation facilities directly into the river. From MID's Upper Main Canal at La Grange, water is delivered to Modesto Reservoir, then flows to the canal system, where the water is diverted to several locations that drain into the San Joaquin, Stanislaus, and Tuolumne Rivers (MID 2017b). From Modesto Reservoir, MID may release water to its Lower Main Canal for irrigation purposes or to the MRWTP for municipal and industrial purposes. Currently, MID manages 208 miles of gravity flow–operated canals and pipelines and provides irrigation water to approximately 3,100 agricultural customers.

Following treatment at the MRWTP, water is conveyed to the City's distribution system. In October 2005, MID and the City approved the Amended and Restated Water Treatment and Delivery Agreement between MID and the City of Modesto. MID became the primary water supply for the City of Modesto by expansion of the MRWTP. The facility has the capacity to treat an additional 30 mgd (67,204 af/yr), which would meet demand north of the Tuolumne River through buildout in 2050, if necessary (City of Modesto 2016).

Groundwater

Groundwater conditions are described in detail in Section 12.3.5 of Chapter 12, *Hydrology and Water Quality*, and are summarized here, The Proposed Program components would primarily overlie the Modesto Subbasin of the San Joaquin Valley Groundwater Basin but some components would also be located in the Turlock Subbasin, and the Delta-Mendota Subbasin.

Prior to the operation of the MRWTP, the City conducted extensive pumping of groundwater in and near the City's service area that resulted in localized overdrafting conditions (i.e., extraction of groundwater in excess of its long-term average rate of natural recharge). All three subbasins had declining groundwater levels between 1970 and 2000. Since 1995, groundwater levels increased as surface water supplies were available from the MRWTP's operation and then declined again as drought conditions affected surface water supplies. A 2007 evaluation conducted by the City determined that, if the total, long-term average

groundwater pumpage quantity is held at or below 53,500 af/yr, groundwater levels would stabilize at approximately 40 feet msl (City of Modesto 2016).

Water Demand

City of Modesto 2015 Urban Water Management Plan

The *2015 Urban Water Management Plan* describes the City's and MID's past, current and projected water use and demand by sector up to the year 2040. **Table 17-2** summarizes the projected water demand by water source from 2020 to 2040. The City does not use recycled water to offset potable water use, nor does it anticipate doing so in the future (City of Modesto 2016).

Table 17-2. Projected Water Demand for the City of Modesto, 2020-2040

Source	Projected Water Demand (AF)				
	2020	2025	2030	2035	2040
Potable and raw water	69,464	74,902	80,340	85,778	91,216
Recycled water	0	0	0	0	0
Total	69,464	74,902	80,340	85,778	91,216

Notes: AF = acre-feet

Source: City of Modesto 2016 (Table 4-4)

A more detailed summary of the City's projected water demands by sector type is summarized in **Table 17-3**.

Table 17-3. Projected Water Demands by Use Type in the City of Modesto, 2020-2040

Use Type	Projected Water Demand (AF)				
	2020	2025	2030	2035	2040
Single Family	35,872	38,680	41,488	44,296	47,105
Multi-Family	6,894	7,434	7,974	8,513	9,053
Commercial	11,031	11,895	12,758	13,622	14,486
Industrial	3,993	4,305	4,618	4,931	5,243
Institutional/Governmental	2,175	2,345	2,515	2,685	2,855
Landscape	2,553	2,753	2,953	3,153	3,352
Other (unmetered water uses)	0	0	0	0	0
Losses	6,946	7,490	8,034	8,578	9,122
TOTAL	69,464	74,902	80,340	85,778	91,216

Note: AF = acre-feet.

Source: City of Modesto 2016

City of Modesto Water Master Plan

The City's Water Master Plan (WMP) estimates projected water demands for the contiguous and outlying water service areas at buildout and with consideration of assumed per capita water use targets in compliance with Senate Bill SB X7-7. Based on updated population estimates, the projected water demand for the contiguous service area is 99,240 af/yr. (West Yost Associates 2017).

17.3.2 Wastewater

Modesto's wastewater collection system conveys wastewater from residential, commercial, and industrial customers in its service area to treatment plants. As described in Chapter 1, *Introduction,* the City's wastewater collection system consists of approximately 40 sewer lift stations, more than 600 miles of sanitary lines ranging from 6 to 66 inches in diameter, 69 miles of trunk lines (pipelines greater than 15 inches in diameter), and an additional 15 miles of trunk lines connecting cannery food processors directly to land disposal (application) areas. Wastewater flowing into the collection system flows by gravity, or is pumped, to the Sutter Plant and the Jennings Plant for further treatment.

The majority of the influent received at the City's wastewater treatment facilities consists of domestic, commercial, industrial, food processing, and winery waste. The Sutter Plant provides primary treatment as well as screening, sedimentation and grit removal services. From there, the wastewater gets transferred via two 6.5-mile-long effluent outfall pipelines to the Jennings Plant. Currently, the Jennings plant disposes of secondary treated effluent in two ways: (1) through irrigation of approximately 2,500 acres of ranch lands owned by the City, and (2) through seasonal discharge to the San Joaquin River. According to the City's NPDES surface water discharge permit (Order R5-2017-0064, NPDES No. CA0079103), discharge of secondary treated wastewater to the San Joaquin River is only allowable between October and May until the year 2018. As discussed in Chapter 1, the City is in the process of constructing tertiary treatment facilities at the Jennings Plant. Once completed, secondary treated wastewater would undergo tertiary treatment and could be used to provide recycled water demands off-site.

As of 2015, the City's wastewater treatment system had a capacity of 81 mgd, including 40.2 mgd of capacity for cannery wastewater. In 2014, average non-canning-season domestic wastewater flows (exclusive of cannery segregated flow) was 18.5 mgd. During the 2014 dry season, the sewer system received an average of approximately 20 mgd of wastewater, with a peak of 36.3 mgd. The peak wet weather wastewater flow was approximately 72.8 mgd (Carollo Engineers 2016).

17.3.3 Stormwater

The City's stormwater drainage system consists of approximately 77 miles of drainage lines and 20 pump stations. As the stormwater drains through this system, it discharges into four major locations. Based on the City's *2015 Urban Water Management Plan*, approximately 40 percent of the stormwater discharges to detention/retention basins, 20 percent to receiving waters (Tuolumne River or Dry Creek), 10 percent to MID laterals/drains, and 30 percent to rockwells. The City currently utilizes these rock wells (approximately 11,000), along with infiltration basins and underground storage and recharge facilities, to recharge the groundwater aquifer with some of the stormwater for beneficial reuse as a water supply source to meet local water demands (City of Modesto 2016).

The outlying service areas' stormwater systems vary in size and complexity based on the various communities' needs. The Del Rio stormwater system consists of a retention pond, curbs, and gutters (Stanislaus County 2004). The retention pond does not discharge to the Stanislaus River (Stanislaus County 2004). Stormwater needs in the small Grayson community are primarily served by roadside percolation, but some areas include storm drainage pipes and a detention basin that discharges to the San Joaquin River (Stanislaus County 2004). The condition of these facilities is good (Stanislaus County 2004). The Turlock stormwater system is owned and operated solely by the City of Turlock and comprised of 28 active storm lift stations, 66 storm ponds (which total 140 acres), 1,300 stormwater catch basins, and 102 miles of storm drain pipe (City of Turlock 2003). Ultimately, stormwater from Turlock flows to the San Joaquin River.

17.3.4 Solid Waste

In 2015, the City disposed of 104,468 tons of solid waste at landfills (CalRecycle 2015). The City of Modesto has an annual per capita disposal rate target of 5 pounds per resident per day, and an annual per capita disposal rate target of 13.8 pounds per employee per day. In 2015, the most recent year for which disposal rate data were available for the city of Modesto, the City's annual per capita disposal rates were 4.5 pounds per resident per day and 12.6 pounds per employee per day (CalRecycle 2015).

There are currently two major firms that are responsible for the collection and transport of solid waste in Modesto. Gilton Solid Waste Management and Bertolotti Disposal both provide hauling and interim transfer stations for the City's waste disposal, transformation, and diversion streams. Bertolotti Disposal also manages the solid waste and recycling programs for the City of Ceres.

The City of Modesto Public Works Department manages garbage and recycling collection services throughout the City. In addition to standard waste, the department also manages hazardous waste cleanup, bulk item pick-up, composting, and street sweeping (City of Modesto 2017).

The Fink Road Sanitary Landfill is the primary landfill within Stanislaus County. This approximately 200-acre landfill is owned by Stanislaus County and operated by the County Department of Environmental Resources. It is located west of Interstate 5 near the town of Crows Landing, where it receives solid waste from all of the cities and unincorporated areas within the county, including Modesto and the study area.

Categorized as a Class II and III landfill for nonhazardous municipal solid waste, its maximum permitted throughput is 2,400 tons per day. It has a remaining capacity of 8,240,435 cubic yards as of January 5, 2012 with a maximum permitted capacity of 14,640,000 cubic yards. Most industrial, commercial, and residential waste (e.g., household and commercial garbage, construction debris) is accepted here, while waste such as car bodies, septic tank waste, and liquid waste are not. As of 2012, it had a remaining capacity of over 8 million cubic yards and an estimated closure date of 2022 (CalRecycle 2017). The landfill is currently considering alternatives for facility expansion, which would extend the closure date to approximately 2030.

Noted above, the solid waste programs operated by the City includes a recycling program; Stanislaus County operates a similar program. These include curb-side recycling and

operation of recycling centers throughout their various jurisdictions within the study area. There are also several private recycling companies that are not affiliated with those who have specific contracts with the City or County.

17.3.5 Communications

A number of communications companies serve the Modesto area, including Comcast, AT&T, and Charter Communications. Many of the streets within which the Proposed Program components would be installed include underground or overhead communications lines.

17.4 Impact Analysis

17.4.1 Methodology

This section describes the impacts of the Proposed Program related to utilities and services systems. This evaluation considers the extent to which the Proposed Program would require entirely new or altered existing facilities to address immediate or foreseeable needs associated with Proposed Program operations. Effects are evaluated qualitatively based on available information on existing facilities and current demand in the study area.

17.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable RWQCB;
- Require or result in the construction of new or expanded water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the Program and reasonably foreseeable future development during normal, dry and multiple dry years. ;
- Result in a determination by the wastewater treatment provider which serves or may serve the Program that it has adequate capacity to serve the Program's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Due to the nature of the Proposed Program, the first criterion is not addressed in the impact analysis because one of the Program objectives is to increase treatment opportunities in order to remain in compliance with the existing Central Valley RWQCB's NPDES requirements. The Proposed Program is intended to meet current and near-term wastewater treatment requirements by constructing adequate wastewater infrastructure and providing services to serve existing and anticipated new growth within the City's sphere of influence. Therefore, this criterion does not apply.

In addition, a portion of the second criterion listed above is not applicable because construction of new and upgraded wastewater infrastructure services is the primary subject of this DEIR and the environmental effects of the Proposed Program are described throughout this document. Therefore, this criterion does not require further discussion in this chapter.

Similarly, the fifth criterion does not apply for the same reasons stated above for the first criterion dismissed.

17.4.3 Environmental Impacts

Impact UTL-1: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects (Less than Significant)

The Proposed Program would not require the construction of any major stormwater drainage facilities or expansion of existing facilities. As described in Chapter 2, *Program Description,* one component of the Program involves removing up to 60 interconnections between storm sewers and sanitary sewers to decrease peak flows in the City's collection system. Although this effort would not involve new construction of stormwater facilities, it would involve minor alterations to existing stormwater facilities.

All other improvements are intended either to repair and replace aging wastewater infrastructure or ensure adequate wastewater infrastructure to accommodate new growth planned by the City. Improvements proposed at the Sutter Plant would be confined to the existing footprint and would not create new impervious surfaces. Similarly, most improvements at the Jennings Plant would occur within the existing plant footprint, with the exception of the proposed sludge drying beds. As discussed in Chapter 12, *Hydrology and Water Quality,* runoff from these surfaces would discharge to surrounding undeveloped land and would not require construction of new stormwater drainage facilities.

Construction of the seven new lift stations throughout the City and the River Trunk and Shackelford pump stations may affect stormwater runoff to a small degree due the construction of new impervious surfaces. While some on-site stormwater drainage may be needed for these facilities, given the small scale of the new lift and pump stations, the environmental effects of constructing any new stormwater drainage facilities would be minimal. Stormwater drainage effects of the Proposed Program are analyzed further in Chapter 12, *Hydrology and Water Quality,* in Impact HYD/WQ-5. Moreover, the environmental effects of constructing and operating new lift and pump stations, including associated improvements at these sites (e.g., stormwater drainage), are evaluated throughout this DEIR. For these reasons, this impact is considered **less than significant**.

Impact UTL-2: Require New or Expanded Water Supply Entitlements (No Impact)

Construction of each improvement would require the use of water to compact loose soils and earthen materials that are dug up from trenching activity. Except for the Jennings Plant, where recycled water is available, construction crews would likely use publicly available groundwater and surface water for most construction uses throughout the various construction phases. The City has some specially designated hydrants that are served only by wells that no longer comply with potable demands, and that are used by contractors and City crews for construction water and other allowable nonpotable uses. However, these hydrants are not conveniently located for all project needs, and the water source for these hydrants is groundwater regardless of water quality. Nevertheless, the amount of water used for construction purposes would be negligible compared to overall demands and available supplies. As a result, construction of proposed improvements would not substantially affect local water supplies.

Once construction of planned improvements is complete, operation of the Sutter and Jennings Plants and other program-level improvements, such as pipeline replacements and rehabilitation and lift station upgrades, would not involve meaningful volumes of water and would not require new or expanded water supply entitlements. Similarly, operation of the River Trunk Realignment project would not require additional water supply entitlements beyond those already obtained by the City. Note that the disconnection of up to 60 stormwater/sanitary sewer cross-connections would decrease peak flows and could allow more stormwater drainage to be directed to groundwater rather than combined with wastewater; these improvements would potentially increase available groundwater supply. As a result, program improvements would not substantially affect water supplies. There would be **no impact.**

Impact UTL-3: Require Additional Permitted Landfill Capacity to Accommodate the Project's Solid Waste Disposal Needs (Less than Significant)

Construction of the Proposed Program facilities would produce solid waste in the form of demolished asphalt, concrete, and excavated soils (construction waste). Construction waste would be transported to one of the recycling facilities currently used by the City of Modesto and outlying service areas, and soils may be reused pending testing results (see Chapter 11, *Hazards and Hazardous Materials*), thus minimizing the amount of waste sent to landfills.

When construction waste recycling is not possible, waste would be transported to the Stanislaus County Fink Road landfill, located at 4000 Fink Road in Crows Landing. The landfill has a total permitted capacity of 14.5 million tons, about one-third of which is full. The facility has an estimated closure date of 2022. The landfill is currently considering alternatives for facility expansion, which would extend the closure date to approximately 2030 (California Integrated Waste Management Board 2007; Frank pers. comm.). In the event that a new landfill would need to be used once the Fink Road landfill is closed, the City has disposal requirement standard practices and general provisions in place that would prevent any potential impacts caused by this activity. These standard practices state that the City would only dispose of waste at a licensed disposal facility, and would identify such facility prior to committing to any project action (i.e. construction activity that involves grading). These practices can be found Section 5.06, Disposal of Excess Material, and Section 11.04, Grading Plans, of the City of Modesto Standard Specifications (2014). Furthermore, the treatment and

handling of all wastes produced during the construction period would adhere to all applicable federal, state, and local statutes.

The generation of construction waste is considered a short-term impact that would not require existing disposal facilities or conveyance transfer and haul systems to be expanded. While the Proposed Program would not result in the creation of additional solid waste once proposed facilities are operational, the standard practices stated above would ensure that the Proposed Program's waste would only be disposed of at licensed disposal facilities and in accordance with all solid waste handling and disposal requirements. Therefore, this impact on solid waste generation as a result of the Proposed Program would be **less than significant**.

Impact UTL-4: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste (Less than Significant)

The Proposed Program would be in compliance with federal, state, and local statutes and regulations related to solid waste. Construction specifications would contain requirements for the handling, storage, cleanup, and disposal of hazardous materials. For additional information about hazardous materials compliance and permitting requirem0ents, refer to Chapter 11, *Hazards and Hazardous Materials*. The Proposed Program would also comply with all of the applicable policies outlined in Section 17.2.3, "Local Laws, Regulations, and Policies." As a result, this impact would be **less than significant.**

Chapter 18
OTHER STATUTORY CONSIDERATIONS

18.1 OVERVIEW

This chapter presents discussions of significant and unavoidable impacts, growth-inducing impacts, and cumulative impacts as required by the State CEQA Guidelines.

18.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2(b) of the State CEQA Guidelines requires an EIR to describe any significant impacts that cannot be mitigated to a less-than-significant level. All of the impacts associated with the Proposed Program would be reduced to a less-than-significant level through the implementation of identified mitigation measures, with the exception of the impacts discussed below. The following impacts have been identified as significant and unavoidable:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use (for collection system and Jennings Plant components) (Impact AG-1)
- Conflict with or Obstruct Implementation of an Applicable Air Quality Plan (Impact AQ-1)
- Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard (Impact AQ-3)
- Generate a Substantial Amount of GHG Emissions (Impact GHG-1)
- Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs (Impact GHG-2)
- Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program (Impact NOI-4)
- Cumulative Impacts on Agriculture (Impact CUM-1)
- Cumulative Impacts Related to Noise and Vibration (Impact CUM-6)

18.3 GROWTH INDUCEMENT

Section 15126.2(d) of the State CEQA Guidelines requires an EIR to include a detailed statement of a proposed project's anticipated growth-inducing impacts. The analysis of growth-inducing impacts must discuss the ways in which a proposed project (or program) could foster economic or population growth or the construction of additional housing in the

surrounding environment. The analysis must also address project-related actions that, either individually or cumulatively, would remove existing obstacles to population growth. The Proposed Program is considered growth-inducing because it removes wastewater infrastructure as an obstacle to growth. Refer to Impact PH-3 in Chapter 15, *Population and Housing,* for detailed discussion of the growth-related effects of the Proposed Program.

18.4 CUMULATIVE IMPACTS

According to State CEQA Guidelines Section 15130(a)(1), a cumulative impact is created by the combination of a proposed project with other past, present, and probable future projects causing related impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355[b]). Under CEQA, an EIR must discuss the cumulative impacts of a project when the project's incremental contribution to the group effect is "cumulatively considerable." An EIR does not need to discuss cumulative impacts that do not result, in part, from the project evaluated in the EIR.

To meet the adequacy standard established by State CEQA Guidelines Section 15130, an analysis of cumulative impacts must contain the following elements:

- an analysis of related past, present, and probable future projects that would affect resources in the project area similar to those affected by the proposed project;
- a summary of the environmental effects expected to result from those projects with specific reference to additional information stating where that information is available; and
- a reasonable analysis of the combined (cumulative) impacts of the relevant projects, including those of the Proposed Program.

The cumulative impacts analysis must evaluate a project's potential to contribute to the significant cumulative impacts identified, and it must discuss feasible options for mitigating or avoiding any contributions assessed as cumulatively considerable. The discussion of cumulative impacts is not required to provide as much detail as the discussion of the effects attributable to the project alone. Rather, the level of detail is to be guided by what is practical and reasonable.

18.4.1 APPROACH TO ANALYSIS: COMBINED APPROACH

The following analysis of cumulative impacts focuses on whether the cumulatively significant impacts exist to which the Proposed Program may contribute, and whether the Proposed Program's contribution to such impacts would be considerable. The cumulative impact analysis considers other projects proposed within the area defined for each resource that have the potential to contribute to cumulatively significant impacts.

State CEQA Guidelines Section 15130 provides the following two alternative approaches for analyzing and preparing an adequate discussion of significant cumulative impacts:

- the list approach, which involves listing past, existing, and probable future projects or activities that have or would produce related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency; or

- the projection approach, which uses a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions and their contribution to the cumulative effect.

This discussion combines the projection approach and the list approach for the Proposed Program's cumulative impact analysis. Projects included in the cumulative analysis were determined using several factors, including the location and type of activity and the characteristics of the activity related to resources with the potential to be affected by the Proposed Program. In addition, regional or global conditions that might lead to cumulative impacts (e.g., GHG emissions) are also described.

Resource Topics Considered and Dismissed

The Proposed Program has been evaluated for its potential to make a considerable contribution to cumulative impacts related to the following resource topics: agricultural resources, air quality, biological resources, cultural resources, GHG and energy, hydrology and water quality, noise and vibration, traffic/transportation, and utilities and service systems. Greenhouse gas emissions are inherently a cumulative issue and are already addressed in Chapter 10, *Greenhouse Gas Emissions and Energy Resources.* In addition, the Proposed Program's contribution to cumulative air quality impacts are addressed in Chapter 6, *Air Quality.* Therefore, these topics are not discussed further in this section. For several other resource topics, as shown in **Table 18-1**, either significant cumulative impacts do not exist, or the Proposed Program would not have any potential to make a considerable contribution to any significant cumulative impacts. These resource topics have been eliminated from consideration in the analysis of cumulative impacts and are not discussed further.

Note also that, while the Proposed Program would be growth inducing and the secondary effects of growth could contribute to significant cumulative impacts, such secondary effects are considered to be already captured in the cumulative setting. Therefore, the analysis of the Proposed Program's contributions to cumulative impacts focus on the impacts of the Proposed Program itself, and not such secondary effects.

Table 18-1. Resource Topics Eliminated from Further Consideration in the Analysis of Cumulative Impacts

Resource Topic Not Discussed Further	Rationale
Forestry Resources	Stanislaus County's tracts of hardwood forest are located outside of the study area. For this reason, the Proposed Program would not have any potential to make a contribution to any significant cumulative impacts pertaining to forest lands, or lands zoned for forest land or timberland uses. Therefore, this resource topic is dismissed from further analysis.
Geology, Soils, and Seismicity	Impacts related to geology, soils, and seismicity from other projects and development in the Modesto area would be site-specific and like the Proposed Program, would be required to comply with CBC standards to minimize seismic-related impacts. For these reasons, there would be no significant cumulative impact regarding geology, soils and seismicity to which the Proposed Program could contribute. Therefore, this resource topic is dismissed from further analysis.
Land Use and Planning	As discussed in Chapter 13, *Land Use and Planning,* the Proposed Program would not result in impacts that involve the division of an established community. Land use and planning has been dismissed from the cumulative analysis because, similar to the Program, other projects are subject to planning, environmental review, and a permitting process. Through these processes, inconsistencies with relevant plans and policies would be resolved before project implementation; therefore, there would be no significant cumulative impact related to conflicts with local plans and policies to which the Proposed Program could contribute.
Minerals	There are no known mineral resource zones, historic or active mines or quarries within the study area, and the Proposed Program's components would not directly affect mineral production sites or prevent future availability of mineral resources. For this reason, the Proposed Program would not have the potential to make any contribution to a significant cumulative impact pertaining to mineral resources. Therefore, this resource topic is dismissed from further analysis.
Public Services	While the Proposed Program would indirectly induce growth, which would increase, but not individually exceed, demand for public services, the City, County, and other affected communities would plan for and implement appropriate improvement to their public services (including associated facilities and infrastructure), such that cumulatively significant impacts related to public services does not and would not occur. For this reason, no cumulatively significant impact exists to which the Proposed Program could contribute, and this topic has been dismissed from further analysis.
Recreation	While the Proposed Program would indirectly induce growth, which would increase, but not individually exceed, demand for recreational facilities, City, County, and other affected communities would plan for and implement appropriate improvement to their recreational facilities, such that cumulatively significant impacts related to recreation does not and would not occur. For this reason, no cumulatively significant impact exists to which the Proposed Program could contribute, and this topic has been dismissed from further analysis.

Notes: CBC = California Building Standards Code; DEIR = Draft Environmental Impact Report

Geographic Scope of Analysis

The level of detail of a cumulative impact analysis should consider a proposed project's geographic scope and other factors (e.g., a project's construction or operation activities, the nature of the environmental resource being examined) to ensure that the level of detail is practical and reasonable. The discussion focuses on the potential cumulative impacts of the Proposed Program for environmental resources that could be cumulatively affected by the Proposed Program in conjunction with other past, present, and reasonably foreseeable future projects. The specific geographic scope for each environmental resource topic analyzed in this DEIR for cumulative impacts is provided below.

The defined specific geographic scope for each environmental resource area analyzed in this DEIR to which the Proposed Program could contribute to cumulative impacts is provided below in **Table 18-2**.

Table 18-2. Geographic Scope for Resources with Cumulative Impacts Relevant to the Proposed Program

Resource	Geographic Scope	Explanation for the Geographic Scope
Aesthetics	General vicinity of the proposed components (e.g., within 0.5 mile) in Modesto and Jennings Plant	Aesthetic impacts are limited to the general vicinity of the proposed components. Other projects in the vicinity of proposed above-ground components would contribute to cumulative aesthetic impacts and collectively affect the region's visual character.
Agricultural Resources	Generally, agricultural land throughout the state; for the purposes of this analysis, focused on the City of Modesto, as well as the remainder of Stanislaus County	While the Proposed Program's impacts on agricultural resources are limited to the footprint of the proposed components, agricultural resources are a valuable regional asset and an important part of Modesto and its surrounding area's character. Other projects in the vicinity of Modesto and the Jennings Plant that impact agricultural land, in combination with the Proposed Program, could result in cumulative effects.
Biological Resources	Modesto, the Jennings Plant vicinity, and greater Stanislaus County, particularly areas of sensitive biological resources value (e.g., wetlands)	Animals are able to migrate and plants may disperse long distances via seed carried by the wind or other mechanisms. Additionally, biological resources are important regional assets. Therefore, the geographic scope for this analysis considers projects in the vicinity of Modesto and the Jennings Plant, as well as Stanislaus County as whole.
Cultural, Paleontological, and Tribal Cultural Resources	Modesto and the Jennings Plant vicinity	Cultural, paleontological, and tribal cultural resources impacts from the Proposed Program would be limited to the immediate area or footprint of the proposed components. Other projects in the City of Modesto and vicinity that disturb the ground surface could impact cultural resources (including TCRs) in a similar manner to the Proposed Program, potentially leading to significant cumulative impacts.

Resource	Geographic Scope	Explanation for the Geographic Scope
Hazards and Hazardous Materials	Modesto and the Jennings Plant vicinity	Hazards and hazardous materials impacts are limited to the general vicinity of the proposed components and hauling routes. Other projects in the vicinity of proposed components using hazardous materials during the construction and/or operation phases could impact sensitive receptors in a similar manner to the Proposed Program. As described in Chapter 11, *Hazards and Hazardous Materials,* compliance with applicable federal, state, and local laws and regulations pertaining to hazardous materials would ensure that the City and/or its contractor prepare and implement a hazardous materials and waste management plan, which requires that proper measures are taken in the event of an accidental hazardous materials spill or in the event that contaminated soils are encountered during construction. Other projects in the Modesto region could have similar construction-related hazards and hazardous materials impacts but these likewise would likely be site-specific and/or temporary. Similar to the Proposed Program, other projects would also be required to comply with the same regulations pertaining to safe use, storage, transport, and disposal of hazardous materials used during construction. Other development in the region that adds hazardous materials-intensive land uses (e.g., gas stations, dry cleaners) could increase the cumulative burden of potential hazardous materials releases in the area, but these impacts would result by a different mechanism than the Proposed Program. Therefore, there are no cumulatively significant impacts to which the Proposed Program could contribute, and this resource topic is dismissed from further analysis.
Hydrology and Water Quality	Immediate vicinity of Modesto, the Jennings Plant, including adjacent (downstream) reaches of the Tuolumne and San Joaquin Rivers	Contributions of the Proposed Program to cumulative impacts on hydrology and water quality (e.g., stormwater discharges from construction sites) would affect the immediate area of the proposed components and potentially areas downstream. Other projects that are constructed in this same area could affect hydrology and water quality in similar ways to the Proposed Program, potentially leading to cumulative impacts.
Noise and Vibration	Immediate vicinity (i.e., within roughly ¼ mile) of proposed components in the Modesto and Jennings Plant area	Noise impacts from the Proposed Program would be limited to the immediate area of the proposed components. Cumulative impacts could result if other projects were to be constructed at the same time as the proposed components and in same area (i.e., roughly ¼ mile), such that ambient noise levels could increase.
Transportation and Traffic	Immediate vicinity of the proposed components in the Modesto and Jennings Plant area	The Proposed Program would not add substantial numbers of vehicle trips over the long-term. Therefore, the Program's impacts on transportation and traffic would primarily be limited to construction-related effects

Resource	Geographic Scope	Explanation for the Geographic Scope
		(i.e., temporary closures of up to one lane of traffic for installation of pipelines). Cumulative impacts could result if other projects were to be constructed at the same time as the proposed components.
Utilities and Service Systems	Immediate vicinity of Modesto and Jennings Plant and regional landfills that may be used by the Proposed Program	The Proposed Program would not use significant water resources and would improve wastewater collection, conveyance, and treatment. The Proposed Program would require disposal of excavated and demolished material at a local landfill. Other project's in the Modesto area that may require disposal of large volumes of waste at a landfill, in combination with the Proposed Program, could potentially result in cumulative impacts on the capacity of landfill(s) in the area.

Table 18-3 lists projects planned in the study area that could affect resources that would also be affected by the Proposed Program. The locations of these projects are also shown in **Figure 18-1.** The list was developed by reviewing sources available on the City's website, Stanislaus County website, and the Governor's Office of Planning and Research CEQAnet database. While it is unlikely that every potential cumulative project is listed, the list of cumulative projects is considered sufficiently comprehensive and representative of the types of impacts that would be generated by other projects similar to or related to the Proposed Program. The evaluation of cumulative impacts assumes that the impacts of past and present projects are represented by baseline conditions. Cumulative impacts are based on the impacts of the Proposed Program plus impacts of reasonably foreseeable future projects, compared to baseline conditions.

Table 18-4 describes the planning documents containing projections used in the analysis.

Table 18-3. Reasonably Foreseeable Future Projects that Might Cumulatively Affect Resources of Concern for the Proposed Program

No.	Project Title	Brief Project Description	Distance from Study Area
Recreation Projects			
1.	Tuolumne River Regional Park Master Plan	The Tuolumne River Regional Park (TRRP) Master Plan envisions over 500 acres of parkland that would run along 7 river miles of the Tuolumne River. The regional park would extend from the Mitchell Street Bridge east to the Carpenter Road Bridge in Stanislaus County. Five major areas make up the TRRP, including the Legion Park/Airport Area, the Gateway Parcel, Mancini Park, the Dryden Park Golf Course Area, and the Carpenter Road Area. The Sutter Plant overlaps with the Carpenter Road Area. The River Trunk Realignment Project overlaps recreational uses planned on the Gateway Parcel. The City is currently constructing recreational trails on the Gateway Parcel, which would establish a connection to the downtown corridor and existing pathways along the Tuolumne River (including those adjacent to Beardbrook Park and further east toward the Modesto Airport). The new development on the Gateway Parcel includes a backwater channel, additional seating, an outdoor classroom, and pedestrian bridge spanning the mouth of the channel on the bank of Tuolumne River (Ortega pers. comm. 2017).	Overlaps study area
Development and Agricultural Projects			
2.	Bronco Wine Co. 2016 Rezone Application (Stanislaus County)	The application requests Stanislaus County to rezone the entire 118-acre parcel to a new Planned Development, and to expand an existing wine manufacturing facility. The project includes 14 new buildings, totaling 1.4 million square feet, which includes warehousing, office and administrative buildings, and an employee center. The expansion also includes railroad access to the Union Pacific Railroad by constructing two rail spurs, which would minimize traffic impacts in surrounding areas. Access to the facility would be along Bystrum Road. Phase 1 is expected to occur within 5 years of project approval; future phases would be built based upon market demands (Stanislaus County 2016b). The project was approved in May 2017.	Approximately 3 miles east of proposed third outfall pipeline
3.	Modesto Courthouse Project (Stanislaus County)	The State of California Judicial Council, Administrative Office of the Courts is pursuing the construction of a new courthouse in Modesto for the Superior Court of Stanislaus County. The preferred site is located in downtown Modesto in the city block bounded by G and H Streets and 9th and 10th Streets. The new courthouse will serve the public with a modern, secure, integrated, and efficient court facility in downtown Modesto. The new courthouse would occupy approximately 300,000 square feet, consist of 26 courtrooms, and replace seven facilities (City of Modesto 2014). Since 2014, the Court Facilities Advisory Committee authorized negotiations on acquiring the property. The project has been approved but has not yet been constructed.	Overlaps study area

No.	Project Title	Brief Project Description	Distance from Study Area
4.	DB Equipment Staff Approval Permit (Stanislaus County)	Request to establish an orchard tractor cab assembly and installation business on a legal non-conforming property, in two phases. Phase 1 includes the reuse of two existing buildings for shipping, receiving, and general office work. Phase 2 includes construction of a 10,000-square-foot metal building, which would be used for the assembly of the orchard tractor cabs. Project was approved by County staff in October 2016.	Approximately 0.38 miles north of study area
5.	Marketplace Shopping Center Project (City of Modesto)	The project includes the construction of a new shopping center with approximately 170,000 square feet of floor area on approximately 18 acres. The proposed project includes two large buildings in the shopping center that would be partitioned into spaces for various tenants. A Final EIR was published in November 2013 (City of Modesto 2013), and the project was approved in December 2013. Following the resolution of legal challenges, construction began in early 2017 and will be completed in 2018.	Overlaps study area
6.	Trinkler Dairy Farms (Stanislaus County)	The project proposes to increase a dairy herd size from 3,150 to 5,175 animal units, consisting of 3,180 milk cows, 600 dry cows, and 1,395 heifers in the A-2-40 (General Agriculture) zoning district. Expansion would require the construction of a freestall barn, a milk parlor, a calf barn, a feed storage pad, and a wastewater storage pond (lagoon). The 220± acre parcel is located at 7251 Crows Landing Road, at the southwest corner of Crows Landing and West Taylor Roads, in the Ceres area. The Planning Commission adopted a Negative Declaration for this project on December 14, 2016. A Notice of Determination was received on February 27, 2017 (Stanislaus County 2017).	Approximately 2 miles from proposed third outfall pipeline alignment
7.	Blue Diamond Growers Rezone Application (Stanislaus County)	Request to rezone the existing parcels for future expansion of the Blue Diamond facility. Expansion plans would include removal of the storm water basin and construction of an underground storage and percolation system, cold and/or dry storage, and pasteurization buildings (Stanislaus County 2016c). A building permit was issued in May 2017.	Less than 0.5 miles from study area
8.	Art Silva Dairy (Stanislaus County)	Request to increase the milk/dry cows at this facility by 928 head. The facility currently houses 583 milk cows, 60 dry cows, and 390 heifers. With the increase, the totals would be 920 milk cows, 180 dry cows, and 861 heifers. The proposed increase would require construction of an approximately 53,000-square-foot freestall barn within an existing exercise pen area. As per the amended Waste Water Management Plan, the lagoons are sufficiently sized to contain the increased wastewater (Stanislaus County 2015a).	Approximately 1 mile from Program study area

No.	Project Title	Brief Project Description	Distance from Study Area
9.	Derrell's Mini Storage Rezone and Merger Application (Stanislaus County)	This is a request to rezone expired P-D (202) to a new P-D to allow for 100 spaces of RV storage on a 3± acre site. The project site consists of 3 separate parcels of 0.39± acre, 0.36± acre and 2.25± acres but the applicant requests to merge the three parcels into one parcel. The project would include construction and operation of 78 enclosed and 22 open storage spaces, a 20-foot pole sign, fencing and landscaping. The operation would be unstaffed and is anticipated to generate an average of 5-10 vehicle trips per day. A Negative Declaration for this project was considered for adoption during the review period from February 9, 2016 to March 14, 2016 (Stanislaus County 2016d).	Overlaps study area
10.	Kansas Woodland Business Park	The City of Modesto is proposing the development of the Kansas Woodland Business Park located northwest of downtown Modesto. It is bounded by Woodland Avenue to the north, Kansas Avenue to the south, 9th Street on the east, and is on the web by State Route 99. The City aims to attract technology intensive businesses to the park (City of Modesto 2017). The project is currently under development.	Overlaps study area
11.	Fruit Yard Amphitheater	This project would expand an existing Planned Development with an outdoor, fenced, 3,500-person-capacity amphitheater event center, a 5,000-square-foot stage, a 5,000-square-foot roof structure, a 4,000-square-foot storage building, a parking lot to the rear of the stage, and an additional 1,302-space temporary parking area. A maximum of 12 amphitheater events are proposed to take place per year. This use permit also includes a covered seating area of approximately 4,800 square feet and a 1,600-square-foot gazebo in the eastern half of the park area, east of the outdoor amphitheater, and replacement of the existing pylon freestanding pole sign with an electronic reader board sign. An initial study was circulated in March 2017. The project was approved by the Board of Supervisors in May 2017.	Approximately 2.7 miles east of proposed future pipelines
Public Works Projects			
12.	City of Modesto Water Master Plan	The City of Modesto is in the process of developing a Water Master Plan and EIR to guide management of its water service system. The Water Master Plan would include various Capital Improvement Projects (CIPs) collectively intended for system-wide implementation needed to deliver safe and reliable water, which would effectively meet demand requirements under both existing and future buildout conditions. The City proposes to construct and operate the following types of CIPs: new water storage tanks, groundwater wells, pump stations, and pipelines. These CIPs would be constructed within the City of Modesto and other communities in Stanislaus County including Salida, North Ceres, Empire, and outlying service areas including Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock.	Overlaps study area

No.	Project Title	Brief Project Description	Distance from Study Area
13.	California High-Speed Rail Passenger Station	The City of Modesto Community and Economic Development Department has prepared a feasibility study for constructing a downtown passenger rail station for the California High-Speed Rail Project. The project is part of Phase 2 of the Proposition 1A High Speed Rail System project, but a specific start date has not been determined. The City has identified a potential site for the rail station, generally bounded by State Route 99 to the west, 9th Street to the east, North Jefferson Street to the northwest, and B Street to the south. This area would overlap the River Trunk Realignment project's boundary to the north (California Department of Transportation 2013).	Overlaps study area
14.	Carpenter Road at Whitmore Avenue Intersection and Bridge Widening (Stanislaus County)	The project includes installation of light signals and widening or replacing the existing Carpenter Road over Turlock Irrigation District Lateral No. 1 Bridge (Stanislaus County N.D.a). This project was approved in 2016 and is in the design phase.	Overlaps study area
15.	Airport Neighborhood Sewer (Phase II) (Stanislaus County)	Phase I of this project was constructed in 2014 and included installation of a gravity sewer system along Kerr Avenue. The County has developed improvement plans for Phase II, which was scheduled to start February 2017 and end in fall 2017. Phase II would include construction of a new gravity sanitary sewer system consisting of approximately 20,000 feet of sewer pipe. The completed project would provide approximately 362 sewer service connections to the residents of the Airport Neighborhood Sewer District (Stanislaus County N.D.b).	Overlaps study area
16.	Crows Landing Road Corridor Improvement Project (Stanislaus County)	This road improvement project is intended to improve safety, help illuminate the corridor, and make pedestrians and cyclists more visible to drivers. The project includes constructing raised medians, street lighting and buffered bike lanes. Crows Landing Road would be resurfaced for buffered bike lanes. Existing signals would be modified and obsolete parts would be removed and salvaged Stanislaus County N.D.c). The project is currently in the design phase.	Overlaps study area

No.	Project Title	Brief Project Description	Distance from Study Area
17.	McHenry Avenue Improvement Project (Stanislaus County)	San Joaquin County, in cooperation with Stanislaus County, has completed engineering work for a project to widen and improve a one-mile segment of McHenry Avenue from Jones Road to 1,700 feet south of River Road, in Stanislaus County. The project would widen and signalize the McHenry Avenue/River Road intersection; widen McHenry Avenue to provide a center left-turn lane; and replace two existing bridges – one across the Stanislaus River, and the other across the SSJID canal. Construction was anticipated to begin in spring 2017; the project is shown as being in the design phase on the County's website as of August 2017 (Stanislaus County N.D.). Environmental studies are underway, and construction of this project would begin in spring 2020.	Overlaps study area
18.	Claribel Road at Roselle Avenue Intersection Road Widening Project (Stanislaus County)	The project includes constructing a signalized intersection at Claribel Road and Roselle Avenue, and right-of-way acquisition, utility relocation, widening the existing two-lane roadway at the intersection to accommodate turn lanes, new signalization, utilities, and drainage improvements. A Mitigated Negative Declaration was published in June 2016 (Stanislaus County 2016e), and the project was approved in August 2016.	Overlaps study area
19	North Valley Regional Recycled Water Program (City of Modesto)	The City of Modesto, City of Turlock, and Del Puerto Water District (DPWD) are partnering on a regional solution to address water supply shortages in DPWD's service area on the west side of the San Joaquin River in San Joaquin, Stanislaus and Merced Counties. The project would deliver 59,000 af/yr of recycled water produced by the Cities of Modesto and Turlock via the Delta-Mendota Canal. Recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, and ending at the Delta-Mendota Canal. The purpose of the project is to make the Cities' recycled water available to DPWD for agricultural purposes, to provide an additional source of water south of the Delta, which can be used to meet agricultural uses and support wildlife refuges and wetland areas. Construction of the first phase of this project (in Modesto) was completed in June 2018 (North Valley Regional Recycled Water Program 2016 and 2018).	Modesto Water Quality Control Facility discharge site would overlap with the Jennings Plant. The Harding Drain Bypass Pipeline would be approximately 0.25 miles from the Jennings Plant project site.

No.	Project Title	Brief Project Description	Distance from Study Area
20.	Stanislaus River Regional Water Authority's Surface Water Supply Project	The SWSP would include release of up to 30,000 af/yr of water from Don Pedro Reservoir, downstream diversion from the Tuolumne River through an existing infiltration gallery and newly constructed pump station and raw water pipelines, treatment at a newly constructed water treatment plant, conveyance of the treated water to the Cities of Ceres and Turlock, and connection to the existing potable water system infrastructure of the two cities. The project also includes a minimum annual transfer of 2,000 af of "offset water" from SRWA member agencies to TID, which would increase in dry years. An EIR is in preparation.	The infiltration gallery, pump station, and water treatment plant would be located on the south bank of the Tuolumne River at Geer Road, approximately 4.5 miles southeast of the nearest CIP (Component No. EM-3)

Notes: af/yr = acre-feet per year; CIP = Capital Improvement Project; DPWD = Del Puerto Water District; EIR = environmental impact report; RV = recreational vehicle; SRWA = Stanislaus Regional Water Authority; SSJID = South San Joaquin Irrigation District; SWSP = Surface Water Supply Project; TID = Turlock Irrigation District; TRRP = Tuolumne River Regional Park

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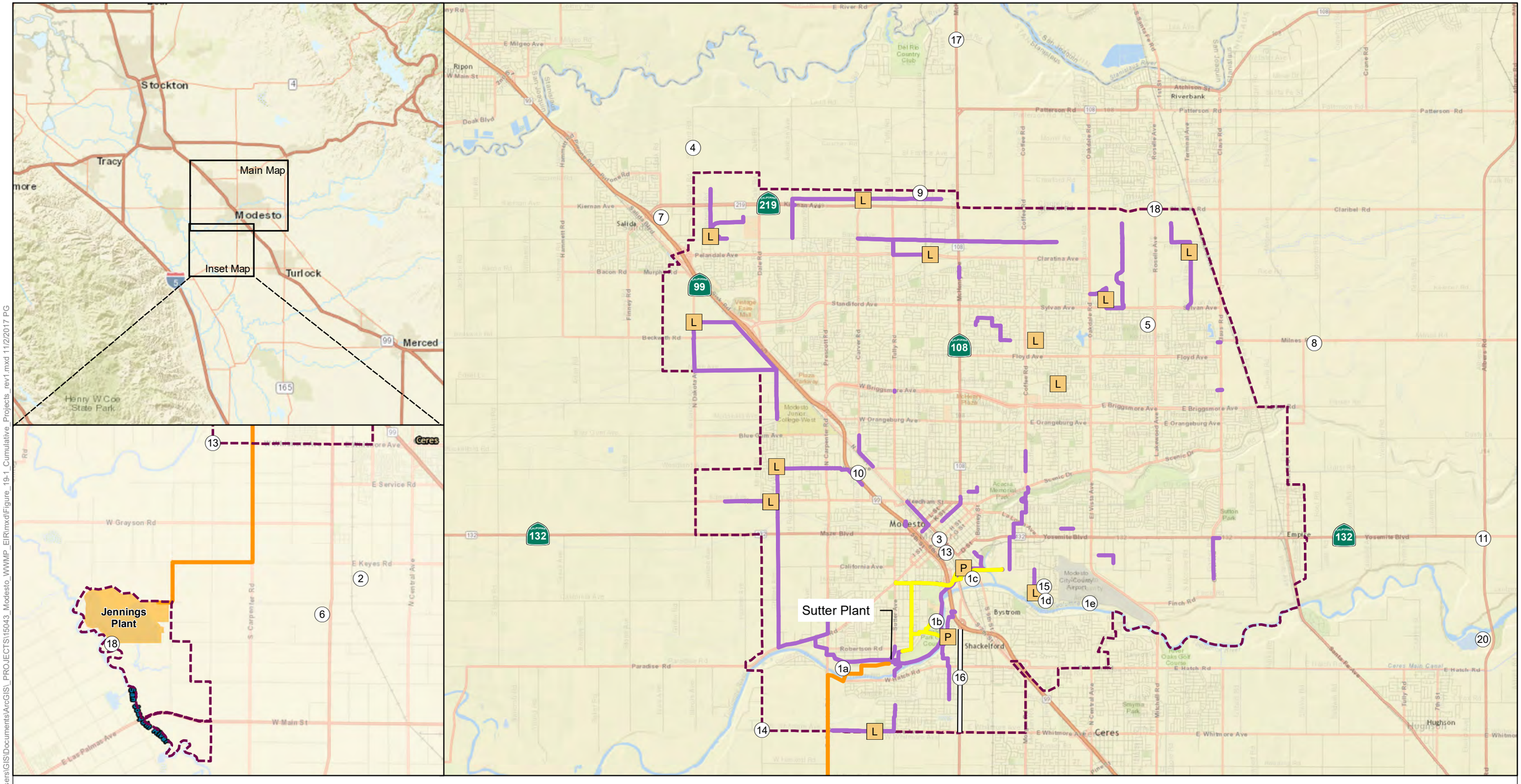
Stockton
Tracy
Main Map
Modesto
Inset Map
Turlock
Merced
Henry W Coe State Park
Ripon
Del Rio Country Club
Riverbank
Salida
Claribel Rd
Patterson Rd
Milnes
Ceres
Jennings Plant
Sutter Plant
Modesto Junior College-West
Modesto City-County Airport
Bystrom
Shackelford
Hughson
Empire
Yosemite Blvd
Standiford Ave
Floyd Ave
W Briggsmore Ave
E Briggsmore Ave
W Orangeburg Ave
E Orangeburg Ave
Claratina Ave
Sylvan Ave
Pelandale Ave
Kiernan Ave
Bacon Rd
Beckwith Rd
Blue Gum Ave
Maze Blvd
California Ave
Finch Rd
Robertson Rd
Paradise Rd
W Watch Rd
E Whitmore Ave
E Hatch Rd
Ceres Main Canal
E Service Rd
W Grayson Rd
E Keyes Rd
W Main St
E Lee Palmas Ave
Dry Creek
Scenic Dr
Oakdale Rd
Coffee Rd
Carpenter Rd
Tully Rd
Crane Rd
Claus Rd
Roselle Ave
Terminal Ave
Atchison St
Patterson Rd
Deak Blvd
E Milgeo Ave
E River Rd
W Main St
Keyes Rd
Service Rd
Whitmore Ave
Hatch Rd
Yosemite Blvd
Finch Rd
Claratina Ave
Sylvan Ave
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Table 18-4. Planning Documents Considered for Cumulative Impact Analysis

Document	Summary
City of Modesto Urban Area General Plan (2019)	▪ The City of Modesto Urban Area General Plan guides land use and development within the City of Modesto. The goals and policies in the General Plan provide an outline for new growth and minimization of possible impacts, while the adopted land use diagram included in the General Plan identifies desired land use types in the City. Adopted in 2019, the City of Modesto Urban Area General Plan updates the previous iteration completed in 2008 and provides a planning horizon to 2040. ▪ The General Plan foresees the majority of future development occurring within an approximately 19,450-acre Planned Urbanizing Area (PUA), which is land within and outside the City's sphere of influence that is predominantly flat, vacant and/or developed with agricultural uses, and minimally, if at all, served with urban services and infrastructure, including roads. The General Plan projects population within the Modesto General Plan boundary to be approximately 390,000. This population is assumed to be reached at some time after the 2040 general plan horizon year (City of Modesto 2019).
Stanislaus County General Plan (2016a)	▪ The Stanislaus County General Plan guides the physical development, preservation and conservation of areas within the unincorporated areas of the County. The General Plan was updated in 2015 to incorporate changes that had occurred in terms of legislation, code, and local standards since the previous version and to provide a planning horizon to 2035 (Stanislaus County 2016a). ▪ The Housing Element of the General Plan anticipates that most of the future residential growth in Stanislaus County to occur within the limits of the incorporated cities. Any concentrated growth in unincorporated Stanislaus County is anticipated to take place in the communities of Denair, Diablo Grande, Keyes, and Salida, which are guided by community or specific plans and are served by special districts which provide sewer and water, necessary to accommodate development. In 2010, the population of unincorporated Stanislaus County was 110,236. This number is projected to increase to 125,879 by 2030 (Stanislaus County 2016f).
City of Ceres General Plan 2035 (2018)	▪ The City of Ceres General Plan formalizes a long-term vision for the physical evolution of Ceres and outlines policies, standards, and programs to guide day-to-day decisions concerning Ceres' development through the year 2035 (City of Ceres 2018). ▪ The General Plan designates land uses for and applies its policies and standards to an area defined as the City's Planning Area, which includes the City's Urban Growth Area. The Planning Area is bounded by the Tuolumne River on the north, Carpenter Road on the east, Grayson Road on the south, and Washington Road on the west, encompassing approximately 14,400 acres (City of Ceres 2018). The Urban Growth Area encompasses all land envisioned for development

Document	Summary
	as part of Ceres through the year 2015. This area is further divided into two phases of development to ensure orderly development and prevent premature conversion of agricultural lands.

Notes: PUA = Planned Urbanizing Area

18.4.2 CUMULATIVE IMPACT SETTING

This section describes the cumulative impact setting for which the Proposed Program could contribute to a cumulative impact.

Aesthetics

The visual setting of Stanislaus County is characterized by a combination of agricultural, rural development, suburban, and open space land uses. Due to the county's flat topography, expansive and long-range views of natural landscapes including the Diablo Range are accessible. Waterways including the Tuolumne River, Stanislaus River, and San Joaquin River, also provide scenic viewing opportunities. Future development in the County and the City could lead to a cumulative degradation in the visual setting and scenic quality in the region.

Agriculture Resources

Stanislaus County is a major agricultural county in California. The County consists of over 425,000 acres of Important Farmland (CDOC 2016) and has over 575,000 acres of farmland under Williamson Act contracts (Stanislaus County 2015b). The success of agriculture in Stanislaus County is largely due to its favorable climate and the flat, fertile soils (Stanislaus County 2016a). However, while overall production trends for leading commodities have continued to grow, the County's agricultural industry is under threat from population growth/urban development and increased production costs. CDOC reports that while the period 2014-2016 saw an overall increase in Important Farmland acreage in Stanislaus County of over 6,700 acres, the County lost over 2,700 acres of Prime Farmland (CDOC 2016).

Biological Resources

Numerous species of plant and animal life are found in Stanislaus County which have aesthetic, recreational, economic, scientific, and educational value to the citizens of the area. Much of the area including Modesto and its surrounding areas is developed for urban and agricultural uses, but the Tuolumne and San Joaquin Rivers provide habitats various species. Most of the special-status wildlife species that have been identified as occurring within the County are associated with these riparian areas, as well as the annual grassland/vernal pool complexes on the eastern side of the county and the lands west of Interstate 5 (Stanislaus County 2016a).

Cultural, Paleontological, and Tribal Resources

A number of archaeological resources have been identified in the Modesto urban area and within Stanislaus County, including habitation sites, burials, and artifacts concentrations located near the Stanislaus and Tuolumne rivers, Dry Creek, and terraces above waterways (City of Modesto 2019). However, information on prehistoric cultural resources in the Modesto area is limited and is often obtained as a result of development or other proposed

activities where archaeological research is required (City of Modesto 2019). Additionally, numerous historic structures and properties within the City of Modesto have been listed on the NRHP, California State Points of Historical Interest, and the City of Modesto Landmark Preservation Sites list (City of Modesto 2019). Within greater Stanislaus County, there are 20 NRHP listings, 5 state landmarks, and 7 points of historical interest (Stanislaus County 2016a, but none are located within the study area. Paleontological resources have been found in the Modesto Formation of Stanislaus County.

Hydrology and Water Quality

The Tuolumne River is the primary watercourse in the Modesto area. Dry Creek also passes through portions of the City before joining the Tuolumne. The San Joaquin River passes through Stanislaus County southeast of Modesto, flowing in a southeast-northwest direction. The Stanislaus River flows roughly east to west north of Modesto and makes up the northern boundary of Stanislaus County. The Tuolumne River in the area of Modesto and the San Joaquin River are designated as impaired for a number of water quality contaminants, as shown in Table 12-2 in Chapter 12, *Hydrology and Water Quality,* likely as a result of urban and agricultural runoff in the watershed. Water quality contaminants include chlorpyrifos, diazinon, mercury, pesticides, among others.

Areas of groundwater contamination have also been identified in the Modesto and Turlock Groundwater Sub-basins due to a combination of declining groundwater levels and more stringent water quality standards. Historically, groundwater levels in the Modesto area have declined over past decades, but completion of the MRWTP in 1994, and subsequent importation of surface water supplies from the Modesto Irrigation District caused groundwater levels to rebound to some degree (STRGBA 2005). More recent data indicates that from 2007 to 2017 groundwater levels in the Modesto area decreased from 0 to 20 feet, with isolated areas of greater reductions (DWR 2017). Some of this decrease may be attributable to the recent drought in California, which lasted in its most severe form from roughly 2013-2014, though moderate drought conditions continued for up to years afterwards in some areas of the state, including in the Modesto area through February 2017.

Noise and Vibration

Numerous sensitive land uses (e.g., residential dwellings, schools, hospitals, etc.) are found in the City of Modesto and in proximity to the proposed components. Dominant existing noise and vibration sources vary within the area of the Proposed Program, but include industrial facilities (e.g., canneries), agricultural activities, railroads, air traffic (near the Modesto City-County Airport), and vehicular traffic. Railroad lines operated by multiple companies, as well as Highways 99, 132, 108, and 219, create elevated ambient noise levels in large portions of the study area. In general, ambient noise tends to decrease as one moves outside of the urban areas of Modesto and Ceres.

Transportation and Traffic

Primary transportation routes in the study area include SR 99, SR 132, SR 108, and SR 219. Proposed components would be installed within and along numerous local roads within the City of Modesto and surrounding area. In addition to commute traffic, goods movement is a potential source of congestion on area highways and roads. Transport of agricultural commodities has long been an important function in Stanislaus County, and the County also is an important food processing region for the State (Stanislaus County 2016a). Additionally,

the large urbanized areas of Stanislaus County, such as Modesto, require millions of tons of goods each year to maintain their economic activities (Stanislaus County 2016a). In agricultural areas outside of the City, movement of agricultural equipment on public roadways may also be encountered.

Utilities and Service Systems

The Proposed Program would have little to no impacts on water supply or wastewater, and would not require the construction of new or expanded stormwater facilities or require new water supply entitlements. Therefore, these aspects are not discussed here.

The primary landfill within the Modesto area, and the only active landfill in Stanislaus County, is the Fink Road Sanitary Landfill. This landfill handles nonhazardous municipal solid waste. As of 2012, it had a remaining capacity of over 8 million cubic yards and an estimated closure date of 2023 (CalRecycle 2017).

18.4.3 CUMULATIVE IMPACT ANALYSIS

Impact CUM-1: Cumulative Impacts on Aesthetics (Less than Significant with Mitigation)

Several projects identified in Table 18-3 involve new development throughout Modesto and the County. For example, in southern Modesto, the Tuolumne River Regional Park Master Plan's Gateway Parcel and Legion Park area would occur near the proposed River Trunk pump station and improvements to the Benson Lift Station, respectively, which would be constructed under the Proposed Program. Residences and recreationists located in close proximity to these facilities may have views of both the new stations and park facilities. Depending on the timing of constructing the planned recreational facilities on the Gateway Parcel and Legion Park parcel, recreationists using those facilities may also have views of the new pump and lift station. Additionally, as discussed in Chapter 4, *Aesthetics and Visual Resources,* the Proposed Program would support planned growth in the City's service area which would involve conversion of agricultural lands. Given the limited heights of the proposed new lift and pump stations, and the majority of other Proposed Program facilities being underground, the facilities in combination with projects listed in Table 18-3 and other planned growth, would not substantially alter the Program area's rural and open space landscape. Cumulative impacts on aesthetics and visual resources would be considered significant and the Program's contribution, if left unmitigated, may be considerable.

The proposed components would not substantially affect existing visual quality or characteristics in Modesto or the County. New and rehabilitated sewer pipelines would be underground and therefore would not affect visual resources, while new lift and pump stations would be similar in visual character to existing lift and pump stations. Components at the Sutter Plant would be visually consistent with existing facilities and the proposed components at the Jennings Plant would not be publicly visible. In fact, once the solids and primary treatment facilities have been completed at the Jennings Plant, decommissioning and removing the primary treatment facilities at the Sutter Plant would improve the visual character in the vicinity of the Sutter Plant. Construction of Program components could adversely affect the visual quality and visual character of a particular site in the short-term but Mitigation Measure AES-1 would reduce this impact by requiring that construction staging areas be located away from public areas. Other projects in the Modesto area, particularly new development projects and future water infrastructure projects, would alter

the visual landscape in the study area. However, once constructed, given that most proposed CIPs would not be visible and the relatively small scale of the proposed lift and pump station components, and with the above-referenced mitigation measure, the Proposed Program would not make a considerable contribution to any significant cumulative impacts pertaining to aesthetics and visual resources. Therefore, the Program's contribution to this cumulative impact would be **less than significant with mitigation**.

Impact CUM-2: Cumulative Impacts on Agriculture (Significant and Unavoidable)

Several projects identified in Table 18-3 could result in conversion of agricultural land, including Farmland, to non-agricultural uses. Additionally, buildout of the City of Modesto, Stanislaus County, and City of Ceres General Plans would convert agricultural land to non-agricultural use. As described in Chapter 5, *Agricultural Resources,* the Proposed Program would result in the conversion of approximately 18.6 acres of Farmland to non-agricultural use associated with development of the sludge cake drying beds.

Given the importance of agriculture to Stanislaus County and that loss of Farmland has been occurring in recent years and is an ongoing concern with increasing urban development in the region, the loss of Farmland is a significant cumulative impact, and the Proposed Program's contribution would be considerable.

As described in Chapter 5, LAFCO's Agricultural Preservation Policy (2015) and Policy 2.15 in the *Stanislaus County General Plan*, which require that agricultural land converted to residential use be replaced at a 1:1 ratio, do not apply to the Proposed Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing conservation easements, that program is designed to address loss of Farmland resulting from residential development and not public infrastructure projects such as the Proposed Program. Furthermore, the City has determined that the cost of establishing a conservation easement would substantially increase the cost of the Proposed Program and burden on ratepayers which would not be acceptable and purchasing an agricultural easement over off-site agricultural land would not ultimately avoid or reduce the impact of converting Farmland. Additional mitigation (e.g., restoration of Farmland) is not considered feasible. Based on this, no feasible mitigation measures have been identified. This impact of the Proposed Program would be significant and unavoidable at the project level, and a considerable contribution to significant cumulative impacts related to loss of Farmland. Therefore, the Program's contribution to this cumulative impact would be **significant and unavoidable.**

Impact CUM-3: Cumulative Impacts on Biological Resources (Less than Significant with Mitigation)

Construction projects in the Program area, such as those listed in Table 18-3, as well as elsewhere in Stanislaus County would have the potential to impact biological resources. Ground-disturbing construction activities could directly injure or kill wildlife, while development of new areas may result in permanent loss of habitat. Given that many of the special-status species known to occur in Stanislaus County are found in riparian areas, this may be particularly true for projects that are located along the Tuolumne River, Dry Creek, or the San Joaquin River. This is considered a cumulatively significant impact.

The Proposed Program would involve various construction activities that could impact wildlife, plants and fish, which, left unmitigated, would be considered a considerable contribution to this cumulative impact.

However, implementation of **Mitigation Measures BIO-1** through **BIO-15** would avoid and/or minimize impacts. In addition, compliance with the NPDES General Construction Permit, the City of Modesto's Standard Specifications related to erosion control, and implementing **Mitigation Measure HYD/WQ-1** regarding a frac-out contingency plan for trenchless pipeline installation methods would serve to avoid and minimize impacts on water quality that could affect fish and aquatic life. Considering that the Proposed Program would not convert large of areas of sensitive habitat and would avoid or minimize temporary effects to the maximum extent practicable with implementation of the above-mentioned mitigation measures, its contribution to cumulative impacts on biological resources would not be considerable. Therefore, this impact would be **less than significant with mitigation.**

Impact CUM-4: Cumulative Impacts on Cultural, Paleontological Resources, and Tribal Cultural Resources (Less than Significant with Mitigation)

While unlikely, it is possible that construction of WWMP components in the Program area could impact buried cultural or paleontological resources. Any project that would disturb the ground surface would have the potential to disturb buried cultural resources (including TCRs). Therefore, many of the projects listed in Table 18-3, as well as currently unknown projects that may be constructed in accordance with the City of Modesto, City of Ceres, and Stanislaus County General Plans, could impact buried cultural resources (including TCRs). Such projects also could affect above-ground historical structures depending on the nature of the project and location. For these reasons, cumulative impacts on cultural, paleontological, and tribal cultural resources are considered significant.

If the Proposed Program were to impact resources or groups of resources, which are also being impacted by other projects, the Proposed Program's contribution to cumulative impacts, if left unmitigated, would be potentially considerable. However, the Proposed Program would comply with various cultural resources policies in the Modesto Urban Area General Plan and implement **Mitigation Measure CR-1** to avoid and/or minimize impacts to cultural, paleontological, and tribal cultural resources. This would include requirements to conduct cultural resources awareness trainings for construction workers prior to commencing ground-disturbing activities (Mitigation Measure CR-1).

With implementation of these mitigation measures, the Proposed Program would not substantially affect cultural, paleontological, or tribal cultural resources and would not contribute considerably to any cumulative impacts on such resources in the Modesto area or greater Stanislaus County. Therefore, this impact would be **less than significant with mitigation.**

Impact CUM-5: Cumulative Impacts on Hydrology and Water Quality (Less than Significant with Mitigation)

Projects listed in Table 18-3, and those that may be constructed in the future in accordance with the City of Modesto and Stanislaus County General Plans, could adversely affect hydrology and water quality (e.g., via stormwater discharges from construction sites). In particular, projects located near the Tuolumne River, Dry Creek, or San Joaquin River would

have potential to affect water quality in these water courses, which is already substantially compromised. The existing impairments to water quality in the region are considered to be a cumulatively significant impact. The Proposed Program, if left unmitigated, would result in discharges to impaired water bodies and therefore would make a considerable contribution to this impact.

The Proposed Program's impacts to hydrology and water quality would be avoided and/or minimized through compliance with all local, state, and federal regulations concerning hazardous materials; the NPDES General Construction Permit; and the City's Standard Specifications related to erosion control, and implementation of **Mitigation Measure HYD/WQ-1,** which would require preparation and implementation of a frac-out contingency plan for trenchless pipeline installation methods.

While discharges of pollutants to the Tuolumne and San Joaquin Rivers may be considered a contribution to a significant cumulative impact given the existing contamination in these water bodies, the mitigation measures prescribed in the DEIR would avoid or reduce any such discharges to minimal levels. Additionally, although not specifically identified, the sources of the existing contaminants in the Tuolumne and San Joaquin Rivers shown in Table 12-2 in Chapter 12, *Hydrology and Water Quality,* are more likely attributed to agricultural and urban runoff, rather than construction-related stormwater discharges, as many of the contaminants are pesticides.

Operation of the Proposed Program would include tertiary-treated effluent discharges to the San Joaquin River and land application of secondary-treated wastewater, which could directly or indirectly contribute to the existing cumulative water quality impacts of the San Joaquin River and downstream water bodies. However, operation of the City's wastewater treatment system, particularly the Jennings Plant, under the Proposed Program would remove additional pollutants and/or suspended solids from the various discharges compared to the existing treatment and discharge operations. With these improved treatment processes, the Proposed Program would not have a substantial contribution to the existing cumulative water quality impacts of the San Joaquin River and downstream water bodies, and would likely have a beneficial contribution.

Several of the projects listed in Table 18-3 could add impervious surface area to the region or require additional use of groundwater supplies. The Proposed Program's new primary treatment and solids handling facilities at the Jennings Plant would increase impervious surface area by approximately 27 acres and potentially contribute to a reduction in groundwater recharge or storage in the underlying aquifers. However, this new impervious surface area, concentrated largely within or near urban areas, would not substantially affect groundwater recharge because the majority of groundwater recharge within the Modesto and Turlock Subbasins occurs via percolation of irrigation water in the vast agricultural lands in the area.

Following mitigation, the Proposed Program would not contribute considerably to cumulative impacts on hydrology and water quality. This impact would be **less than significant with mitigation.**

Impact CUM-6: Cumulative Impacts related to Noise and Vibration (Significant and Unavoidable)

Other projects in the immediate area of the proposed components could add to, or exacerbate, noise generated by construction and/or operation of the proposed components. Several projects listed in Table 18-3 fit this description. Additionally, projects that may be constructed in the future in accordance with applicable jurisdiction's general plans could be located in immediate proximity to the proposed CIP projects. Because the schedule for the projects listed in Table 18-3 and that for specific CIP projects under the Proposed Program (other than the River Trunk Realignment Project) is unknown and/or is subject to change, this analysis makes the conservative assumption that overlaps would occur, potentially producing significant cumulative noise effects.

As described in Chapter 14, *Noise,* Proposed Program construction and operation would not generate noise in excess of standards established in the local general plan or noise ordinance, depending on the specific characteristics of the proposed components. Stanislaus County and the City of Modesto Municipal Codes also contain some exemptions for noise from construction and maintenance activities performed by or for public utilities and facilities. **Mitigation Measures NOI-1** through **NOI-4** would reduce these effects through a variety of means. Additionally, implementation of **Mitigation Measure NOI-5** would avoid or minimize groundborne vibration impacts from the Proposed Program.

However, as discussed in Chapter 14, for the River Trunk Project, temporary construction noise associated with operating equipment and periodic truck traffic would likely exceed FTA noise thresholds (90 dB) at individual sensitive receptors along the pipeline alignment even after implementation of Mitigation Measures NOI-1 and NOI-2, resulting in a significant and unavoidable impact. Of the projects listed in Table 18-3, the TRRMP is located closest to the River Trunk Realignment Project. The City is currently constructing recreational trails on the Gateway Parcel, which would establish a connection to the downtown corridor and existing pathways along the Tuolumne River. Because it is possible that construction of the River Trunk Project could overlap with construction of the TRRMP, temporary or periodic increases in ambient noise levels caused by the River Trunk Project could be exacerbated by construction and operation activities for such other projects, contributing considerably to significant cumulative noise impacts. No feasible mitigation beyond that described above exists to reduce this impact; therefore, this impact is considered to be **significant and unavoidable.**

Impact CUM-7: Cumulative Impacts related to Transportation and Traffic (Less than Significant)

Depending on the timing of construction activities, other projects located in the immediate vicinity of the proposed components listed in Table 18-3 or included in general plans could overlap in duration with Program construction activities, exacerbating temporary effects on transportation and traffic. These projects, as well as other development that may be constructed in accordance with the City of Modesto, City of Ceres, or Stanislaus County General Plans could add substantial vehicle trips associated with residential and commercial uses, which could contribute to a long-term reduction in LOS and operating conditions on roads and highways in the area, creating a significant cumulative impact.

As described in Chapter 16, *Transportation and Traffic,* the Proposed Program would include trenching within the roadway for installation of new and rehabilitated sewer lines, as well as off-hauling of construction debris and spoils to the landfill. These activities could temporarily create congestion on local streets, which would be largely confined to the immediate area of the proposed components. However, preparation and implementation of a construction traffic management plan, which specifically requires that the City and/or its contractor coordinate with appropriate public safety about construction detours, lane closures, and other major deliveries, is required by City Standard Specifications. As a result, the City would be required to coordinate with other local agencies (e.g., local fire and police departments) about construction schedules and develop plans to minimize effects on traffic.

Because the Proposed Program would not add substantial vehicle trips over the long term and its impacts on transportation and traffic would be temporary, it would not contribute considerably to cumulative impacts on transportation and traffic. Therefore, this impact would be **less than significant.**

Impact CUM-8: Cumulative Impacts on Utilities and Service Systems (Beneficial)

During construction, measures would be implemented to avoid any interruptions to utilities and service systems. Over the long-term, the Proposed Program would not generate the need for additional stormwater or water infrastructure or increased solid waste disposal needs. Additionally, the Proposed Program would provide necessary wastewater collection and treatment infrastructure to support planned development. As such, the Proposed Program is anticipated to be beneficial from the standpoint of cumulative impacts related to utilities and service systems.

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Chapter 19
ALTERNATIVES

19.1 OVERVIEW

This chapter describes the CEQA requirements related to evaluation of alternatives in an EIR, presents the alternatives development process for the Proposed Program, describes the alternatives considered and those considered but eliminated from detailed analysis, provides environmental impact analysis of the alternatives considered, presents a comparison of alternatives, and identifies the environmentally superior alternative.

19.2 CEQA REQUIREMENTS

CEQA requires that an EIR evaluate a reasonable range of potentially feasible alternatives to the Proposed Program, including the No Program Alternative. The No Program Alternative allows decision-makers to compare the impacts of approving the action against the impacts of not approving the action. Although no clear rule exists for determining a reasonable range of alternatives to a Proposed Program, the CEQA Guidelines provide guidance that can be used to define the range of alternatives for consideration in the environmental document.

The alternatives described in an EIR must feasibly accomplish most of the basic project objectives, should avoid or substantially lessen one or more of the significant impacts of the Proposed Program, and must be potentially feasible (State CEQA Guidelines Section 15126.6[a]). In determining whether alternatives are potentially feasible, Lead Agencies are guided by the general definition of feasibility found in State CEQA Guidelines Section 15364: "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." In accordance with State CEQA Guidelines Section 15126.6(f), the Lead Agency should consider site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, and jurisdictional boundaries in determining the feasibility of alternatives to be evaluated in an EIR. An EIR must briefly describe the rationale for selection and rejection of alternatives and the information that the Lead Agency relied on in making the selection. It also should identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reason for their exclusion (State CEQA Guidelines Section 15126.6[c]).

An EIR's analysis of alternatives is required to identify the environmentally superior alternative among all those considered (State CEQA Guidelines Sections 15126.6(a) and (e)(2). If the "no project" alternative is identified as the environmentally superior alternative, then the EIR must also identify an environmentally superior alternative amongst the other alternatives.

These guidelines were used in developing and evaluating the alternatives as described below.

19.3 ALTERNATIVES DEVELOPMENT PROCESS

The Proposed Program's purpose and objectives, as well as its significant environmental impacts, were considered while developing alternatives. In accordance with the requirements of CEQA, alternatives were developed to achieve most of the Proposed Program's basic objectives while avoiding or substantially lessening one or more of its significant adverse environmental impacts. Alternatives development was also based on potential feasibility. A reasonable range of potentially feasible alternatives is presented in Section 19.4, "Alternatives Considered," describing their impacts as well as benefits.

19.3.1 PROJECT OBJECTIVES

As stated in Chapter 2, *Program Description,* the objectives of the Proposed Program as a whole are as follows:

- To implement the City's economic goals and General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
- To repair and replace aging wastewater infrastructure.
- To ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's SOI, and planned wastewater demands.
- To plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system improvements, the objectives of the Proposed Program are:

- To extend service to new customers.
- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event, and where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To replace, repair, or rehabilitate existing trunk sewers, and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant improvements, the objectives are:

- To reduce flooding impacts at the Sutter Plant site and increase treatment process operational flexibility and efficiencies.
- To increase the capacity of the outfall connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.
- To increase treatment systems efficiency, reliability, and functionality for both domestic and cannery process stream flows.

- To increase or modify treatment systems to remain in compliance with existing Central Valley RWQCB's NPDES requirements and plan for potential future permitting regulations.

19.3.2 SIGNIFICANT ENVIRONMENTAL IMPACTS PRIOR TO MITIGATION

A number of impacts have been identified as significant, but would be mitigated to a level of less-than-significant through implementation of mitigation measures. These impacts are listed in Table ES-1 in the *Executive Summary* of this DEIR.

19.3.3 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

The following impacts have been identified as significant and unavoidable:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use (Impact AG-1)
- Conflict with or Obstruct Implementation of an Applicable Air Quality Plan (Impact AQ-1)
- Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard (Impact AQ-3)
- Generate a Substantial Amount of GHG Emissions (Impact GHG-1)
- Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs (Impact GHG-2)
- Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Program and River Trunk Realignment Project (Impact NOI-4)
- Cumulative Impacts on Agriculture (Impact CUM-1)
- Cumulative Impacts related to Noise and Vibration (Impact CUM-7)

19.4 ALTERNATIVES CONSIDERED

The following alternatives were considered for the Proposed Program:

- Alternative 1: No Program Alternative
- Alternative 2: Deferred Implementation Alternative
- Alternative 3: Primary Treatment and Solids Handling Facilities to the North of the Jennings Plant Alternative
- Alternative 4: River Trunk Realignment Project Design Alternative 4A
- Alternative 5: River Trunk Realignment Project Design Alternative 1

The Primary Treatment and Solids Handling Facilities to the North of the Jennings Plant Alternative (Alternative 3), River Trunk Realignment Project Alternative 4a (Alternative 4), and River Trunk Realignment Project Design Alternative 1 (Alternative 5) were identified in the context of the set of potentially feasible sites identified during the design process, and the significant impacts of the Proposed Program. **Table 19-1** at the end of this chapter summarizes the alternatives considered and compares them to the Proposed Program.

19.4.1 ALTERNATIVE 1: NO PROGRAM ALTERNATIVE

Characteristics of this Alternative

Under this alternative, no new wastewater infrastructure would be constructed or upgraded. Operation of the City's collection system and treatment facilities would continue similar to existing conditions. Under this alternative, the existing collection system and treatment facilities would continue to operate. Existing sewer mains, trunk lines, and lift stations that are currently under capacity would continue functioning but capacity issues may increase over time. This alternative would not meet any of the Program objectives.

Impact Analysis

Aesthetics

This alternative would have no impacts on visual character or quality. No new wastewater infrastructure would be constructed or operated; therefore, there would be no new impacts on views or visual character of sites.

Agricultural Resources

This alternative would have no impacts on Important Farmland or agricultural resources. No new wastewater infrastructure would be constructed or operated; therefore, there would be no effects on Important Farmland, lands zoned for agricultural uses, or Williamson Act contracts.

Air Quality

This alternative would have no conflicts with applicable air quality plans, violation of air quality standards, and cumulatively considerable net increases in criteria pollutants. No new wastewater infrastructure would be constructed or operated; therefore, there would be no new emissions of criteria air pollutants or toxic air contaminants. However, existing odor issues at the Sutter Plant and the Beard Park Siphon would not be addressed and may worsen without implementation of the Proposed Program.

Biological Resources

This alternative would have no impacts on biological resources from construction or operation of new wastewater infrastructure. However, the existing issues with the River Trunk (e.g., degradation of the pipeline, erosion of surrounding riverbank) and system capacity issues would not be addressed, leading to potential releases of sewage during overflow events, which could adversely affect/impact aquatic species in the Tuolumne River or other biological resources.

Cultural, Paleontological, and Tribal Cultural Resources

This alternative would have no impacts on cultural, paleontological, and tribal cultural resources due to trenching and ground excavation for installation of new wastewater infrastructure.

Geology, Soils, and Seismicity

This alternative would have no impacts related to geology, soils, and seismicity. No new pump stations, pipelines, or treatment plant improvements would be included so there is no potential for facilities to be constructed on unstable or expansive soils, such as to expose people or structures to substantial risks.

Greenhouse Gas Emissions and Energy Resources

This alternative would result in no new emissions of greenhouse gases, as no construction equipment would be operated to install new facilities, and there would be no long-term operation of new pump stations or treatment plant facilities. Greenhouse gas emissions and energy demand of the City's wastewater infrastructure would be similar to existing conditions.

Hazards and Hazardous Materials

This alternative would have no impacts related to routine transport, use, or disposal of hazardous materials; upset and accident conditions; interference with an emergency response plan, or exposure to wildfire.

Hydrology and Water Quality

This alternative would have no impacts related to violation of water quality standards, drainage patterns, groundwater recharge, siltation, runoff, and flooding directly caused by installation of Program facilities. No construction equipment would be operated and no ground disturbance would occur, so there would be no potential for spills of hazardous materials contained in construction or discharges of sediment-laden stormwater runoff from construction sites. However, as mentioned above, the No Program Alternative would not address existing deficiencies in the City's wastewater collection and treatment systems, which may lead to sanitary sewer overflows or releases of sewage from deteriorating infrastructure (e.g., River Trunk). Such occurrences could result in degradation of water quality in the Tuolumne River and violation of water quality standards. Additionally, the Sutter Plant treatment facilities would remain in the 100-year floodplain without adequate flood-proofing; as a result, these facilities could be subject to damage during a 100-year flood event and sewage also could be released to the environment during such an event.

Land Use and Planning

This alternative would have no impacts related to land use and planning. It is assumed that the City would not approve development which would result in demand for wastewater service that cannot be met under the No Program Alternative. As such, this alternative may impede attainment of the City's land use plans and policies which rely upon wastewater service capacity that would be provided by the Proposed Program.

Noise and Vibration

This alternative would have no impacts related to increases in ambient noise levels, groundborne noise or vibration levels, and other noise and vibration impacts. No construction equipment would be operated and no long-term operation of pump stations, lift stations or other infrastructure associated with the Proposed Program would occur. Thus, no sensitive receptors would be affected by new sources of noise or vibration.

Population and Housing

This alternative would not result in long-term inducement of substantial population growth or secondary impacts from growth. No new wastewater collection and treatment infrastructure would be constructed, so new development and population growth within the City will occur only to the extent that the City's existing collection and wastewater treatment systems' capacity can support it.

Transportation and Traffic

This alternative would have no impacts on transportation and traffic. No trenching for installation of new or rehabilitated sewer pipelines or hauling of waste spoils and construction materials would occur; therefore, there would be no short-term effects on traffic conditions in the area of proposed WWMP components. Also, to the extent that population growth and development is inhibited due to lack of wastewater system capacity, long-term increases in vehicle trips and congestion may not occur.

Utilities and Service Systems

This alternative would have no impacts related to solid waste disposal, and need for additional permitted landfill capacity. No demolition of structures or excavation of material would occur; therefore, there would be no need to dispose debris at the landfill. However, as described previously, the No Program Alternative could over time exacerbate the existing need for additional wastewater collection and treatment capacity in the City.

19.4.2 Alternative 2: Deferred Implementation Alternative

Characteristics of this Alternative

Under the Deferred Implementation Alternative, the schedule for construction of some program-level WWMP components would be deferred by 5 years, compared to the schedule for implementation of the Proposed Program. The City would revisit the list of CIPs and prioritize those that should be constructed in the near-term and determine which could be delayed by up to 5 years. Under this alternative, new wastewater collection and treatment infrastructure would be constructed or upgraded as indicated for the Proposed Program, but some CIPs would be implemented at a later date. Construction or upgrades of pump stations, lift stations, sewer pipelines, and wastewater treatment facilities would continue, but at a slower pace. Maintenance of existing collection and wastewater treatment facilities would continue, but some shortfalls in the City's collection system and treatment capacity or pressure flows may result from the delay in implementation of identified CIPs. In addition, development in the City's sewer service area may be delayed to the extent that construction of necessary infrastructure to support such development would be delayed under this alternative.

This alternative would delay the City's ability to meet Program objectives and thus would not fully meet objectives aimed to provide sewer infrastructure in a timely and cost-effective manner to serve new and existing development and provide adequate wastewater infrastructures and services to serve new growth within the General Plan and City's SOI.

Impact Analysis

Aesthetics

This alternative would have similar aesthetics impacts as the Proposed Program, but these impacts would occur later in time. Over the long term, the alternative would result in the same impacts on existing visual character and quality due to the new wastewater treatment infrastructure, although the intensity of impacts may be reduced by spreading them out over time.

Agricultural Resources

This alternative would have similar agriculture and forestry impacts as the Proposed Program, but these impacts would occur later in time. Like the Proposed Program, this alternative would result in direct conversion of Important Farmland associated with the new facilities at the Jennings Plant and other Program facilities.

Air Quality

This alternative would have similar air quality impacts as the Proposed Program, but these impacts would occur later in time. The same conflicts with applicable air quality plans, violation of air quality standards, and cumulatively considerable net increases in criteria pollutants may occur from operation of construction equipment and Program facilities. However, impacts could be increased or reduced by shifting them out further in time, either due to shifting standards, changes in air quality conditions, or use of improved equipment/ technology with lower emissions, and the intensity of impacts may be reduced by spreading them out over time.

Biological Resources

This alternative would have similar biological resources impacts as the Proposed Program, but these impacts would occur later in time. Extending the timeframe for implementation of CIPs could allow additional flexibility in timing for site-specific improvements that would allow avoidance of special-status species.

Cultural, Paleontological, and Tribal Cultural Resources

This alternative would have similar cultural, paleontological, and tribal cultural resources impacts as the Proposed Program, but these impacts would occur later in time. The alternative would involve the same trenching and ground excavation for installation of improvements, which may encounter unknown buried artifacts and other cultural resources.

Geology, Soils, and Seismicity

This alternative would have similar impacts related to geology, soils, and seismicity as the Proposed Program, but these impacts would occur later in time. The alternative would involve construction of the same pipelines, pump stations, and treatment facilities and

compliance with the City's Standard Specifications would prevent substantial impacts related to location on unstable or expansive soils from occurring.

Greenhouse Gas Emissions and Energy Resources

This alternative would have similar greenhouse gas emissions impacts as the Proposed Program, but these impacts would occur later in time. The alternative would use the same construction equipment to install proposed facilities and the same Program facilities may be operated following construction, which could emit greenhouse gases. However, increased fuel efficiency and other standards to reduce GHG emissions are expected to occur over time; therefore, delaying construction and operation of various Program components could result in use of newer technology with lower emissions, which could have the result of reducing impacts overall.

Hazards and Hazardous Materials

This alternative would have similar hazards and hazardous materials impacts as the Proposed Program, but these impacts would occur later in time. The alternative would involve use of the same construction equipment containing hazardous materials installation of emergency generators that would store fuel, which could create opportunities for accidental releases of hazardous materials to the environment, although the intensity of impacts may be reduced by spreading them out over time.

Hydrology and Water Quality

This alternative would have similar hydrology and water quality impacts as the Proposed Program, but these impacts would occur later in time. Like the Proposed Program, this alternative could result in discharges of stormwater from construction sites or frac-outs during trenchless pipeline installation techniques, although the intensity of impacts may be reduced by spreading them out over time.

Land Use and Planning

By delaying construction of facilities, this alternative may not fully meet the City's land use plans, which could result in greater impacts than under the Proposed Program.

Noise and Vibration

This alternative would have similar noise and vibration impacts as the Proposed Program, but these impacts would occur later in time. The alternative would involve use of the same construction equipment and operation of the same Program facilities, which would generate the same levels of noise and vibration in the same locations, but these effects would occur on an extended timeline, which may reduce the intensity of impacts.

Population and Housing

This alternative would have similar population and housing impacts as the Proposed Program, but these impacts would occur on an extended timeline. The alternative would result in the same long-term inducement of substantial population growth, and related secondary impacts, but these effects would be delayed as growth may be impeded by the lack of adequate wastewater service capacity.

Transportation and Traffic

This alternative would have similar transportation and traffic impacts as the Proposed Program, but these impacts would occur at a later time. The alternative would result in the same temporary congestion caused by construction traffic and lane closures during installation of CIPs, although the intensity of impacts may be reduced by spreading them out over time.

Utilities and Service Systems

This alternative would have similar utilities and service systems impacts as the Proposed Program, but these impacts would occur later in time. This alternative would involve the same hauling of excavated materials spoils and construction debris from demolished structures to the landfill, which could adversely affect landfill capacity, although the intensity of impacts may be reduced by spreading them out over time.

19.4.3 Alternative 3: Primary Treatment and Solids Handling Facilities to the North of Jennings Plant Alternative

Characteristics of this Alternative

This alternative was evaluated in the City's Wastewater Treatment Master Plan (Carollo Engineers 2016) and entails purchasing of approximately 50 acres of land to the north of the Jennings Plant. Instead of constructing the new primary treatment facilities east of the BNR/tertiary treatment facilities, as proposed under the Proposed Program, these facilities would be constructed on purchased land to the north of the Jennings Plant along the alignment of the two existing outfall pipelines (see **Figure 19-1**).

Compared to the Proposed Program, this alternative would use a less complex yard piping arrangement because the new primary treatment and solids handling facilities would be sited adjacent to the existing outfall pipelines and could more directly tie into the secondary treatment facilities. All other WWMP components, including collection system CIPs and CIPs planned at the Sutter Plant, would be constructed under this alternative. This alternative would meet all of the Program objectives.

Impact Analysis

Aesthetics

This alternative would have similar aesthetics impacts as the Proposed Program. The Jennings Plant is not in a scenic vista, and the alternative site location would not substantially change the effects on scenic views or the visual quality or character of the site compared to the site proposed under the Proposed Program.

Agricultural Resources

As shown on Figure 19-1, this alternative would involve development of primary treatment and solids handling facilities on agricultural land. This land is designated as Important Farmland; therefore, this alternative would result in a larger amount of permanent loss of Farmland than under the Proposed Program, and mitigation would be insufficient to reduce the impact to less than significant.

Air Quality

This alternative could have somewhat reduced criteria air pollutant emissions compared to the Proposed Program due to the simpler piping scheme. As described above, this alternative would site the primary treatment and solids handling facilities along the alignment of the existing outfall pipelines north of the Jennings Plant, which would allow for a less complex piping arrangement. This simpler arrangement could result in less use of construction equipment and materials during construction, which could lead to fewer emissions. In the context of the entire Proposed Program, however, this would be a small reduction and would be unlikely to reduce emissions below significance thresholds.

Biological Resources

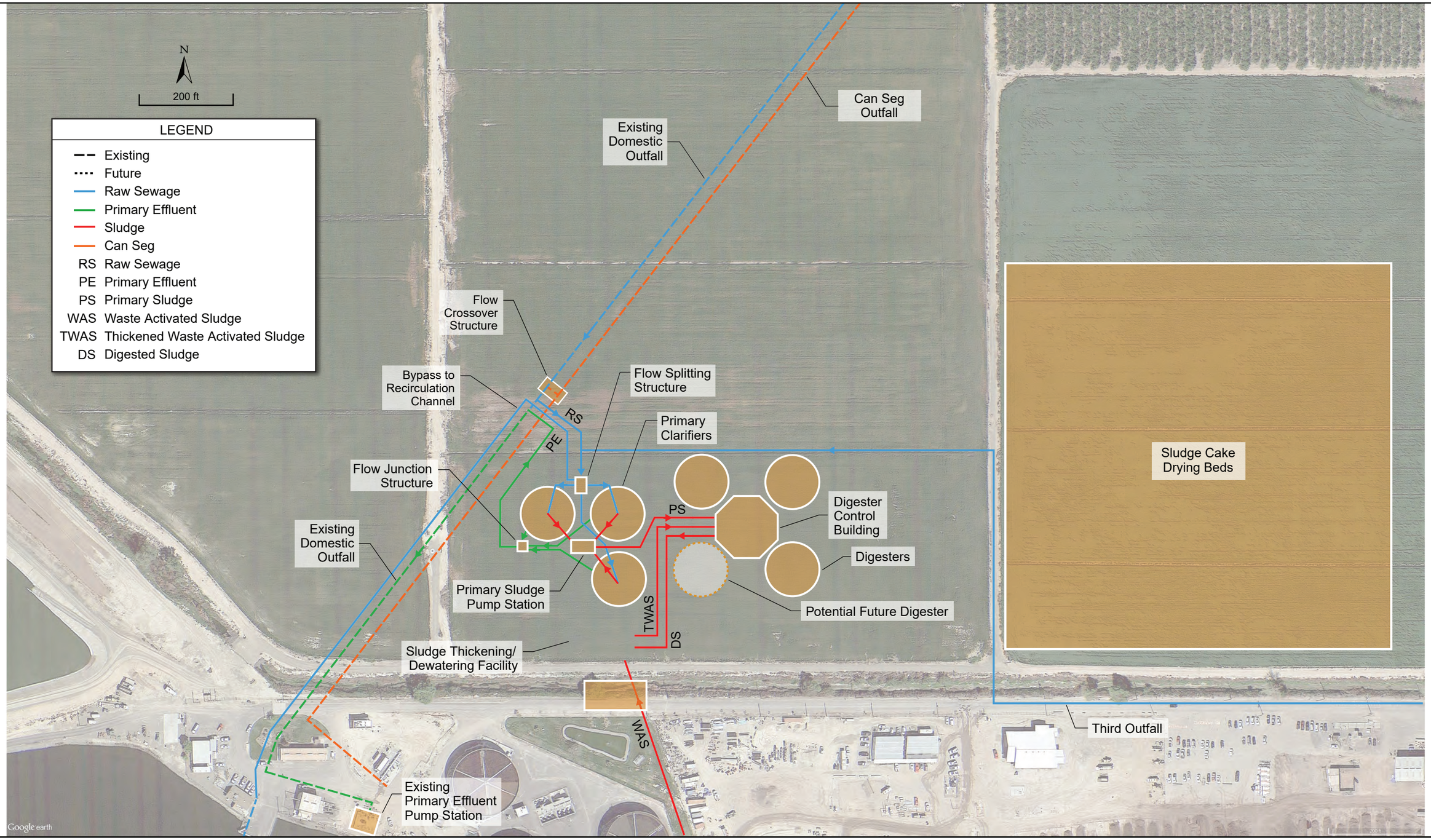
This alternative would have similar biological resources impacts to those of the Proposed Program. The alternative site location for the primary treatment and solids handling facilities at the Jennings Plant is adjacent to the proposed site (to the north), and has similar land cover/habitat characteristics. Special-status plants or animals would not be more likely to occur at this alternative site location than at the proposed site. Therefore, the impacts of this alternative would be comparable to those of the Proposed Program.

Cultural, Paleontological, and Tribal Cultural Resources

This alternative would have similar cultural, paleontological, and tribal cultural resources impacts to those of the Proposed Program. This alternative would involve similar ground disturbing activities to install the Jennings Plant primary treatment and solids handling facilities, which could expose unknown buried cultural (including tribal) or paleontological resources, but these possible effects would occur at an alternate site to the north. Given the less complex piping scheme under this alternative and location of facilities nearer to the existing pipeline outfalls, it is possible that this alternative may reduce the amount of trenching that would be required for pipeline installation, and thus reduce potential for discovery of archaeological resources. This difference would be minimal, however, and overall the alternative would have similar impacts to those of the Proposed Program.

Geology, Soils, and Seismicity

This alternative would have similar geology, soils, and seismicity impacts to those of the Proposed Program. Nothing about the alternate site (see Figure 19-1), which is currently an agricultural field, suggests that it would be more susceptible to geologic hazards, such as unstable or expansive soils, or landslides. Additionally, as described for the Proposed Program, the City would be required under its Standard Specifications to prepare a soil report and abide by the recommendations of a licensed geotechnical engineer prior to and during construction of the facilities. As a result, this impact would be less than significant, similar to the Proposed Program.



Source: Carollo 2016

Figure 19-1.
Site Layout for Alternative 3

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto
Wastewater Master Plan EIR

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Greenhouse Gas Emissions and Energy Resources

This alternative would have similar, if not slightly less severe, greenhouse gas emission impacts to those of the Proposed Program. As described above, under "Air Quality," owing to the less complex piping arrangement and location of facilities closer to the existing outfall pipelines, this alternative may require less trenching and use of construction equipment, potentially resulting in fewer construction emissions such as greenhouse gases. This difference would be relatively minimal, however, especially with respect to the overall Program, and would be unlikely to reduce greenhouse gas emissions below applicable significance thresholds.

Hazards and Hazardous Materials

This alternative would have similar hazards and hazardous materials impacts to those of the Proposed Program. The alternative would involve generally the same construction methods to install the primary treatment and solids handling facilities, although the less complex piping arrangement for this alternative could result in less use of construction equipment and thereby reduce potential for spills of hazardous materials contained in equipment. This difference would be minor, however, and impacts would generally be similar to those for the Proposed Program.

Hydrology and Water Quality

This alternative would have similar hydrology and water quality impacts to those of the Proposed Program. The alternative would involve the same ground-disturbing construction methods to install the primary treatment and solids handling facilities, which could discharge stormwater from the construction site causing water quality impacts. As for the Proposed Program, these impacts would be reduced to less than significant with adherence to the City's Standard Specifications.

Land Use and Planning

This alternative may introduce conflicts with existing zoning, as the parcel on which the alternative site is located is zoned for agriculture by Stanislaus County. The facilities may be subject to a conditional use permit, but there is greater potential for conflict than for the Proposed Program; under the Proposed Program, the primary treatment and solids handling facilities would be located on City-owned land.

Noise and Vibration

This alternative would have similar noise and vibration impacts to those of the Proposed Program. The alternative would use the same construction equipment to install the primary treatment and solids handling facilities, and the same facilities would be operated following construction, all of which could generate noise and vibration. As discussed under previous resource topic headings, the less complex piping arrangement associated with this alternative may decrease to some degree the amount of construction activity, thereby decreasing noise, but this would not be a significant difference. In general, the area surrounding the Jennings Plant is relatively undeveloped and few, if any, sensitive receptors exist in the area.

Population and Housing

This alternative would have the same impacts related to population and housing as the Proposed Program. This alternative would provide the same amount of additional capacity at the Jennings Plant as the proposed primary treatment and solids handling facilities, and thus would accommodate population growth to the same degree.

Transportation and Traffic

This alternative would have similar transportation and traffic impacts to those of the Proposed Program. The alternative site is located adjacent to the proposed site and is not next to or near any public roadways. Construction vehicles and haul trucks would use the same routes to access the alternative site as they would the proposed site, and there would be no new trenching within a public roadway. Therefore, this alternative would have the same impacts as the Proposed Program.

Utilities and Service Systems

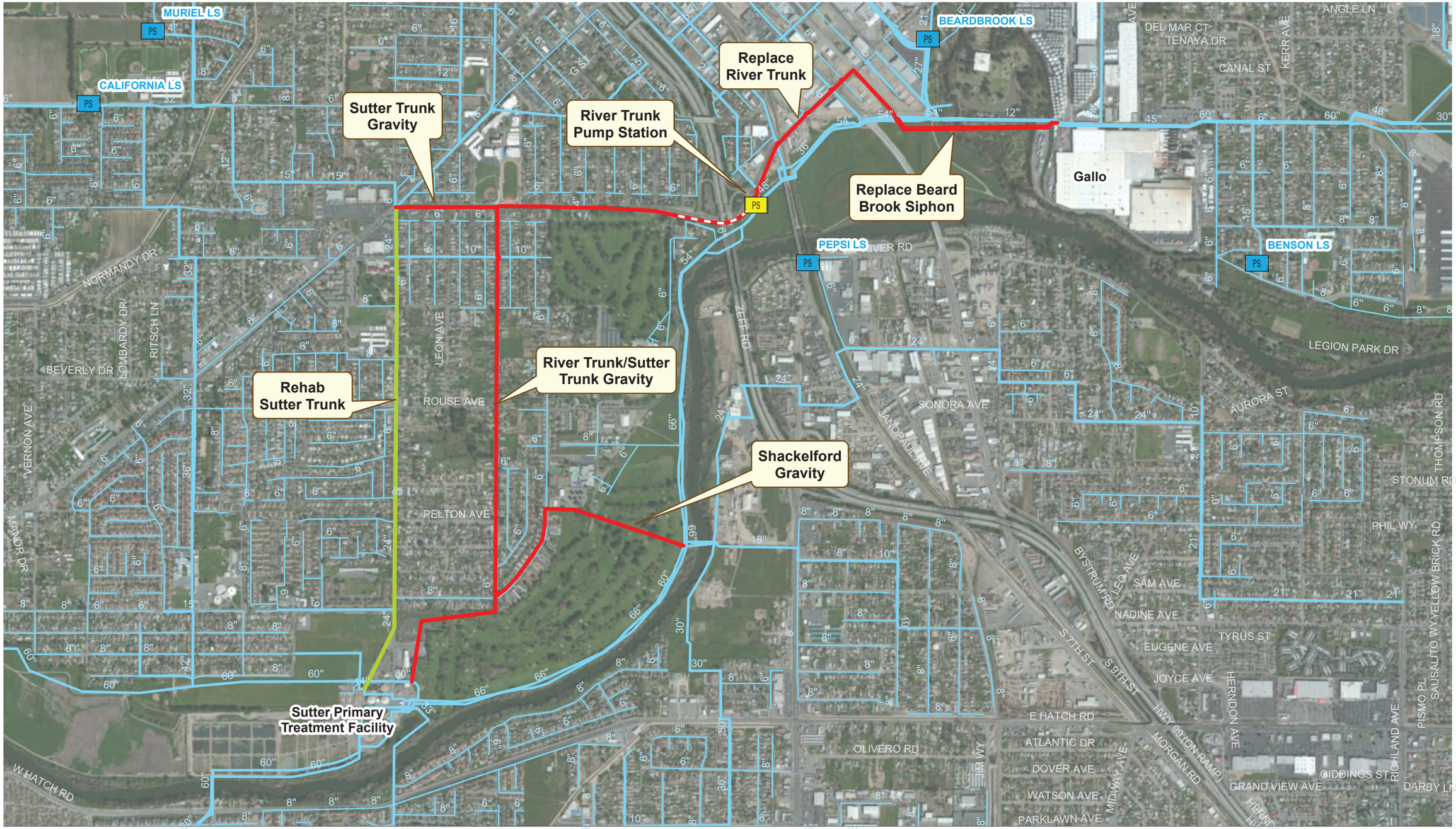
This alternative would have similar utilities and services impacts compared to the Proposed Program. This alternative may use slightly less materials and require slightly less construction activity due to the simpler piping arrangement, but this difference would not be substantial and overall the alternative would have similar energy demands and may dispose of similar amounts of material at the landfill.

19.4.4 Alternative 4: River Trunk Realignment Project Design Alternative 4A

Characteristics of this Alternative

Carollo Engineers evaluated a number of design alternatives to the River Trunk Realignment Project (Carollo Engineers 2015). Alternative 4A from the Preliminary Design Report (referred to as "Alternative 4" hereafter) is carried forward for analysis in this EIR because it would achieve most of the Program objectives and would reduce one or more significant environmental impacts. Alternative 4 would follow largely the same alignment as the proposed River Trunk Realignment Project, but would not involve construction of the Shackelford Pump Station. Rather, the existing pipeline that would otherwise tie into the Shackelford Pump Station under the Proposed Program, would tie into existing sewer lines that cross the Tuolumne River. Additionally, Alternative 4 would include rehabilitation of the Sutter Trunk within Sutter Avenue, and also would involve constructing the River Trunk Pump Station at a slightly different location than under the Proposed Program, between Highway 99 and 7th Street. **Figure 19-2** shows the proposed alignment and components of the River Trunk Realignment Project Design Alternative 4A.

Compared to the Proposed Program, this alternative would involve less overall construction by rehabilitating the Sutter Trunk instead of constructing the Shackelford Pump Station. The River Trunk Pump Station would also be constructed in a slightly different location.



Source: Carollo 2015

Prepared by: Horizon Water and Environment

Legend

- Proposed Gravity Sewer
- Proposed Force Main
- Proposed Rehabilitation
- Other Pipelines
  - 8" and Smaller
  - Greater than 8"
- Proposed Junction Structure
- Proposed Lift Station (PS)
- Other Lift Stations (PS)

N

1,000 500 0 1,000

Feet

Figure 19-2.
Alternative 4 Alignment

City of Modesto
Wastewater Master Plan EIR

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Impact Analysis

Aesthetics

This alternative would not have substantially different aesthetics impacts than the alignment included in the Proposed Program. Placing the River Trunk Pump Station to the east of 7th Street could make this facility more visible from Highway 99, potentially degrading visual quality of views from this location during the construction period. As Highway 99 is not a scenic highway and because views would be fleeting, constructing the pump station at the 7th Street location would not result in a significant impact on sensitive viewers. For similar reasons, following construction, views would not be substantially affected by the pump station. Not constructing the Shackelford Pump Station on the southeast bank of the Tuolumne River could reduce aesthetic impacts in this area, but there are relatively few sensitive receptors in the area of the proposed pump station that are likely to be affected by the project as described under the Proposed Program. Similar to the River Trunk Realignment Project as described in Chapter 2, *Program Description*, most of the aesthetics impacts of this alternative would be temporary during construction, and views would remain relatively unchanged following construction.

Agricultural Resources

Like the Proposed Program, this alternative would have no impacts on agricultural resources, as all of the land on which components would be constructed is either urban/built-up land or vacant land not being used for agriculture. None of the land is designated Farmland.

Air Quality

This alternative could have somewhat reduced criteria air pollutant emissions compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station would avoid a substantial amount of emissions associated with construction equipment and materials, as well as operation of the pump station over the long term. However, rehabilitation of the Sutter Trunk under this alternative would introduce emissions that would not otherwise occur under the River Trunk Realignment Project. Such rehabilitation would require use of construction equipment to expose the existing pipeline and implement rehabilitation techniques (see Chapter 2, *Program Description)*. It is believed that the reduction in emissions from not constructing the pump station would more than offset the increase in emissions from the additional component of rehabilitating the Sutter Trunk, leading to a modest overall reduction in emissions.

Biological Resources

This alternative would have slightly reduced biological resources impacts compared to the Proposed Program owing to the avoidance of the need to construct the Shackelford Pump Station. Not constructing this pump station would avoid possible impacts on habitat from ground disturbance and construction activity, as well as reduce potential for adverse biological resources impacts from discharges of stormwater from the construction site that could occur under the Proposed Project. The alternate location of the River Trunk Pump Station would not likely have a substantial effect on biological resources, and the rehabilitation of the Sutter Trunk would not introduce substantial new impacts, as this work would occur within an existing street. Thus, the alternative would have an overall reduced

impact on biological resources compared to the River Trunk Realignment Project as described in Chapter 2 and the Proposed Program.

Cultural, Paleontological, and Tribal Cultural Resources

Not constructing the Shackelford Pump Station under this alternative also would reduce potential for cultural, paleontological, and tribal cultural resources impacts, as there would be less ground disturbance/excavation. Under the River Trunk Realignment Project as described in Chapter 2, which would construct a Shackelford Pump Station, there would be greater potential to encounter buried, unknown cultural resources (including tribal cultural resources), potentially resulting in adverse impacts. The alternate location of the River Trunk Pump Station under this alternative would not substantially change potential for cultural resources impacts compared to the River Trunk Realignment Project as described in Chapter 2. The rehabilitation of the Sutter Trunk also would have low likelihood to result in cultural resources impacts, as it would involve relatively minimal ground disturbance within an existing street. Nonetheless, the potential to encounter unknown cultural resources during Sutter Trunk rehabilitation activities still exist and implementation of mitigation measures described in Chapter 8, *Cultural Resources,* would still apply. As such, overall, this alternative would somewhat reduce cultural, paleontological, and tribal cultural resources impacts compared to the River Trunk Project as described in Chapter 2, and the overall Proposed Program.

Geology, Soils, and Seismicity

This alternative would have somewhat reduced geology, soils, and seismicity impacts compared to the River Trunk Realignment Project as described in Chapter 2. By not constructing the Shackelford Pump Station, this alternative would create less potential for the project to construct facilities on unstable or expansive soils, although this impact would be less than significant for the River Trunk Project covered in the WWMP due to compliance with the City's Standard Specifications including preparation of a soils report. Constructing the River Trunk Pump Station in an alternate location would not substantially change geology, soils, and seismicity impacts, and rehabilitation of the Sutter Trunk would not result in substantial impacts because it would involve work on existing facilities within a street. Therefore, this alternative would reduce potential for geology, soils, and seismicity impacts to some degree compared to the Proposed Program.

Greenhouse Gas Emissions and Energy Resources

For similar reasons as described under "Air Quality" above, this alternative would likely reduce greenhouse gas emissions to some degree compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station would reduce greenhouse gas emissions associated with operation of construction equipment, haul-truck and employee vehicle trips, and operation of the pump station facilities following construction. Locating the River Trunk Pump Station in an alternate location would not substantially change the level of greenhouse gas emissions. Rehabilitating the Sutter Trunk would involve operation of construction equipment that would emit greenhouse gases, but these increased emissions would likely be outweighed by the reductions associated with the Shackelford Pump Station.

Hazards and Hazardous Materials

This alternative would have somewhat reduced potential for hazards and hazardous materials impacts compared to the River Trunk Realignment Project as described in Chapter 2 due to not constructing the Shackelford Pump Station. The alternative would avoid potential for construction equipment used to construct the Shackelford Pump Station to be improperly stored or accidentally release hazardous materials to the environment, although this impact would be less than significant under the River Trunk Realignment Project as described in Chapter 2. Constructing the River Trunk Pump Station at an alternate location would not substantially change potential for hazardous materials impacts. Rehabilitation of the Sutter Trunk could increase impacts from use of hazardous materials in construction equipment, emissions of TACs from equipment, but it is believed that these increased impacts would be outweighed by the reductions from not constructing the Shackelford Pump Station.

Hydrology and Water Quality

This alternative would have somewhat reduced potential for hydrology and water quality impacts compared to the River Trunk Realignment Project as described in Chapter 2. By not constructing the Shackelford Pump Station, this alternative would avoid potential discharges of contaminants from the pump station construction site, which would be located on the bank of the Tuolumne River, as well as accidental spills of hazardous materials contained in construction equipment. The alternate location of the River Trunk Pump Station and rehabilitation of the Sutter Trunk under this alternative would not introduce new significant impacts. Therefore, overall, this alternative would have somewhat less hydrology and water quality impacts compared to the River Trunk Realignment Project as described in Chapter 2 and the overall Program.

Land Use and Planning

This alternative would provide the same level of capacity and address existing deficiencies in the City's wastewater system. As such, it would provide for growth and development in accordance with the City's General Plan and would not inhibit development of land use planning/policies. This alternative would have the same impacts related to land use and planning as the River Trunk Realignment Project as described in Chapter 2 and the overall Program.

Noise and Vibration

This alternative would have somewhat reduced noise and vibration impacts compared to the River Trunk Realignment Project as described in Chapter 2. The alternative would not construct the Shackelford Pump Station, and therefore would avoid noise and vibration at this location associated with use of heavy construction equipment. Operational noise associated with this pump station also would be avoided, but these impacts would be less than significant for the River Trunk Realignment Project as described in Chapter 2. The alternate location of the River Trunk Pump Station would not substantially change noise impacts, but would change the location of the impacts. The rehabilitation of the Sutter Trunk could introduce some new noise impacts from operation of construction equipment to accomplish this task, but it is believed these increased impacts would be outweighed by the reductions from Shackelford Pump Station. Overall, this alternative would have somewhat less noise and vibration impacts compared to the River Trunk Realignment Project as described in Chapter 2 and the overall Program.

Population and Housing

This alternative would provide the same level of capacity and address existing deficiencies in the City's wastewater system. As such, it would provide for population growth and development in accordance with the City's General Plan to a similar degree and extent as the River Trunk Realignment Project as described in Chapter 2. This alternative would have the same impacts related to population and housing as the River Trunk Realignment Project covered in Chapter 2.

Transportation and Traffic

This alternative would have somewhat less transportation and traffic impacts to those of the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station would avoid haul-truck and employee vehicle trips associated with construction of this pump station, reducing potential congestion on streets in this area. Rehabilitation of the Sutter Trunk under this alternative would introduce new transportation and traffic impacts, as these activities may involve operation of construction equipment on Sutter Avenue or temporary closure of one lane of traffic. Overall, the reduction in traffic impacts attributable to not constructing the Shackelford Pump Station would outweigh the increased impacts caused by the Sutter Trunk rehabilitation. As a result, this alternative would have somewhat less transportation and traffic impacts compared to the Proposed Project.

Utilities and Service Systems

This alternative would have roughly similar utilities and services impacts compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station could lead to less disposal of construction debris at a landfill, but rehabilitation of the Sutter Trunk may generate some debris that would require disposal. Any difference with respect to the Proposed Project would have a minimal effect on existing landfill capacity. Therefore, this alternative would have the same impacts on utilities and service systems as the River Trunk Realignment Project as described in Chapter 2.

19.4.5 Alternative 5: River Trunk Realignment Project Design Alternative 1

Characteristics of this Alternative

This alternative was based on the recommendations documented in the 2007 Wastewater Master Plan. The alternative would replace the Beard Brook Siphon with an 1,800-linear-foot, triple barrel inverted siphon. Capacity deficiencies in the River Trunk would be mitigated by constructing a peak-flow diversion structure that diverts flows to the Cannery Segregation Line (CSL) during wet weather events, such that capacity in the CSL can be used to convey peak domestic wastewater flows. A second diversion structure would be constructed upstream of the Sutter Plant to divert the flows back to the River Trunk for primary treatment. The CSL would be flushed after the diversions multiple times prior to returning to normal canning season operation. Additionally, the alternative would mitigate capacity deficiencies in the Sutter Trunk by replacing the existing sewer with a new 24-inch diameter gravity sewer. The existing River Trunk also would be rehabilitated to correct its deteriorating condition. **Figure 19-3** shows the alignment and components of the River Trunk Realignment Project Design Alternative 1.

While this alternative would meet many of the Program objectives by addressing existing capacity issues and repairing aging wastewater infrastructure, it was identified as not meeting many of the important design goals (Carollo Engineers 2015). Specifically, the alternative may create treatment plant impacts from comingled flows, may create or fail to address CSL peak-flow limitations, and would not correct existing problems with operations and maintenance access and vulnerability issues of the River Trunk and CSL (e.g., erosion) by being located along the Tuolumne River.

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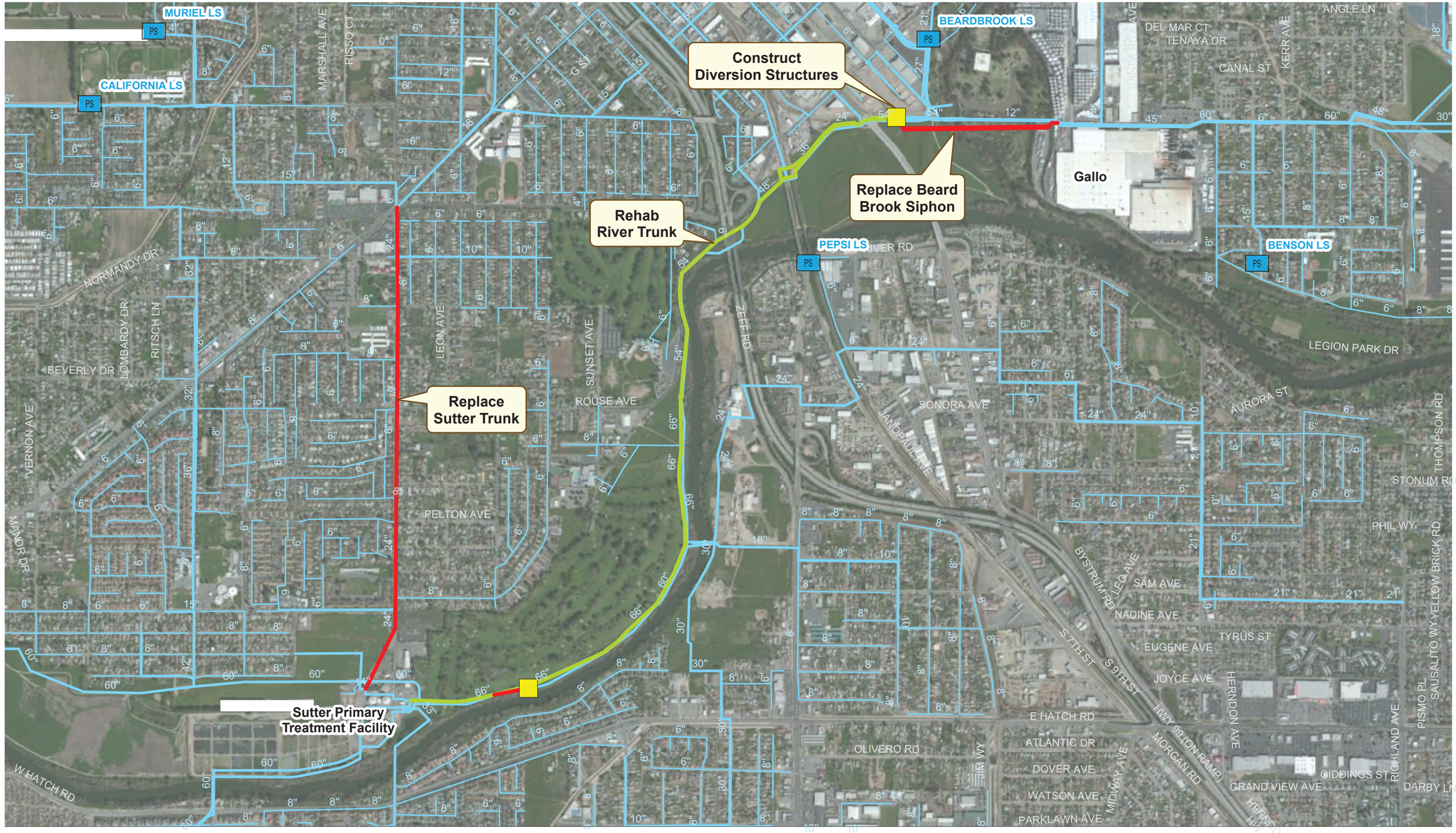

Source: Carollo 2015

Prepared by: Horizon Water and Environment

Legend

- Proposed Gravity Sewer
- Proposed Force Main
- Proposed Rehabilitation
- Other Pipelines
  - 8" and Smaller
  - Greater than 8"
- Proposed Diversion Structure
- Proposed Lift Station
- Other Lift Stations

N

1,000 500 0 1,000

Feet

Figure 19-3.
Alternative 5 Alignment

City of Modesto
Wastewater Master Plan EIR

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Impact Analysis

Aesthetics

This alternative would have less aesthetics impacts than the River Trunk Realignment Project as described in Chapter 2. By not constructing the River Trunk Pump Station and Shackelford Pump Station, or replacing sewer lines along Tuolumne Boulevard, Colorado Avenue, and other streets, this alternative would avoid impacts on views and visual quality during construction of these components. Rehabilitation of the River Trunk and construction of the diversion structures would likely be less involved and resulting in less aesthetics impacts than the River Trunk Realignment Project described in Chapter 2 and the overall Program.

Agricultural Resources

Like the Proposed Program, this alternative would have no impacts on agricultural resources, as all of the land on which components would be constructed is either urban/built-up land or vacant land not being used for agriculture. None of the land is designated Farmland.

Air Quality

This alternative would result in less criteria air pollutant emissions compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station or River Trunk Pump Station would avoid a substantial amount of emissions associated with construction equipment and materials, as well as operation of the pump station over the long term. Not replacing sewers in Tuolumne Boulevard, Colorado Avenue, and other streets also would avoid emissions, and rehabilitation of the River Trunk and construction of diversion control structures would involve less construction activity than River Trunk Realignment Project components as described in Chapter 2. Installation of the new Sutter Trunk would introduce new emissions from operation of construction equipment, but these emissions would be off-set by reductions elsewhere. Overall, this alternative would have less air quality impacts compared to the River Trunk Realignment Project described in Chapter 2 and the overall Program.

Biological Resources

This alternative would have reduced biological resources impacts compared to the Proposed Program owing to the avoidance of the need to construct the Shackelford Pump Station and River Trunk Pump Station. Not constructing these pump station would avoid possible impacts on habitat from ground disturbance and construction activity, as well as reduce potential for adverse biological resources impacts from discharges of stormwater from the construction site that could occur under the River Trunk Realignment Project described in Chapter 2. Rehabilitation of the River Trunk and construction of diversion control structures along the Tuolumne River could introduce new impacts to aquatic species and other biological resources in the riparian area, but these increased impacts would likely be outweighed by reductions due to not constructing the pump stations. The replaced Sutter Trunk would not introduce new substantial impacts because it would take place within an existing street. Overall, this alternative would have less biological resources impacts compared to the River Trunk Realignment Project as described in Chapter 2 and the overall Program.

Cultural, Paleontological, and Tribal Cultural Resources

Not constructing the Shackelford Pump Station or River Trunk Pump Station under this alternative also would reduce potential for cultural, paleontological, and tribal cultural resources impacts, as there would be less ground disturbance/excavation. Under the River Trunk Realignment Project as described in Chapter 2, which would construct these pump stations, there would be greater potential to encounter buried, unknown cultural resources (including tribal cultural resources), potentially resulting in adverse impacts. Rehabilitation of the River Trunk and installation of diversion control structures would likely not result in impacts because the activities would occur along the existing pipeline alignment. Overall, this alternative would have less cultural, paleontological, and tribal cultural resources impacts compared to the River Trunk Realignment Project as described in Chapter 2 and the overall Program.

Geology, Soils, and Seismicity

This alternative would have somewhat reduced geology, soils, and seismicity impacts compared to the River Trunk Realignment Project described in Chapter 2. By not constructing the Shackelford Pump Station and River Trunk Pump Station, this alternative would create less potential for the project to construct facilities on unstable or expansive soils (although this impact would be less than significant for the River Trunk Realignment Project described in Chapter 2 due to compliance with the City's Standard Specifications including preparation of a soils report). Rehabilitation of the River Trunk and replacement of the Sutter Trunk would not substantially change the level of geologic hazard these facilities might be exposed to in comparison to existing conditions. Therefore, this alternative would reduce potential for geology, soils, and seismicity impacts to some degree compared to the River Trunk Realignment Project as described in Chapter 2 and the overall Program.

Greenhouse Gas Emissions and Energy Resources

For similar reasons as described under "Air Quality" above, this alternative would reduce greenhouse gas emissions to some degree compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station would reduce greenhouse gas emissions associated with operation of construction equipment, haul-truck and employee vehicle trips, and operation of the pump station facilities following construction. Locating the River Trunk Pump Station in an alternate location would not substantially change the level of greenhouse gas emissions. Rehabilitating the Sutter Trunk would involve operation of construction equipment that would emit greenhouse gases, but it is believed these increased emissions would be outweighed by the reductions associated with the Shackelford Pump Station.

Hazards and Hazardous Materials

This alternative would involve less potential for hazards and hazardous materials impacts compared to the River Trunk Realignment Project as described in Chapter 2 due to not constructing the Shackelford Pump Station, River Trunk Pump Station, and replacement sewer lines along various streets. The alternative would avoid potential for construction equipment used to construct these facilities to be improperly stored or accidentally release hazardous materials to the environment, although this impact would be less than significant under the River Trunk Realignment Project as described in Chapter 2. Rehabilitation of the River Trunk along the bank of the Tuolumne River would introduce potential for impacts, but due to the reduced effort for this activity, it is believed that these new impacts would be

outweighed by the reductions in impacts described above. Overall, this alternative would have less hazards and hazardous materials impacts than the River Trunk Realignment Project as described in Chapter 2.

Hydrology and Water Quality

This alternative would have somewhat reduced potential for hydrology and water quality impacts compared to the River Trunk Realignment Project as described in Chapter 2. By not constructing the Shackelford Pump Station and River Trunk Pump Station, this alternative would avoid potential discharges of contaminants from the pump station construction sites, as well as accidental spills of hazardous materials contained in construction equipment. Rehabilitation of the River Trunk and installation of the diversion control structures would introduce potential for discharges of stormwater and contaminants to the Tuolumne River, but these impacts would likely not be severe as those impacts that would be avoided by not constructing the pump stations. Additionally, while the alternative would rehabilitate the River Trunk, it would not move the existing alignment of the River Trunk, leaving it potentially vulnerable to erosive high flows during a storm or flood event, although it is believed that the alternative would meet immediate concerns regarding rupture of the deteriorated existing pipeline resulting in discharges of sewage to the Tuolumne River. Overall, this alternative would have somewhat less hydrology and water quality impacts compared to the River Trunk Realignment Project as described in Chapter 2.

Land Use and Planning

This alternative would provide a similar level of capacity for domestic wastewater flows (albeit less capacity for Cannery Segregation flows) and address existing deficiencies in the City's wastewater system. As such, it would provide for growth and development in accordance with the City's General Plan and would not inhibit development of land use planning/policies. This alternative would have the same impacts related to land use and planning as the River Trunk Realignment Project as described in Chapter 2.

Noise and Vibration

This alternative would have reduced noise and vibration impacts compared to the River Trunk Realignment Project as described in Chapter 2. The alternative would not construct the Shackelford Pump Station or River Trunk Pump Station, or replacement sewer lines along Tuolumne Boulevard, Colorado Avenue, and other streets, and therefore would avoid noise and vibration impacts at these locations associated with use of heavy construction equipment. Operational noise associated with the pump stations also would be avoided, but these impacts would be less than significant for the River Trunk Realignment Project as described in Chapter 2. Rehabilitation of the River Trunk, construction of diversion structures, and replacement of the sewer line along Sutter Avenue would introduce new noise and vibration impacts at these locations, but it is believed that these increased impacts would be outweighed by reductions in impacts achieved elsewhere. Overall, this alternative would less noise and vibration impacts compared to the River Trunk Realignment Project as described in Chapter 2.

Population and Housing

This alternative would provide a similar level of capacity for domestic wastewater flows (albeit less capacity for Cannery Segregation flows) and address existing deficiencies in the City's wastewater system. As such, it would provide for population growth and development

in accordance with the City's General Plan to a similar degree and extent as the River Trunk Realignment Project as described in Chapter 2. This alternative would have the same impacts related to population and housing as the River Trunk Realignment Project as described in Chapter 2.

Transportation and Traffic

This alternative would have less transportation and traffic impacts compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station and River Trunk Pump Station would avoid haul-truck and employee vehicle trips associated with construction of these pump stations, reducing potential congestion on streets in this area. Additionally, not installing new or replacement sewer lines along Tuolumne Boulevard, Colorado Avenue, and other streets would reduce traffic impacts associated with required lane closures during construction. Increased vehicle trips and congestion associated with rehabilitation of the River Trunk and replacement of the Sutter Trunk would be outweighed by reductions in impacts described above. Overall, this alternative would have less transportation and traffic impacts compared to the River Trunk Realignment Project as described in Chapter 2.

Utilities and Service Systems

This alternative would have roughly similar utilities and services impacts compared to the River Trunk Realignment Project as described in Chapter 2. Not constructing the Shackelford Pump Station and River Trunk Pump Station could lead to less disposal of construction debris at a landfill, but rehabilitation of the River Trunk and replacement of the Sutter Trunk may generate some debris that would require disposal. Any difference with respect to the River Trunk Realignment Project as described in Chapter 2 would have a minimal effect on existing landfill capacity. Therefore, this alternative would have the same impacts on utilities and service systems as the River Trunk Realignment Project as described in Chapter 2.

19.4.6 Comparison of Alternatives

Table 19-1, at the end of this chapter, compares the various alternatives considered in this analysis to the Proposed Program and River Trunk Realignment Project.

19.4.7 Alternatives Considered and Eliminated

The following alternatives were considered, but ultimately eliminated from further analysis for one or more of the following reasons: (1) they would not sufficiently meet most of the Proposed Program objectives; (2) they were determined to be infeasible; or (3) they would not avoid or substantially lessen one or more significant impacts of the Proposed Program.

- **River Trunk Alternative Construction Methods.** Instead of utilizing open trench methods to install the gravity pipelines along Colorado Boulevard, this alternative would employ trenchless methods in effort to reduce community impacts such as traffic disruption and congestion, noise and pollutant emissions. During the planning phase, this alternative construction method was eliminated from further consideration due to the high costs associated with the trenchless methods (an increase in cost of 50% or more), which would render the alternative economically infeasible.

- **Secondary/Cannery Segregation Treatment Alternatives.** As part of WWMP planning process, the City evaluated several alternatives to accommodate an anticipated 5 mgd of additional cannery segregation flows. Such alternatives were evaluated against the proposed CIPs described in Chapter 2 (see JP-3.1, JP-3.2, JP-3.3, JP-3.4, and JP-3.5), which include upgrading the existing secondary treatment infrastructure in order to accommodate additional cannery segregation flows. As described in Chapter 2, Section 2.5.3, the City plans to install new aerators in the recirculation channel, install new chemical feed pumps and storage tanks, construct a berm in the effluent channel to keep effluent from designated domestic pond (Facultative Treatment Pond No. 3) separate from the Cannery Segregation ponds (Facultative Treatment Ponds No. 1 and 2), dredge the digestion pits of the facultative ponds, and install new aerators in the facultative ponds.

Alternative processes considered relative to the CIPs included in the Proposed Program involved:

- Option 1. Constructing dedicated Cannery Segregation treatment facilities,
- Option 2. Converting Facultative Pond No. 1 to an anaerobic pond which would require construction of new methane gas system facilities
- Option 3. Expanding the City's agricultural land application area to avoid the need for treating additional cannery segregation flows.

The latter option would have required acquisition of an additional 619 acres of agricultural land and was ultimately eliminated due to the high cost of land. Due to feasibility constraints, the City eliminated the other two treatment alternatives. For example, the first option would have required use of some existing Ranch lands as additional space would be needed to construct dedicated Cannery Segregation facilities, and from an operations standpoint, it would require additional staff attention. The second option would require more frequent removal of digested solids, pond liner, and cover.

In addition, neither of the secondary/cannery segregation treatment options would avoid or substantially lessen any of the Proposed Program impacts. Therefore, this alternative was eliminated from further consideration.

19.4.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Of the alternatives evaluated in detail above, the No Program Alternative is considered environmentally superior as, with one exception, it would reduce or avoid most impacts of the Proposed Program. However, note that the No Project Alternative would not address deficiencies in the City's wastewater collection and treatment systems, which could result in sanitary sewer overflows. The Sutter Plant facilities would remain in the 100-year floodplain, the facilities of which could be subject to damage during a 100-year flood event. It also may impede attainment of the City's land use plans and policies which rely upon wastewater service capacity that would be provided by the Proposed Program. This alternative would also not meet any of the City's objectives to plan for and provide sewer infrastructure in a timely and cost-effective manner to serve new and existing development; repair and replace aging wastewater infrastructure; ensure adequate wastewater infrastructure and services

are available to serve new growth within the General Plan and City's SOI; or plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

Under CEQA, if the "no project" alternative is identified as environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Both Alternatives 4 and 5 would have less environmental impacts than the proposed River Trunk Realignment Project. Between the two different River Trunk Project alternatives (Alternatives 4 and 5), Alternative 5 would be environmentally superior because it would result in less environmental impacts than Alternative 4. Construction and operation impacts associated with Alternative 5 would be less than Alternative 4 primarily because it would entail less new pipeline construction and would not involve new pump station construction. As shown in Table 19-1 and described in Section 19.4, by not installing new pump stations or realigning the River Trunk line, Alternative 5 would result in less construction-related disturbance to sensitive receptors including noise and vibration effects, air pollutant and GHG emissions, and traffic impacts. Similarly, since the construction footprint would be smaller in scope relative to Alternative 4, construction-related impacts on biological resources, cultural (including tribal cultural) and paleontological resources, and aesthetics would be less in comparison to Alternative 5 as well. Operation and maintenance effects of Alternative 4 would generally be less than Alternative 5 as the River Trunk Pump Station would not be installed; therefore, noise and air pollutant emissions that would be generated under Alternative 5 would not be realized under Alternative 4. Note that the rehabilitated River Trunk line under Alternative 5 would continue to be subject to certain vulnerabilities including erosion due to its adjacency to the Tuolumne River which could result in adverse water quality effects. Based on the above, Alternative 5 would be environmentally superior.

In comparing impacts of Alternative 3 (Primary Treatment and Solids Handling Facilities to the North of the Jennings Plant) and Alternative 2 (Deferred Implementation Alternative) to the Proposed Program, Alternative 2 would be environmentally superior because, on the whole, this alternative would reduce construction impacts at a given time since some CIPs would be delayed (although the impacts would eventually occur). Under Alternative 3, the construction timeframe for all collection system components would be the same as the Proposed Program and, therefore, would result in greater construction impacts collectively when compared to Alternative 2. For example, it is anticipated that construction-related air pollutant and GHG emissions, traffic, and noise impacts associated with Alternative 3 would be greater in comparison to Alternative 2 at a given time because a greater number of CIPs would be constructed at a given period within the overall 25-year construction schedule.

Table 19-1. Summary of Alternatives in Comparison to the Proposed Program

Impact Category	Proposed Program	Proposed Program Alternatives			River Trunk Realignment Project	River Trunk Realignment Project Alternatives	
		Alternative 1: No Program Alternative	Alternative 2: Deferred Implementation Alternative	Alternative 3: Primary Treatment and Solids Handling Facilities to the North of Jennings Plant Alternative		Alternative 4: Design Alternative 4A	Alternative 5: Design Alternative 1
Aesthetics and Visual Resources	Short-term degradation of visual character or quality during construction activities	Less	Delayed	Same	Short-term degradation of visual character or quality during construction activities	Same	Less
Agricultural Resources	Direct or indirect conversion of Important Farmland	Less	Delayed	Greater	No impacts	Same	Same
Air Quality	Conflict with applicable air quality plans; violate air quality standards; cumulatively considerable net increase in criteria pollutants; expose sensitive receptors to substantial pollutant concentrations	Less	Somewhat less	Somewhat less	Conflict with applicable air quality plans; violate air quality standards; cumulatively considerable net increase in criteria pollutants; expose sensitive receptors to substantial pollutant concentrations	Somewhat less	Less
Biological Resources	Impacts on special-status plants, vernal pool branchiopods, VELB, special-status fishes, western pond turtle, burrowing owl, raptors including special-status species, passerine species and birds protected under the MBTA, riparian habitat and other sensitive natural communities, federal protected wetlands, wildlife movement, local ordinances or policies	Less	Delayed	Same	Impacts on special-status plants, vernal pool branchiopods, VELB, special-status fishes, western pond turtle, raptors including special-status species, passerine species and birds protected under the MBTA, riparian habitat and other sensitive natural communities, federal protected wetlands, wildlife movement, local ordinances or policies	Somewhat less	Less
Cultural, Paleontological, and Tribal Cultural Resources	Impacts on historical, archaeological, tribal, or paleontological resources or human remains	Less	Delayed	Similar	Impacts on historical, archaeological, tribal, or paleontological resources or human remains	Somewhat less	Less
Geology, Soils, and Seismicity	Impacts from expansive soils; erosion; or subsidence, liquefaction, or collapse	Less	Delayed	Same	Impacts from expansive soils; erosion; or subsidence, liquefaction, or collapse	Somewhat less	Less
Greenhouse Gas Emissions and Energy Resources	Substantial GHG emissions or conflict with applicable plan or150 policy	Less	Somewhat less	Somewhat less	Substantial GHG emissions or conflict with applicable plan or policy	Somewhat less	Less
Hazards and Hazardous Materials	Upset and accident conditions involving the release of hazardous materials	Less	Delayed	Somewhat less	Upset and accident conditions involving the release of hazardous materials	Somewhat less	Less

Impact Category	Proposed Program	Proposed Program Alternatives			River Trunk Realignment Project	River Trunk Realignment Project Alternatives	
		Alternative 1: No Program Alternative	Alternative 2: Deferred Implementation Alternative	Alternative 3: Primary Treatment and Solids Handling Facilities to the North of Jennings Plant Alternative		Alternative 4: Design Alternative 4A	Alternative 5: Design Alternative 1
Hydrology and Water Quality	Violate water quality standards or otherwise degrade water quality; deplete groundwater supplies; alter drainage patterns	Less construction-related impacts. By not addressing existing wastewater collection and treatment system deficiencies, the potential for sanitary sewer overflows and subsequent water quality impacts may increase. Sutter Plant facilities would continue to be subject to damage during a 100-year flood event.	Delayed	Similar	Violate water quality standards or otherwise degrade water quality; deplete groundwater supplies; alter drainage patterns	Somewhat less	Somewhat less; however, the rehabilitated River Trunk line would still be vulnerable to erosion, which could result in water quality impacts
Land Use and Planning	No significant impacts	Greater (potential to conflict with land use plans, policies, and regulations)	Greater (potential to conflict with land use plans, policies, and regulations)	Same	No significant impacts	Same	Same
Noise and Vibration	Violate noise standards; excessive groundborne vibration or noise; increase in ambient noise levels	Less	Delayed and somewhat less	Same	Violate noise standards; excessive groundborne vibration or noise; increase in ambient noise levels	Somewhat less	Less
Population and Housing	Inducement of substantial population growth	Less	Delayed	Same	Inducement of substantial population growth	Same	Same
Transportation and Traffic	Increased congestion during construction activities; potential degradation of LOS during construction activities	Less	Delayed and somewhat less	Same	Increased congestion during construction activities; potential degradation of LOS during construction activities	Same	Less
Utilities and Service Systems	Effects on landfill capacity	Less	Delayed	Same	Effects on landfill capacity	Same	Same

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Chapter 20
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None cited.

CHAPTER 21. REPORT PREPARATION

None cited.

Chapter 21
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Appendix A
Scoping Summary and Notice of Preparation

City of Modesto Utilities Department

Modesto Wastewater Master Plan Update

State Clearinghouse Number: 2016062033

Modesto, California

CEQA Scoping Summary

Prepared for:
City of Modesto, Utilities Department
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353

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September 2016

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Background and Purpose

Scoping refers to the process to determine the scope, focus, content, and extent of an environmental impact report (EIR). A key feature of the scoping process is to engage the public and public agencies for feedback regarding the proposed project. The scoping comment period offers an important opportunity for the public and agencies to review and comment during the early phases of the environmental compliance process. Scoping helps identify and select an appropriate range of alternatives to be considered in the EIR. Scoping also helps define analysis methods, initially identify potential environmental effects to be considered in detail, and consider mitigation measures to avoid or compensate for adverse effects. In some cases, it may also identify issues that the public feels do not warrant analysis.

This report documents the scoping process undertaken by the City of Modesto Utilities Department (City) for the Wastewater Master Plan Update (Proposed Program) to comply with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. This report also summarizes comments received from agencies consistent with Section 15082(b) of the CEQA Guidelines. Comments are reproduced in their entirety in the appendices to this report.

Proposed Project Scoping Process

Scoping is initiated when the lead agency issues a Notice of Preparation (NOP) announcing the beginning of the EIR process. In accordance with Section 15082 of the CEQA Guidelines, a NOP was developed that provided information on the background, goals, and objectives of the Proposed Program. The NOP announced the EIR's preparation and requested public and agency comment on the Proposed Program. An initial study was also developed for the Proposed Program. A copy of the NOP/Initial Study is included in **Attachment A**.

The NOP was distributed for review and comment to numerous federal and state agencies, departmental and public services agencies within Stanislaus County, and interested parties. A copy of the mailing list is included in Attachment A. The City published an advertisement to announce EIR scoping in the Modesto Bee on June 10, 2016. The City also posted the NOP/Initial Study or post on the City's website to announce EIR scoping.

The City held a public scoping meeting for the Proposed Program on June 22, 2016 at City Hall, 1010 10th Street, Room 2001, Modesto. One person attended the meeting.

The NOP for the Proposed Program was received by the State Office of Planning and Research, State Clearinghouse on June 10, 2016, which initiated the public scoping period. The State Clearinghouse Number for this project is 2016062033 and a copy of the State Clearinghouse posting can be found in **Attachment B**.

The public scoping comment period officially ended on July 10, 2016.

Public Comments Received

June 22, 2016 Meeting Summary

One person attended the scoping meeting, an employee at the Turlock Irrigation District (TID). The majority of questions and comments received at the scoping meeting related to the scope of the WWMP Update, clarification about the proposed storm drain/sewer cross-connection improvements, Sutter wastewater treatment plant improvements, decommissioning of the Sutter Plant, need for the third outfall pipeline, and potential conflicts with utility lines. These concerns are summarized under the "Comment Summary by Topic" section below.

Comment Letters

One comment letter was received during the scoping period from the following party:

- Office of Planning and Research, State Clearinghouse (June 10, 2016)

A copy of the comment letter is included in **Attachment C** of this report and summarized below. The State Clearinghouse's letter is a courtesy notice requesting state agencies to provide comments on the Wastewater Master Plan Update Draft EIR in a timely manner.

Comment Summary by Topic

The comments received and concerns described during the scoping period involved the project description and project impacts. These comments are summarized below, and the commenter is identified in parenthesis. All comments received will be addressed in the EIR.

Comments on Project Description and Elements

- Does the WWMP boundary encompass the Preferred and Alternative General Plan Update boundaries? (TID)
- How will the City of Modesto manage stormwater/flooding once the storm drain/sewer cross-connections are severed? (TID)
- Why is wastewater treatment capacity at the Sutter Plant needed to address "peak wet weather flows" after the storm drain/sewer cross-connections are severed? (TID)
- If rain water leaks into the sewer pipes, does the City know how much sewage leaks out of the pipes? How did the WWMP evaluate leaking pipes? (TID)
- What will happen to the Sutter Plant after the treatment facilities are decommissioned? (TID)
- Is flooding a concern at the Jennings Plant and does the WWMP evaluate flooding potential and any improvements to protect the wastewater treatment plant from flooding impacts? (TID)
- Will all discharges from the cannery segregation outfall go to the City's ranch lands for irrigation/infiltration? (TID)

- Why is a new third outfall pipeline needed and why is redundancy and extra capacity needed? (TID)

Comments on Impacts

Utilities

- There are a lot of utility and electrical lines along Carpenter Road. Potential conflicts with utilities during pipeline construction should be considered in the EIR. (TID)

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Attachment A:
Notice of Preparation and Distribution List

Notice of Preparation (NOP) of a Draft Environmental Impact Report for the Wastewater Master Plan Update

Date: June 10, 2016

To: State Clearinghouse, and Responsible and Trustee Agencies

The City of Modesto (City) will serve as the Lead Agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan Update (WWMP) (Program or Proposed Program). The Proposed Program is located in the City of Modesto and other communities in Stanislaus County. The City is seeking the views of your agency regarding the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the Proposed Program. Your agency may need to use the subject EIR when considering any necessary permit or other approval for the Program. Interested parties and individuals are also invited to comment on alternatives to, concerns with, and environmental issues or potential effects of the project. Please share this notice with anyone you feel may be interested in the Program.

The Proposed Program description, location, and the potential environmental effects are contained in the attached materials and are available online at: https://www.modestogov.com/uppd/reports/.

Public Scoping Meeting: A public scoping meeting will be held to receive agency and public comments on the scope of the EIR for the Proposed Program.

Date and Time: June 22, 2016 at 6:00 pm

Location: City Hall
1010 10th Street, Room 2001
Modesto, CA 95354

Due to the time limits mandated by State law, your written response must be sent at the earliest possible date but **not later than 30 days after receipt of this notice**.

Please send your response to: Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 10th Street)
Modesto, CA 95353
jalves@modestogov.com
(209) 571-5557

Jim Alves
Associate Civil Engineer

6-6-16
Date

Aviso de Preparación de un reporte preliminar de impacto ambiental para la actualización de El Plano Maestro de Drenaje Sanitario

Fecha: 10 de junio de 2016

Para: State Clearinghouse, y Agencias Responsables y Fideicomisarios

La Cuidad de Modesto va servir como la agencia principal bajo la Ley de Calidad Ambiental de California (California Environmental Quality Act, CEQA) en preparación de un informe de impacto ambiental (Environmental Impact Report, EIR) para actualizar el Plano Maestro de Drenaje Sanitario (Programa o Programa Propuesto). El Programa Propuesto está localizado en la Cuidad de Modesto y en otras comunidades del Condado de Stanislaus. La Cuidad está buscando el punto de vista de su agencia en relación con la cobertura y el contenido de la información ambiental cual es relacionado a las responsabilices legales de su agencia en conexión con el Programa Propuesto. Su agencia pueda necesitar el uso del sujeto informe de impacto ambiental cuando considere cualquier permiso necesario o alguna aprobación para el Programa. Partidos o individuos interesados también son invitados a comentar sobre alternativas para, preocupaciones sobre, y asuntos ambientales o efectos potenciales del proyecto. Por favor comparta este aviso con cualquier persona que usted piense que tuviera interés sobre el Programa.
La descripción, localidad, y posibles efectos ambientales del Programa Propuesto, están contenidos en los materiales incluidos.

Junta Pública: Una Junta Publica sobre la cobertura se va a llevar acabo para recibir comentarios de las agencias y el público sobre la cobertura del informe de impacto ambiental por el Programa Propuesto.

Fecha y Tiempo:	El 22 de junio del 2016 a las 6:00 pm
Lugar:	Municipio (City Hall) 1010 10th Street, Room 2001 Modesto, CA 95354

Debido a los límites de tiempo establecidos por las leyes del estado, debe mandar su repuesta en escrito lo más pronto posible pero **no más tarde de 30 días después de recibir este aviso**.

Por favor mande su respuesta a:

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 10th Street)
Modesto, CA 95353
jalves@modestogov.com

Jim Alves
Associate Civil Engineer

6-6-16
Fecha

A. Project Description

1. Introduction

As the lead agency responsible for compliance with the California Environmental Quality Act (CEQA), the City of Modesto (City) has determined that the Wastewater Master Plan (WWMP) (Program or Proposed Program) has potential to result in a significant impact on the physical environment, and has decided to prepare an Environmental Impact Report (EIR) to provide ample opportunity for public disclosure and participation in the planning and decision making process. The Proposed Program would consist of numerous Capital Improvement Projects (CIPs) collectively intended for system-wide implementation needed to ensure adequate wastewater infrastructure and services are available to meet wastewater demand requirements under both existing and future developed conditions. Further details of the Proposed Program are provided below.

The purpose of the draft EIR process is to identify and evaluate possible environmental impacts of the Program, and consider mitigation measures and feasible alternatives to avoid, reduce, or compensate for any significant impacts on environmental resources, while still achieving the primary Program objectives.

This document, which serves as the Notice of Preparation (NOP) required by CEQA and the State CEQA Guidelines (California Code of Regulations [CCR] title 14, section 15000 et seq.) contains a brief description of the Program, including its goals and objectives, and possible environmental impacts (as described in the attached Initial Study). It also provides an overview of the opportunities for participation in review of the EIR, along with contact information.

2. Background

The City operates and maintains a wastewater collection system that services all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, and unincorporated “islands” in Stanislaus County that are served by agreement with the City. The City conducts a periodic review of the City’s growth trends to identify potential areas of new growth, infill development, and urban infrastructure serving the area. Previous reviews recognized existing and planned sanitary sewer infrastructure as a potential constraint to the urban growth of the City. Some of these deficiencies were addressed in the City’s 2007 Wastewater Master Plan and CIP. The City has made a number of improvements since the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure; providing reliability of critical facilities; and, for future growth, providing increased capacity and extending infrastructure when it is needed. The Proposed Program includes a number of improvements that are anticipated to address these challenges.

3. Program Purpose and Objectives

The objectives of the Proposed Program as a whole are as follows:

- Implement the City's economic goals and Urban Area General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
- Continue the City's policy of providing affordable and attractive wastewater rates.
- Repair and replace aging wastewater infrastructure.
- Ensure adequate wastewater infrastructure and services are available to serve new growth within the City's Sphere of Influence.
- Provide an adequate funding mechanism to pay for necessary improvements.
- Require new development to pay for infrastructure necessary to serve it.
- Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system improvements, the objectives of the Proposed Program are:

- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event, and where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To extend service to new customers.
- To replace, repair, or rehabilitate existing trunk sewers (by lining or coating the interior walls), and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant improvements, the objectives are:

- To improve treatment reliability and provide sufficient capacity at the Sutter Avenue Primary Treatment Plant (Primary Plant or Sutter Plant) during peak wet weather flow events.
- To improve reliability and increase capacity by constructing new primary treatment and solids handling facilities at the Jennings Road Secondary Treatment Plant (Secondary Plant or Jennings Plant) and decommission primary treatment and solids handling facilities from the Sutter Plant.
- To increase the capacity of the outfall connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.

4. Program Location

The proposed wastewater collection system and improvements to the Sutter Plant would occur within the City and its wastewater service area (see **Figures 1 and 2**). The City's wastewater service area includes all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, and unincorporated "islands" in the County that are served by agreement. The Sutter Plant is in the southwestern portion of Modesto, adjacent to the north bank of the Tuolumne River. The Jennings Plant is approximately 6.5 miles southwest of the Modesto urban area and located on City-owned land on the eastern side of the San Joaquin River. These areas are shown in Figures 1 and 2.

5. Existing Facilities and Operations

The City's wastewater system consists of approximately 40 sewer lift stations; more than 600 miles of sanitary lines, ranging from 6 to 66 inches; 69 miles of trunk lines (pipelines greater than 15-inches in diameter); and an additional separate 15 miles of trunk lines connecting cannery food processors directly to land disposal (application) areas. Most of the City's wastewater system flows by gravity, but in some areas lift stations (also referred to as pump stations) are necessary to convey wastewater generated within the service area to the Sutter Plant and the Jennings Plant. The City's existing sewer service area and key wastewater treatment facilities are shown in Figure 2.

Wastewater is transmitted to the Sutter Plant via several trunk sewers lines. Initial wastewater treatment begins at the headworks, which includes influent pumping, screening, grit removal, and primary clarification. Excess trash, debris, rags, sand, and other inorganic particles and hauled to a landfill for disposal, while removed biosolids are processed in anaerobic digesters then dried in sludge drying beds. Primary treated wastewater (effluent) is then conveyed to the Jennings Plant for further treatment and/or disposal.

As shown in **Figure 3**, effluent from the Sutter Plant is routed underneath the Tuolumne River through a 54-inch lined Primary Effluent Outfall and 60-inch Cannery Segregation (CanSeg) pipelines. From the Sutter Plant, the effluent is pumped through a river undercrossing to a point where it flows by gravity for a total length of approximately 6.5 miles south to the Jennings Plant where it undergoes secondary and tertiary treatment. The Jennings Plant is situated on the eastern side of the San Joaquin River near Patterson. Phase 1 of the tertiary treatment facilities was completed in 2010 and has production capacity of 2.3 million gallons per day (mgd) and is designed for year-round discharge. The City completed construction of the Phase 2 tertiary treatment facilities at the Jennings Plant in 2015. Phase 2 is currently undergoing operational trials. At full operation, Phase 2 has a production capacity of 15 mgd and with permitted year-round discharge could replace the City's seasonal discharge of secondary effluent.

6. Program Description

The Proposed Program involves several improvements to the City's collection system, such as replacement or construction of new trunk sewers or pump stations, construction of new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include, but are not limited to, upgrading the influent pump station to increase its hydraulic

capacity to convey peak wet weather flows, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes outfall pipeline improvements, such as replacement of existing pipe crossings under the Tuolumne River and construction of a new third outfall pipeline from the Sutter Plant to the Jennings Plant. At the Jennings Plant, the Program includes upgrades to the secondary and CanSeg treatment facilities, and construction of new primary treatment and solids handling facilities.

Most of the proposed CIPs would be implemented within the City's sewer service area, the Sutter Plant, and the Jennings Plant. Figure 3 shows the conceptual alignment of the third outfall pipeline. This pipeline would traverse the Tuolumne River and is expected to remain within existing County right-of-way. The exact locations of some of the proposed new facilities (e.g., collection system improvements) have yet to be finalized; where tentative sites have been identified, these locations will be identified in the draft EIR.

7. Topics to be Analyzed in the EIR

The City has prepared this NOP pursuant to CEQA Guidelines section 15082. Attached to the NOP is an Initial Study which provides a preliminary environmental impact analysis for the proposed Program. The Initial Study evaluates the proposed Program as it is currently envisioned.

Based on the Proposed Program's potential for significant impacts on the environment, the City has decided to prepare an EIR. The EIR will further assess the Proposed Program's effects on the environment, to identify significant impacts, and to identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts. Only those topics identified in the Initial Study as having potentially significant adverse effects will be further evaluated in the EIR. The word "significant" is only used in the Initial Study related to the significance of an environmental impact. An analysis of alternatives to the Proposed Program will also be included in the EIR. Topics to be analyzed in the EIR, include but are not necessarily limited to the following:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Geomorphology
- Land Use and Planning
- Noise and Vibrations
- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Water Quality
- Cumulative Impacts
- Irreversible Impacts

Responses received to this NOP may modify or add to the preliminary assessment of potential issues addressed in the EIR.

8. Environmental Process and Public Scoping Meeting

This NOP initiates the CEQA process through which the City will refine the range of issues and project alternatives to be addressed in the draft EIR. Comment is invited on the proposal to prepare the EIR and on the scope of issues to be included in the EIR.

Please submit any comments within 30 days of receipt of this notice to the City (see *Contact Information* below). In conjunction with the 30-day review period for the NOP, the City will hold a scoping meeting to provide an additional opportunity to learn about the project, ask questions, and provide comments about the scope and content of the information to be addressed in the draft EIR. The scoping meeting will be held at 6:00 pm on June 15, 2016 at the following location:

City Hall
1010 10th Street, Room 2001
Modesto, CA 95354

After the 30-day review period for the NOP is complete and all comments are received, a draft EIR will be prepared in accordance with CEQA, as amended (Public Resources Code [PRC] §21000 et seq.), and the State Guidelines for Implementation of CEQA (CCR §15000 et seq.).

Once the draft EIR is completed, it will be made available for a 45-day public review and comment period. Copies of the draft EIR will be sent directly to those agencies commenting on the NOP, and will also be made available to the public at a number of locations, including the City's offices, and public libraries in the area. Information about availability of the draft EIR will also be posted on the following website: https://www.modestogov.com/uppd/reports/

9. Contact Information

For further information, contact:

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 10th Street)
Modesto, CA 95353
jalves@modestogov.com

Additional information relevant to the Program and the draft EIR can also be found online at the following website: https://www.modestogov.com/uppd/reports/

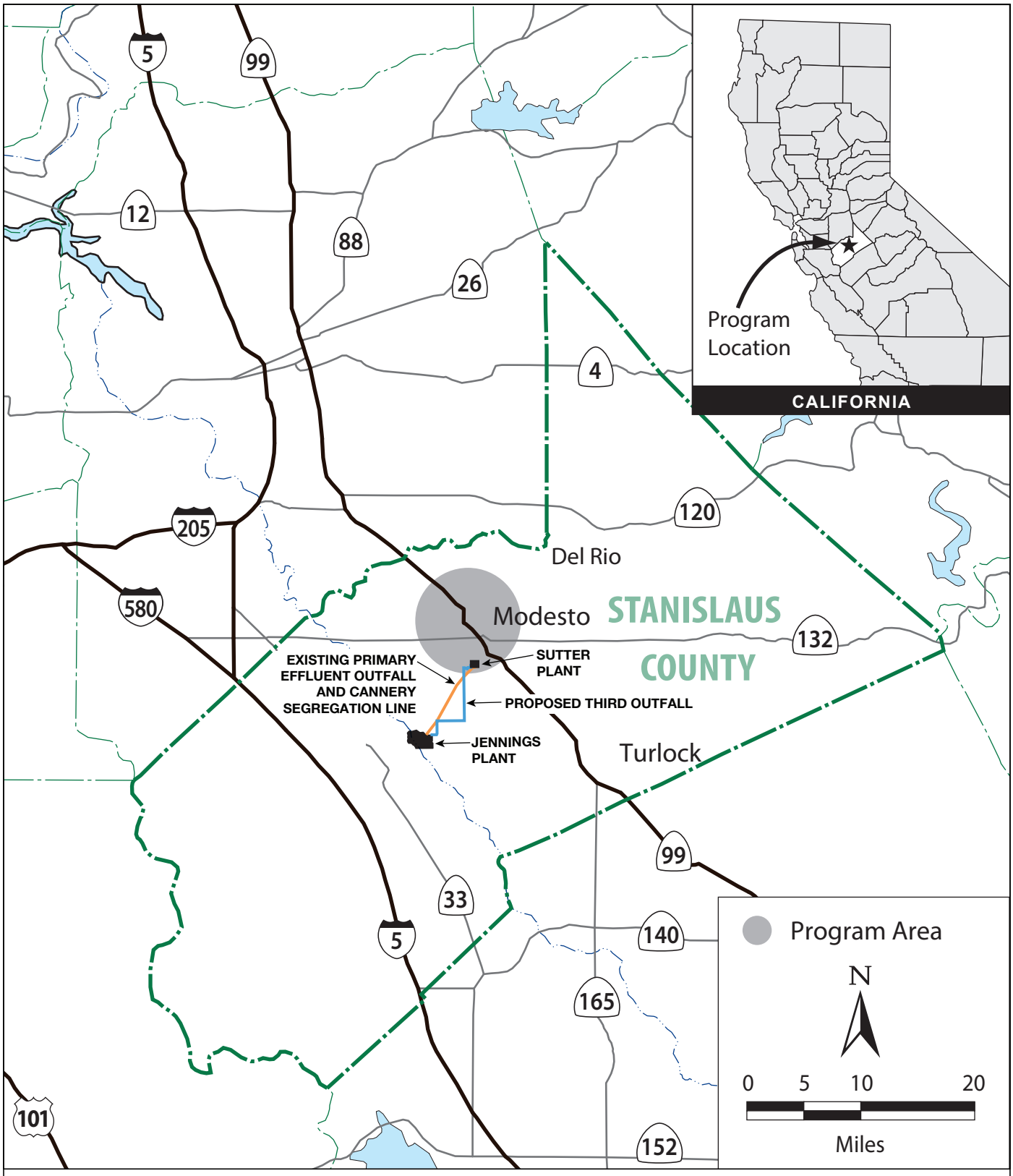

Figure 1
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

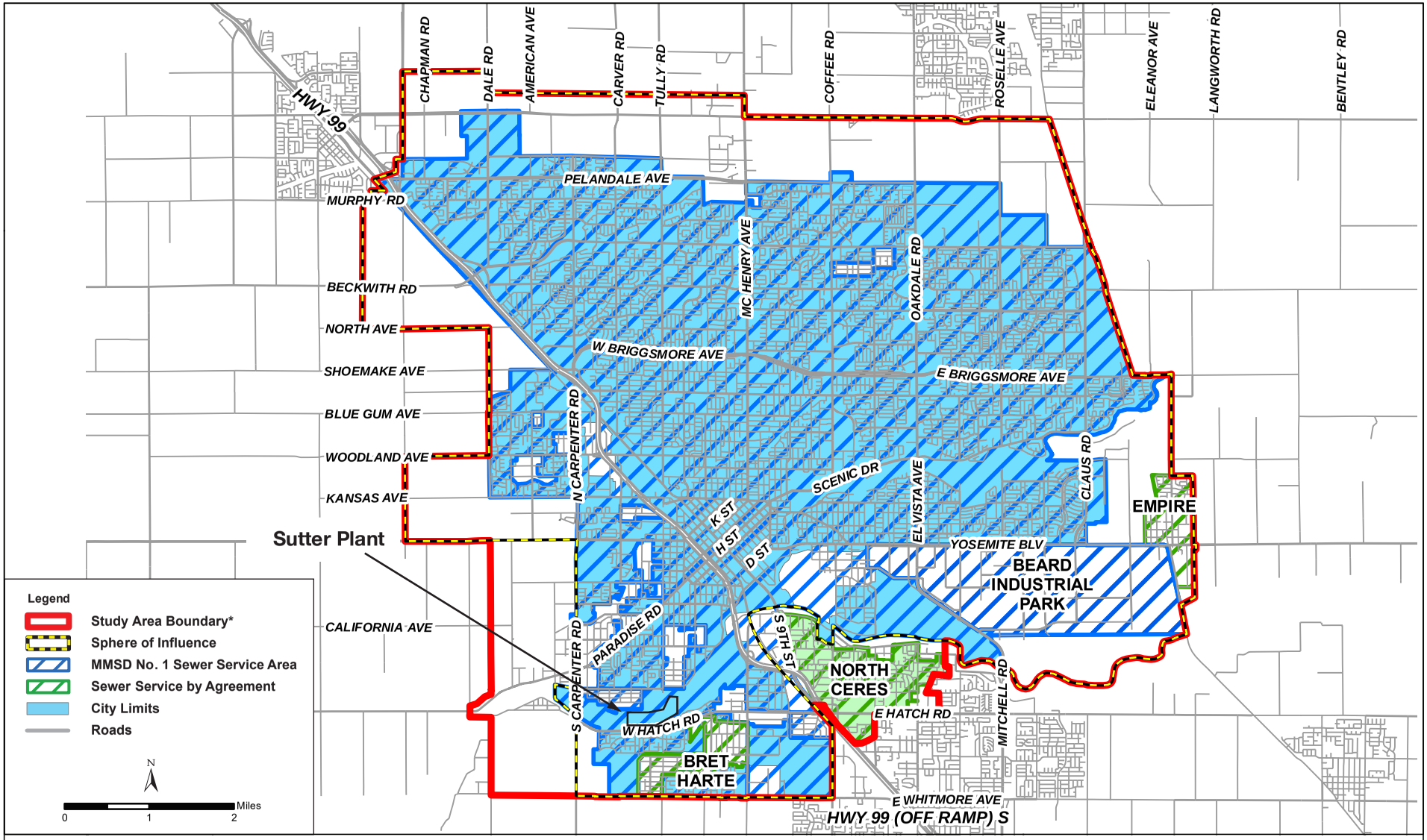

Figure 2
Wastewater Master Plan Sewer Service Study Area

Source: City of Modesto, 2016

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

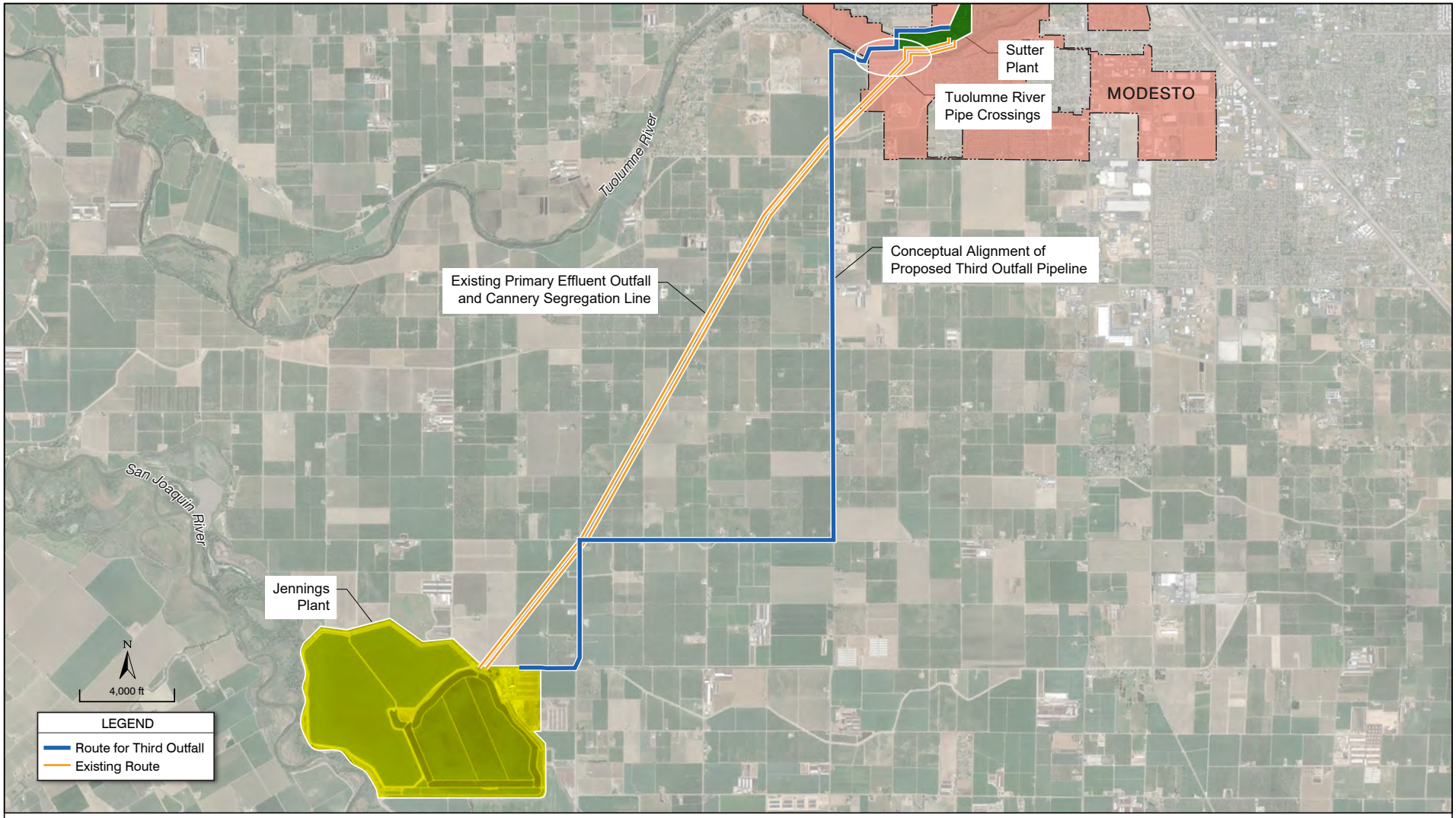

Figure 3
Location of Wastewater Treatment Plants

Source: Carollo, 2016

Prepared by:

Horizon
WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

B. Environmental Checklist

Project Title:	Wastewater Master Plan Update
Lead Agency Name and Address:	City of Modesto Utilities Department P.O. Box 642 (1010 10th Street) Modesto, CA 95353
Contact Person and Phone Number:	Jim Alves, Associate Civil Engineer (209) 571-5557
Project Location:	City of Modesto, a portion of north Ceres, the unincorporated community of Empire, and other unincorporated areas of Stanislaus County
Project Lead Contact and Address:	Jim Alves, Associate Civil Engineer City of Modesto Utilities Department P.O. Box 642 (1010 10th Street) Modesto, CA 95353
General Plan Designation:	Various
Zoning:	Various
Description of Project:	See Project Description
Surrounding Land Uses and Setting:	Various
Other Public Agencies whose Approval or Input May Be Needed:	▪ United States Army Corps of Engineers ▪ United States Fish and Wildlife Service ▪ National Marine Fisheries Service ▪ California Department of Fish and Wildlife ▪ California State Water Resources Control Board ▪ Central Valley Regional Water Quality Control Board (RWQCB) ▪ San Joaquin Valley Air Pollution Control District ▪ Stanislaus County

1. Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this Program (i.e., the Program would involve at least one impact that is a “Potentially Significant Impact”), as indicated by the checklist on the following pages.

[X] Aesthetics	[X] Agricultural and Forestry Resources	[X] Air Quality
[X] Biological Resources	[X] Cultural Resources	[X] Geology / Soils
[X] Greenhouse Gas Emissions	[X] Hazards and Hazardous Materials	[X] Hydrology / Water Quality
[X] Land Use & Planning	[ ] Mineral Resources	[X] Noise
[X] Population & Housing	[ ] Public Services	[ ] Recreation
[X] Transportation/Traffic	[X] Utilities & Service Systems	[X] Mandatory Findings of Significance

2. Evaluation of Environmental Impacts

The degree of change from existing conditions resulting from implementation of the Program is compared to the impact evaluation criteria to determine if the change is significant. Where it is determined that one or more significant impacts could result from implementation of the Program, mitigation measures would be developed to reduce or eliminate the significant impacts. Existing conditions serve as a baseline for evaluating the impacts of the Program.

The following terminology is used in this document to describe the various levels of environmental impacts associated with the Program:

- A finding of *no impact* is identified if the analysis concludes that the Proposed Program would not affect a particular environmental topical area in any way.
- An impact is considered *less than significant* if the analysis concludes that the proposed Program would not cause a substantial adverse change in the environment.
- An impact would be considered to have *potentially significant issues* if the analysis concludes that the Proposed Program could cause a significant environmental impact. A program that potentially produces significant impact(s) warrants a greater level of analysis and consideration provided by an EIR.

3. CEQA Environmental Checklist

I. AESTHETICS: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?		X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a designated scenic highway?			X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X	

Explanations

a) Substantial adverse effects on scenic vistas – *Less than Significant*

The Proposed Program would be unlikely to significantly adversely affect a scenic vista. New lift stations, wastewater treatment facilities and improvements, and other above-ground facilities could potentially have adverse aesthetic effects on a site-specific level; while below-ground infrastructure, such as new sewer trunks and collection infrastructure, could have temporary adverse aesthetic effects during construction. However, these facilities would not be anticipated to be sited within a scenic vista and any such effects would not be anticipated to be significant from the perspective of a scenic vista. The Proposed Program would have a **less than significan**t impact on scenic vistas.

b) Substantial damage to scenic resources – *No Impact*

Proposed CIPs would not be sited within a designated scenic highway and would not be anticipated to substantially damage scenic resources within a scenic highway. The nearest designated scenic highway to the Program area is Interstate 5 (I-5) (Caltrans 2016), which is approximately 15 miles away. No Program facilities would be constructed in this area. As such, the Proposed Program would have no impact on views from scenic highways. Therefore, the Proposed Program would be anticipated to have **no impact** on scenic resources.

c) Substantial adverse changes to the existing visual character and quality – *Potentially Significant Issues*

The Proposed Program could potentially result in substantial adverse changes to the existing visual character and quality of specific facility sites and their surroundings, both during construction and operation. Construction of lift stations, sewer trunk extensions, treatment plant

upgrades, and other facility improvements would involve use of large construction equipment, excavation, and other activities that could adversely affect the existing visual character of a site. Once constructed, Program facilities also could permanently adversely affect the visual character and quality of a site, particularly those facilities that may be located-in or adjacent-to residential areas. These issues would be **potentially significant**, and will be investigated further in the Proposed Program EIR.

d) Substantial adverse changes to light and glare – *Less than Significant*

The Proposed Program would not be anticipated to create new sources of substantial light or glare which would adversely affect nighttime or daytime views in the area. Lighting necessary near new lift stations or other Program features would be internally directed to reduce light or glare. This impact would be **less than significant**.

II. AGRICULTURAL AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	X		
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC section 12220(g)), timberland (as defined by PRC section 4526), or timberland zoned Timberland Protection (as defined by Government Code section 51104(g)?			X
d) Result in the loss of forest land or conversion of forest land to non-forest use?			X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	X		

Explanations

a) Causes loss of agricultural lands – *Potentially Significant Issues*

The Proposed Program could potentially result in the loss or conversion of important farmland to non-agricultural use. A substantial portion of Stanislaus County is used for agricultural purposes and/or designated Prime Farmland, including areas mapped in the immediate vicinity of the City of Modesto's urban boundaries and the outlying areas of Del Rio, Ceres, and Turlock (CDOC 2014). The proposed third outfall that extends from the Sutter Plant to the Jennings Plant is

expected to be installed within County right-of-way but given that the outfall alignment is preliminary, the pipeline could potentially affect agricultural lands. It is possible that other facilities may be sited in areas mapped as Important Farmland, thereby resulting in conversion of agricultural land to non-agricultural use or preventing Prime Farmland from being developed for agricultural use in the future. The Proposed Program could also indirectly result in the loss or conversion of Important Farmland by allowing or facilitating additional urban growth onto adjacent agricultural lands. These impacts are considered **potentially significant**. These issues will be investigated further in the EIR.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract – *Potentially Significant Issue*

Numerous Williamson Act contracts exist in the vicinity of the City of Modesto's urban boundaries and the outlying areas (CDOC 2011). Likewise, numerous parcels in and around the Program area are zoned for agricultural use (Stanislaus County 2015). The proposed third outfall, extending from the Sutter Plant to the Jennings Plant, could affect lands zoned for agricultural use and lands that are subject to Williamson Act contracts. It is possible that other proposed facilities or improvements may be sited in areas under Williamson Act contract or zoned for agricultural use, which could result in a conflict and **potentially significant** impact. This issue will be investigated further in the EIR.

c) Conflict with existing zoning for forest land or timberland – *No Impact*

The Proposed Program would not be anticipated to conflict with zoning for forest land. No zoning for forest land or timberland was identified in the Program area (Stanislaus County 2015) and Stanislaus County had no land classified as Timberland Protection Zone as of 2002 (Shih 2002). There would be **no impact**.

d) Cause a loss of forest lands – *No Impact*

The Proposed Program would not be anticipated to result in the loss of forest lands or the conversion of forest land to non-forest use. Stanislaus County has tracts of hardwood forest, as indicated in its General Plan (Stanislaus County 1994), but these are primarily located west of I-5 and outside the Program area. There would be **no impact** on forest lands.

e) Cause changes to the existing environment due to conversion of agricultural or forest lands – *Potentially Significant Issue*

As mentioned under (a) above, the Proposed Program could indirectly lead to changes in the existing environment, which could have adverse effects on agricultural land by removing obstacles to growth. The Proposed Program would provide additional wastewater treatment capacity and ensure adequate sewer infrastructure and services are available to serve new growth within the City's Sphere of Influence. As Modesto and the outlying areas are generally surrounded and interspersed with Important Farmland, additional urban expansion or growth made possible by the Proposed Program could lead to conversion of agricultural or forest lands, resulting in a **potentially significant** impact. This issue will be investigated further in the EIR.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of applicable air quality plans?	X		
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	X		
d) Expose sensitive receptors to substantial pollutant concentrations?	X		
e) Create objectionable odors affecting a substantial number of people?	X		

Explanations

a-d) Conflict with air quality plans, Violate Air Quality Standards, Result in Cumulatively Considerable Increase of Criteria Pollutants, Expose Sensitive Receptors to Substantial Pollutant Concentrations - *Potentially Significant Issues*

The Proposed Program would be located in Stanislaus County, which is one of eight counties that comprise the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the San Joaquin Valley Air Basin (Basin). The County's portion of the Basin has been designated as nonattainment for both the federal and State ozone and particulate matter 2.5 ($PM_{2.5}$) standards, and for the State particulate matter 10 standard (CARB 2015, USEPA 2016). The Basin, within Stanislaus County, is in attainment or unclassified for all other criteria pollutants. The SJVAPCD has developed air quality plans for ozone and $PM_{2.5}$.

The Proposed Program's construction activities would have the potential to emit PM from ground-disturbing construction activities, and emit ozone precursor pollutants (i.e., reactive organic gases and nitrogen oxides) from fuel combustion by construction equipment, materials delivery and fill hauling vehicles, and construction worker vehicle trips. In addition, diesel PM, a toxic air contaminant, would be emitted from equipment and vehicles using diesel as a fuel source. These construction-related emissions could occur near or adjacent to sensitive receptors. These impacts would be **potentially significant**. This issue will be investigated further in the Proposed Program EIR.

The Program area is not within an area identified as likely to contain naturally occurring asbestos (NOA), which is a toxic air contaminant. Therefore, it is unlikely that the Program's ground-disturbing activities would result in any NOA emissions.

In the long-term, given the close proximity between the City's ranch lands and the Jennings Plant, once construction of the solids handling facilities at the Jennings Plant is complete, operational truck emissions generated by off-hauling biosolids to the City's ranch lands would be substantially less than existing emissions generated from transporting biosolids from the Sutter Plant to the City's ranch lands. While beneficial, this topic would be further evaluated in the EIR.

e) Create objectionable odors affecting a substantial number of people - *Potentially Significant Issue*

Construction of the Proposed Program components could potentially generate objectionable odors through emissions of diesel particulate matter by construction equipment or potential excavation of organic sediments. It should be noted that the decommissioning of biosolids treatment facilities at the Sutter Plant would generally improve odors generated at this plant. However, for the purposes of this Initial Study, this impact would be **potentially significant**. This issue will be investigated further in the Proposed Program EIR.

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	X		
d) Interfere substantially with the movement of any native resident or migratory species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?			X

Explanations

a) Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species - *Potentially Significant Issues*

Several candidate, sensitive, or special-status species are known to occur in the vicinity of the Program area. These include valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Swainson's hawk (*Buteo swainsoni*), Central Valley distinct population segment steelhead (*Oncorhynchus mykiss irideus*) and others (CDFW 2016). Additionally, the Jennings Plant is known to support large populations of both migratory and resident bird species (eBird

2016). Program improvements could be located in areas that may potentially support candidate, sensitive, or special-status species.

Potential impacts to candidate, sensitive, or special-status species could occur from direct impacts due to construction or operation of Program components, or from Program-related modification of potential habitat. These impacts would be **potentially significant**. The EIR will evaluate the potential for candidate, sensitive, or special-status species to occur in proposed improvement locations based on known occurrences and habitat requirements of these species. The EIR will also evaluate potential effects of the proposed improvements to those species with the potential to occur within the Program area.

b) Substantial adverse effect on any riparian habitat or other sensitive natural community - *Potentially Significant Issues*

Riparian habitat potentially occurs in the vicinity of the Program area along the Tuolumne River, Stanislaus River, San Joaquin River, and Dry Creek (tributary to the Tuolumne River). Other sensitive natural communities may also potentially be present in the Program area. Potential impacts to these habitats or communities could occur due to construction and/or operation of proposed CIPs, such as the proposed third outfall pipeline, which would traverse the Tuolumne River. These impacts are considered **potentially significant** because the Program could result in degradation or losses of ecologically sensitive natural communities. The EIR will further evaluate this impacts by mapping sensitive natural communities in the Program area and analyzing the potential for Program activities to impact these communities.

c) Substantial adverse effects on federally protected wetlands - *Potentially Significant Issues*

Federally protected wetlands and waters exist in and along the Tuolumne River, Stanislaus River, San Joaquin River, and Dry Creek. Other surface waters or wetland features may potentially exist in the Program area. Activities associated with the Proposed Program could result in the disturbance or loss of jurisdictional wetland and aquatic communities.

This impact is considered **potentially significant** because it could result in degradation or losses of wetlands and aquatic habitats, including jurisdictional wetlands and other waters.

The EIR will further evaluate the potential for and the magnitude of impacts Program-related impacts on wetlands. This evaluation will be based on Program-specific design and construction details to be developed during the EIR process.

d) Substantial interference with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites - *Potentially Significant Issues*

The Proposed Program could potentially interfere with breeding or migration of wildlife species. Specifically, if construction of Program components occurs during the breeding season for migratory species, impacts to these species could potentially occur. These impact would be **potentially significant** and these impacts will be further evaluated in the EIR.

e) Conflict with local policies or ordinances protecting biological resources - *Potentially Significant Issues*

The Proposed Program could potentially conflict with local policies or ordinances protecting biological resources. This could result in a **potentially significant** impact. The EIR will evaluate whether proposed Program activities would be in conflict with local policies and ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan - *No Impact*

The Proposed Program would not occur within the area covered by an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan. Thus the Proposed Program would not conflict with the provisions of any of these types of plans. There would be **no impact**.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X		
d) Disturb any human remains, including those interred outside of formal cemeteries?	X		
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in §21074?	X		

Explanations

a-b) Adverse change in the significance of a historical resource or an archaeological resource - *Potentially Significant Issues*

Historical resources, as defined in PRC 15064.5, include, but are not limited to, any resource that is listed, or is eligible for listing, in the California Register of Historical Resources (CRHR); is included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript determined to be historically significant by a lead agency. Furthermore, historical resources, defined under PRC 5024.1, include resources listed, or eligible for listing, in the National Register of Historical Places, State Historical Landmarks and points of historical interest. The Modesto General Plan Update (City of Modesto 2008) indicates that there are a large number of resources located within the City, and thus the current Program area meets these criteria.

Furthermore, there is potential for the discovery of new historical resources of an archaeological nature within the Program area, particularly within the footprint of the proposed third outfall. Potential impacts to historical resources would occur if these resources are present and would be physically disturbed by the Proposed Program construction activities (e.g., from direct ground disturbance, or vibrations from ground disturbance). Impacts on resources which cause de-listing from the CRHR, or render the resources ineligible for listing in the CRHR, would also be considered significant. These impacts would be **potentially significant.**

The EIR will compare the locations of currently known or newly identified historical resources with the proposed actions identified by the Program to evaluate potential effects to those resources.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature - *Potentially Significant Issues*

The City of Modesto is underlain by the Modesto Formation, which is known to contain vertebrate fossil remains; and is, therefore, considered sensitive for containing paleontological resources (City of Modesto 2009). As a result, ground disturbing activities, particularly with the construction of the proposed third outfall, has the potential to encounter such resources. This impact would be **potentially significant**. This topic will be further evaluated in the EIR.

d) Disturbance of any human remains, including those interred outside of formal cemeteries - *Potentially Significant Issues*

Human remains are not currently known to exist within the locations of Program CIPs; however, they may be present without any surface manifestation and, as a result, could be disturbed by the Proposed Program's activities. This impact would be **potentially significant**. The EIR will further address the potential presence of human remains and the possibility of impacting human remains during construction.

e) Adverse change in the significance of a tribal cultural resource as defined in PRC 21074 - *Potentially Significant Issues*

The Proposed Program is within a geographic area associated with the Northern Valley Yokuts tribes who have a traditional and cultural affiliation with the region. Assembly Bill 52, which was enacted on July 1, 2015, requires that a State lead agency consult with California Native American tribes with a traditional and cultural affiliation to a project (or program) area in order to determine if any tribal cultural resources (TCRs) would be affected by the proposed project (or program). PRC 21074 defines TCRs as resources that are historical resources under CCR 15064.5; cultural landscapes that meet the criteria of CCR 15064.5; and as unique archaeological sites pursuant to PRC 21083.2. There is the potential for TCRs to be located in the Proposed Program area and for the Program to have an adverse change to any such resources.

The City will consult with local tribes about the presence of TCRs within the Program area and, should any be identified, the protection of TCRs from Program-related actions. The consultation efforts and the identification of TCRs, if present, will be analyzed in the EIR.

VI. GEOLOGY AND SOILS: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death related to:			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X
ii) Strong seismic ground shaking?		X	
iii) Seismic-related ground failure, including liquefaction?	X		
iv) Landslides?			X
b) Result in substantial soil erosion or the loss of topsoil?	X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?		X	

Explanations

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Seismic-related rupture of a known earthquake fault - *No Impact*

The Proposed Program is not located within a Alquist-Priolo designated hazard zone. The two nearest active faults are the Greenville Fault (approximately 23 miles west) and Ortigalita Fault (approximately 21 miles southwest) (CGS 2010). Since there are no known faults in the in the Program area, there would be **no impact** from fault rupture.

ii) Strong seismic ground shaking – *Less than Significant*

Due to the significant distance to active faults and the underlying geologic and soil conditions, the Central Valley generally experiences lower levels of more infrequent ground shaking than many other regions of California. In Stanislaus County, the level of seismic ground shaking decreases from 'High' risk along the western border of the County and the foothills of the Diablo Range, to 'Moderate' risk in the central part of the County, to 'Low' risk in the eastern portion (CGS 2008). The Program area lies within the Central portion of the County and is considered 'Moderate' risk for earthquake shaking potential. Additionally, the Proposed Program would be required to comply with California Building Codes, reducing any adverse effects to structures or people to a level that is **less than significant**.

iii) Seismic-related ground failure, including liquefaction - *Potentially Significant Issues*

Liquefaction is the temporary transformation of saturated and very low cohesion, or cohesionless, soils into a viscous liquid as a result of ground shaking. Liquefaction may occur in water-saturated sediment during moderate to great earthquakes. The potential for liquefaction to occur depends on soil composition, soil saturation levels, and intensity and duration of seismic ground shaking. As several Program improvements would be located near major surface waterways, such as the Tuolumne River and San Joaquin River, the potential for the presence of a high water table and sandy, liquefiable soils exists. Therefore, impacts related to seismic-related ground failure, including liquefaction would be **potentially significant.** This issue will be investigated further in the EIR.

iv) Landslides - *No Impact*

The floor of the Central Valley where the project sites are located are relatively flat with only minor changes in topography. Landslides are not likely to occur on or near any of the improvement sites. There would be **no impact** related to landslide effects.

b) Substantial soil erosion or the loss of topsoil - *Potentially Significant Issues*

The Proposed Program may include grading, excavation, trenching, or other construction-related activities that leave soils exposed to erosion. In addition, some improvements like the proposed third outfall may involve removing a substantial volume of topsoil. Excavated spoils, depending upon how they are disposed of, may be susceptible to erosion. Therefore, these impacts are considered **potentially significant** and will be investigated further in the EIR.

c) Location on a geologic unit or soil that is unstable or that would become unstable as a result of the Proposed Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse - *Potentially Significant Issues*

As described above, the Program area is located in an area that is relatively flat with only minor changes in topography; landslides are not likely to occur on any of the proposed sites. For any improvement sites near Stanislaus River, Tuolumne River, or other surface waterbodies, such

as the proposed third outfall, construction-related ground-disturbing or excavation activities could alter the soil stability in those immediate locations. Excavation and trenching for the outfall pipeline may create unstable slopes. This impact related to soil instability is considered **potentially significant** and will be investigated further in the EIR.

d) Location on expansive soil, creating substantial risks to life or property - *Potentially Significant Issues*

Soils that contain a relatively high percentage of clay minerals have the potential to shrink and swell with changing moisture conditions. The Proposed Program includes numerous improvement sites throughout central Stanislaus County. Underlying soil conditions and composition at each site is highly variable. Impacts related to expansive soils are considered **potentially significant** and will be further examined further in the EIR.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater - *No Impact*

The Proposed Program includes various improvements focused on repairing and upgrading the existing sewer infrastructure, decommissioning of wastewater treatment facilities at the Sutter Plant, and upgrading wastewater treatment facilities at the Jennings Plant. The Program does not involve construction of septic tanks or alternative wastewater disposal systems. Therefore, there would be **no impact** related to the suitability of soils to support septic tanks or alternative disposal systems.

VII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	X		
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purposed of reducing the emissions of GHGs?	X		
c) Encourage activities that result in the use of substantial amounts of fuel or energy, or use these resources in a wasteful manner?	X		

Explanations

a) Generate a net increase in GHG emissions which may have a significant impact on the environment - *Potentially Significant Issues*

The Proposed Program would generate short-term direct emissions of GHGs during construction activities through the combustion of fossil fuels by construction equipment, worker vehicles and construction-related trucks. During operation, the Proposed Program could directly emit GHGs through a variety of stationary (i.e., fossil-fueled mechanical equipment) and mobile (worker or equipment vehicles) sources. Furthermore, potential energy use by electrical equipment for the Proposed Program could indirectly emit GHGs if energy sources derive from fossil fuel consumption. Therefore, the Proposed Program would generate a net increase in GHG emissions that would have a **potentially significant** impact.

The EIR will further evaluate this topic, based on available design, operation, and construction details, and make an impact determination based upon appropriate guidance and/or applicable GHG emissions impact thresholds.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs - *Potentially Significant Issues*

As described above, the Proposed Program's construction and operation would directly and possibly indirectly result in GHG emissions. If these GHG emissions exceed established thresholds or if other aspects of the Proposed Program (including its design or operation) conflicted with goals and objectives identified in the adopted plans, policies, or regulations, this would result in a potentially significant impact. Plans potentially applicable to the Proposed Program include the SJVAPCD's *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (SJVAPCD 2009). An assessment of the Proposed Program's consistency with all policies contained in the above-mentioned document has not yet been performed; therefore, this impact is considered **potentially significant**. The EIR will further evaluate this topic.

c) Encourage activities that result in the use of substantial amounts of fuel or energy, or use these resources in a wasteful manner – *Potentially Significant Issues*

Because the specific fuel or energy use requirements for the Proposed Program's construction and/or operation have not been yet evaluated, the potential for the Proposed Program to use substantial amounts of fuel or energy, or use these resources in a wasteful manner is considered **potentially significant**. The EIR will further evaluate this topic. The EIR analysis will consider the Proposed Program's short-term and long-term fuel and energy use compared to the existing energy use, identify potential energy sources (i.e., renewable), and determine if fuel or energy resources would be used in a wasteful manner or in substantial amounts.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, storage or disposal of hazardous materials?	X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	X		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	X		
e) Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport and result in a safety hazard for people residing or working in the study area?	X		
f) Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the study area?	X		
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X		
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X

Explanations

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials – *Potentially Significant Issue*

Once construction is complete, operation of proposed wastewater treatment plant facilities and improvements would likely involve routine transport, use, or disposal of hazardous materials. In addition, some proposed facilities (e.g., lift stations) may require backup generators and storage of diesel fuel, which is a hazardous material. Construction of the proposed CIPs also would

involve use of heavy equipment which would require hazardous materials, such as fuel, lubricant, and other materials. It is anticipated that standard mitigation measures and compliance with existing hazardous waste regulations would be sufficient to prevent a significant impact from such use of hazardous materials. However, this impact is considered **potentially significant** and will be investigated further in the EIR.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment – *Potentially Significant Issue*

As described under (a) above, the Proposed Program may include improvements that require backup generators and storage of diesel fuel. Construction of the proposed CIPs would also require use and storage of hazardous materials, such as fuel, lubricant, and other materials. Storage and use of such hazardous materials could potentially create a significant hazard to the public or the environment through upset and accident conditions (e.g., if storage containers were to leak or rupture, or hazardous materials were to otherwise spill), resulting in a significant impact. It is anticipated that standard mitigation measures and compliance with existing hazardous materials regulations would be sufficient to prevent accidental releases of hazardous materials. However, for the purposes of this initial study, this impact is considered **potentially significant**. This issue will be investigated further in the EIR.

c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school – *Potentially Significant Issue*

It is possible that facilities may be installed within 0.25 mile of an existing or proposed school. Storage of diesel fuel on-site for certain improvements or use and storage of hazardous materials during construction of improvements could potentially emit hazardous emissions or otherwise pose a hazard to public health and safety. While it is anticipated that standard mitigation measures and compliance with existing hazardous materials regulations would be sufficient to prevent a significant impact; for the purposes of this initial study, this impact is considered **potentially significant**. This issue will be investigated further in the EIR.

d) Located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment – *Potentially Significant Issue*

Because the exact locations of proposed facilities and improvements are not yet known, it is possible that some improvements may be located on a site that is included on a list of hazardous materials sites and thereby create a significant hazard to the public or the environment. While the Proposed Program would not include residences or occupied buildings (facilities would generally be operated remotely), if facilities were to be located on a hazardous materials site, trenching and excavation activities during construction could potentially expose workers and the public to contaminated soil or emissions, which could result in a significant impact. This impact is considered **potentially significant**. This topic will be investigated further in the EIR.

e) Located within an airport land use plan area, or where such a plan has not been adopted, or be within 2 miles of a private or public airport and result in a safety hazard for people residing or working in the study area – *Potentially Significant Issue*

Proposed improvements may be located within an airport land use plan area or within 2 miles of a public or private airport. Airports within the Program area potentially include the Modesto City-County Airport and the Turlock Airpark (Stanislaus County 2014). Given that some facilities may involve storage of hazardous materials, the facilities may be an incompatible land use and thereby create a safety hazard for people residing or working the area (Stanislaus County 2014), depending on the distance from the airports. As such, this impact is considered **potentially significant**. This issue will be evaluated further in the EIR.

f) Create a safety hazard for people working in the area due to the presence of a private airstrip – *Potentially Significant Issue*

It is possible that proposed CIPs could be located in the vicinity of a private airstrip. As described under (e) above, if that were the case, some improvements could potentially create a hazard to people residing or working in the area, depending on their proximity to the airstrip. This issue is considered **potentially significant** and will be evaluated further in the EIR.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan – *Potentially Significant Issue*

The Proposed Program may include pipelines within the public right-of-way and other facilities that may require temporary closure of at least one lane of traffic during construction. Depending on the specific location of the proposed facilities and the construction activities required, effects on roads or building ingress and egress could potentially impede the movement of emergency response vehicles or otherwise interfere with an emergency response plan or emergency evacuation plan. Once constructed, proposed CIPs are not anticipated to have any adverse effects with respect to implementation of emergency response plans. However, for the reasons previously described, this impact is considered **potentially significant** and these topics will be investigated further in the EIR.

h) Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands Are Adjacent to Urbanized Areas or Where Residences Are Intermixed with Wildlands – *No Impact*

The Proposed Program would be located in urban and rural areas surrounded by agricultural lands. There are no wildlands in the Program area; and therefore, there is no potential for people or structures to be exposed to a significant risk of loss, injury, or death involving wildland fires. There would be **no impact**.

IX. HYDROLOGY: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	X		
c) Substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	X		
d) Substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	X		
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	X		
f) Otherwise substantially degrade water quality?	X		
g) Place housing within a 100-year flood-hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X
h) Place within a 100-year flood-hazard area structures which would impede or redirect flood flows?	X		
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	X		
j) Inundation by seiche, tsunami, or mudflow?			X

Explanations

a) Violate any water quality standards or waste discharge requirements - *Potentially Significant Issues*

Construction of proposed facilities and improvements would involve excavation, grading, and use of heavy construction equipment, all of which would have the potential to cause soil erosion and sedimentation to local waterways. Use and storage of hazardous materials during construction could also result in water contamination (e.g., from leaking or spills) without adequate safeguards. Over the long term, however, the proposed CIPs would be anticipated to improve water quality by reducing the potential for release of untreated sewage during flooding events at the Sutter Plant. This impact would be **potentially significant** and will be investigated further in the EIR.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or lowering of the local groundwater table level – *Potentially Significant Issue*

The Proposed Program would not require or use substantial groundwater supplies. Construction of the proposed CIPs may require some water supplies for dust control and other purposes, but these water requirements would not be substantial, such as to deplete groundwater supplies or lower the water table, if they were to be obtained from groundwater sources. The Proposed Program could potentially interfere with recharge of groundwater to some degree by increasing impervious surface area (e.g., from lift station buildings). In addition, construction of some proposed CIPs would involve substantial excavation work (e.g., the proposed third outfall), which could potentially interfere with groundwater supplies. This impact is considered **potentially significant** and will be investigated further in the EIR.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, resulting in substantial erosion or siltation on-site or off-site, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff – *Potentially Significant Issues*

The Proposed Program would not alter the course of any stream or river, but may change the existing drainage patterns at specific improvement sites. As noted under (b) above, proposed lift station facilities and other wastewater treatment facilities would result in an increase of impervious surfaces, and could therefore, increase the amount of runoff at a given site or otherwise change patterns of drainage and infiltration. It is not anticipated that these effects would be substantial since many improvements would occur in developed areas. Nonetheless, this impact is considered **potentially significant** and will be investigated further in the EIR.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff resulting in flooding on-site or off-site – *Potentially Significant Issues*

As described under (c) above, the Proposed Program may alter the existing drainage patterns of specific Program sites through addition of impervious surfaces, through these effects are not anticipated to be substantial. It is not anticipated that the amount of increased surface runoff generated from proposed CIPs would be sufficient to result in flooding on-site or off-site. However, for the purposes of this analysis, this issue is considered **potentially significant** and will be investigated further in the EIR.

e) **Create runoff that would exceed the existing stormwater systems –** *Potentially Significant Issues*

As described under (c) and (d) above, the Proposed Program would include construction of impervious facilities (e.g., lift stations and wastewater treatment facilities) that may increase the amount of surface runoff. It is not anticipated that the amount of increased runoff that may be generated by the Proposed Program would be sufficient to exceed the capacity of existing stormwater systems. However, this issue is considered **potentially significant** and will be investigated further in the EIR. The Proposed Program would also include modifications to existing stormwater systems (e.g., removal of cross-connections with the wastewater collection system), but these modifications would be designed to maintain adequate stormwater collection and conveyance capacity.

f) Substantially degrade water quality – *Potentially Significant Issue*

Apart from the potential construction-related water quality impacts discussed under (a) above, the Proposed Program would not be anticipated to substantially degrade water quality. Over the long term, the proposed improvements (e.g., removing some storm drain cross connections with stormwater sewers) would be anticipated to improve water quality through reduced potential for release of untreated sewage during wet weather events. Nevertheless, this issue is considered **potentially significant** and will be investigated further in the EIR.

g) Place housing within a 100-year flood hazard area, as mapped on a federal flood hazard boundary or flood insurance map or other flood hazard delineation map - *No Impact*

The Proposed Program would not involve placement of housing within a flood hazard area. Therefore, criterion g) is not applicable to the Proposed Program. **No impact** would occur.

h) Place structures within a 100-year flood hazard area resulting in impeding or redirect flood flows – *Potentially Significant Issue*

It is possible that some proposed improvements may be located within a 100-year flood hazard area, as portions of the Program area are within the 100-year floodplain (e.g., near the Sutter Plant). Many improvements would be low-profile or underground (e.g., sewer pipelines) and

some improvements would involve flood proofing wastewater treatment facilities (e.g., the primary effluent pump station would be replaced with a new outfall pump station above the 100-year flood elevation). While no new structures are anticipated to substantially impede or redirect flood flows, this impact is considered **potentially significant** impact. This issue will be evaluated further in the EIR.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding resulting from the failure of a levee or dam – *Potentially Significant Issue*

Based on a review of the dam inundation map included in the Stanislaus County General Plan (1994), it is possible that some improvement sites may be located in a dam inundation area, and therefore, some facilities may be subject to significant loss if an upstream dam were to fail. Some improvements could potentially be subject to flooding due to levee failure (e.g., overtopping of the Tuolumne River during storm events). In the unlikely event of dam or levee failure, proposed aboveground facilities could be compromised during such an event. It is anticipated that proposed CIPs would be designed to withstand natural hazards, such as levee or dam failures. For the purposes of this initial study, this issue is considered **potentially significant** and will be evaluated further in the EIR.

j) Contribute to inundation by seiche, tsunami, or mudflow – *No Impact*

Because the Proposed Program would be located in the Central Valley of California, not near any lakes or other large bodies of water, there would be no potential for seiche or tsunami in the Program area. The topography of the area also is generally flat and mudflow is not a noted hazard in the area. **No impact** would occur.

X. LAND USE AND PLANNING: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Physically divide an established community?		X	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	X		
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X

Explanations

a) Divide an established community – *Less than Significant*

The proposed Program would occur within Modesto and other outlying service areas, including Empire, North Ceres, and other unincorporated areas of Stanislaus County. Proposed CIPs would involve improvements to the City's collection system (e.g., upgraded sewers and lift stations), decommissioning of wastewater treatment facilities at the Primary Plant, construction of a new primary effluent outfall, and various modifications to the Secondary Plant. Construction of these improvements could result in temporary noise disturbances, increases in local traffic, and increases in air pollutant emissions for nearby sensitive receptors. However, construction of these CIPs would be short-term and phased over the next 20 years. The new outfall would be installed belowground and would traverse predominantly open space agricultural lands and thus not divide an established community. Additionally, given that the goal of the proposed Program is to accommodate wastewater treatment and sewer collection needs for customers throughout the above-mentioned communities, impacts related to dividing an established community would not be substantial. This impact would be **less than significant**.

b) Conflicts with land use plans or policies – *Potentially Significant Issues*

The Proposed Program would include a series of CIPs that involve repair and replacement of aging collection and wastewater infrastructure, decommissioning of wastewater treatment facilities at the Primary Plant, and construction of new wastewater infrastructure at the Secondary Plant. These CIPs would be implemented to address existing deficiencies and capacity needs for the City's wastewater treatment system and collection system through 2035. These improvements are also expected to provide sufficient sewer collection and wastewater treatment services for new growth anticipated in the City's Urban Area General Plan. As such, the Proposed Program would generally support general plan policies that call for safe and reliable wastewater collection and treatment services.

In order to implement the Proposed Program, temporary and/or permanent easement acquisitions may be required to ensure the City has adequate right-of-way and access to the

various CIP sites. Depending on where the CIPs are proposed to occur, some easements may need to be acquired from Modesto Irrigation District and Turlock Irrigation District. Until this issue is investigated further, impacts related to conflicts with land use plans or policies is considered **potentially significant**. The EIR will further evaluate this topic.

c) Conflicts with any habitat conservation plan or natural community conservation plan - *No Impact*

As described in Section IV, *Biological Resources,* the Proposed Program would not be located in an area covered by a habitat conservation plan or natural community conservation plan. As such, no conflicts with such plans would occur and there would be **no impact**.

XI. MINERAL RESOURCES: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?			X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X

Explanation

a-b) Loss of availability of mineral resources - *No Impact*

Based on review of the Stanislaus County General Plan (1992) and California Department of Conservation Surface Mining and Reclamation Act Mineral Lands Classification mapping (CDOC 2016), there are no known mineral resource zones, historic or active mines or quarries within the Program area. In addition, construction and operation of the proposed CIPs would not directly affect mineral production sites or prevent future availability of mineral resources. As a result, the Proposed Program would have **no impact** on mineral resources.

XII. NOISE: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels without the project?	X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	X		
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	X		

Explanations

a-d) Excessive noise levels, excessive groundborne vibration, or substantial temporary or permanent increase in noise levels - *Potentially Significant Issue*

The Proposed Program's construction activities would require the operation of heavy construction equipment in the Program area, which would temporarily increase noise and possibly groundborne vibration levels. Such noise and/or vibration needs to be evaluated to determine the extent to which it would be audible at properties adjacent to the Program work area. In addition, heavy trucks accessing the Program construction sites would temporarily increase traffic noise levels along their routes, and would also be potentially audible at properties along the construction truck routes. Although the construction generated noise and/or vibrations would be short-term and temporary, increased levels could potentially exceed the construction noise limits established in the local noise ordinances.

In addition, the Proposed Program's operation would potentially generate short-term or permanent noises through the use of mechanical equipment (e.g., pumps or generators), and maintenance-related worker vehicle trips to program sites.

This impact would be **potentially significant**. The EIR will further evaluate this topic, based on available construction, operation, and design details.

e-f) Expose people residing or working at a project site to excessive noise levels by locating a project within an airport land use plan area, or, within 2 miles of a public or private airport – *Potentially Significant Issue*

As described in Section VIII, *Hazards and Hazardous Materials*, the proposed CIPs may be located within an airport land use plan area or within 2 miles of a public or private airport (the exact locations of all improvements are not yet known). Airports within the study area potentially include the Modesto City-County Airport and the Turlock Airpark (Stanislaus County 2014). The Proposed Program would not involve the construction of any housing or offices. However, construction or maintenance workers could be exposed to excessive noise levels if project sites were located near airports. This impact would be potentially significant. The EIR would further evaluate the potential for the Program's proximity to an airport to result in excessive noise exposure.

XIII. POPULATION AND HOUSING: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Induce substantial growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	X		
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X

Explanations

a) Induce population growth, either directly or indirectly – *Potentially Significant Issue*

Throughout the Proposed Program's construction phase, workers would be temporarily employed at CIP sites. It is anticipated that regional labor could meet the construction workforce requirements. While some workers might temporarily relocate from other areas, the increase would likely be minor and short-term. It is anticipated that existing City of Modesto staff would conduct long-term operation and maintenance of the project facilities. The Program would not result in the construction of new homes and it may involve construction of new access roads to individual project sites. No new long-term employment opportunities or substantial population growth would occur in the project area due to construction of the Program.

One of the objectives of the Proposed Program is to ensure adequate wastewater infrastructure and services are available to serve its existing service area and new growth within the City's Sphere of Influence. As such, although the Proposed Program would not include any residential housing or businesses, it would remove insufficient wastewater treatment capacity and sewer collection capacity as potential obstacles to growth, and thereby could have an indirect effect on population growth within the Program area. This issue is considered **potentially significant** and will be investigated further in the EIR.

b) Displace existing housing – *No Impact*

The proposed CIPs would be constructed within the public right-of-way or on parcels owned by the City. The Proposed Program would not be anticipated to displace any existing housing. **No impact** would occur.

c) Displace existing populations – *No Impact*

As described under (b) above, the proposed CIPs would be constructed primarily within the public right-of-way and would not be anticipated to displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. **No impact** would occur.

XIV. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Fire protection?		X	
b) Police protection?		X	
c) Schools?		X	
d) Parks?		X	
e) Other public facilities?		X	

Explanations

a-b) Need for additional or physically altered fire and police services – *Less than Significant*

As noted in Section XIII, *Population and Housing*, above, construction of the proposed project would employ construction workers at the project site, which would likely come from the regional labor force. While some construction workers could temporarily relocate from other areas, the project would not result in a substantial increase in the local population. During construction, potential incidents could require law enforcement, fire protection or emergency services. However, such increases in incidents would not be anticipated to be of a magnitude that they would adversely affect response times or other performance objectives of such public services. Potential conflicts with emergency response plans are addressed in Section IX, *Hazards and Hazardous Materials,* and construction-related effects on emergency access are described in Section XVI, *Transportation and Traffic.*

c-e) Need for additional or physically altered schools, parks, or other public facilities – *Less than Significant*

As described above, construction of the Proposed Program would employ construction workers likely originating from the regional labor force. While some construction workers could temporarily relocate from other areas, the project would not result in a substantial increase in the local population. In addition, project operations following implementation of the Proposed Project would be similar to current conditions. The Propose Project impacts on local schools, parks, or other public facilities would be **less than significant**. Potential effects on parks are evaluated in Section XV, *Recreation,* below.

XV. RECREATION: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X

Explanations

a) Increase use of existing parks or recreational facilities - *Less than Significant*

The Proposed Program is not anticipated to directly generate increased demand for recreational facilities. Potential increased demand for parks or recreation facilities due to potential population growth are addressed in Section XIII, *Population and Housing*. In the event that construction of any proposed CIPs occur near or at existing parks or recreational facilities, the temporary closure of these facilities could result in a short-term increase in use of other nearby parks and recreational facilities. However, the Proposed Program would not be expected to substantially increase the use of any existing parks or recreational facilities such that physical deterioration of those facilities would occur or be accelerated. This impact would be **less than significant**.

b) Creation of new or altered recreational facilities – *No Impact*

The Proposed Program does not include recreational facilities and would not directly require the construction or alteration of any such facilities. Potential increased needs for new or altered parks or recreation facilities due to potential population growth are addressed in Section XIII, *Population and Housing*. There would be **no impact**.

XVI. TRANSPORTATION/TRAFFIC: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	X		
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	X		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X		
e) Result in inadequate emergency access?	X		
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	X		

Explanations

a-b) Conflict with applicable circulation plans, ordinances or policies or conflict with an applicable congestion management program - *Potentially Significant Issues*

Construction of the proposed CIPs would result in a temporary increase in roadway traffic within the Program area and in the broader Stanislaus County. In addition, construction of some improvements may require temporary road or lane closures and/or would be conducted within the road right-of-way. These activities could potentially conflict with applicable circulation plans, ordinances or policies or congestion management plans. This impact would be **potentially significant**. This topic will be further investigated in the EIR.

Currently, biosolids from the Sutter Plant are trucked from the sludge drying beds to 2,450 acres of City-owned ranch land near the Jennings Plant. Once construction of the new solids handling

facilities at the Jennings Plant is completed, the length of truck trips associated with hauling biosolids from the drying beds to the City's ranch lands, would be substantially less than existing conditions. As such, in the long-term, operational traffic generated by the Program would be less than existing conditions.

c) Change in air traffic patterns - *No Impact*

The proposed CIPs may be constructed near airports. However, some proposed facilities and improvements would be below ground (e.g., pipelines) or not of a substantial height (e.g., pump station buildings that are approximately one story) such that the Proposed Program would not interfere with any air traffic patterns. There would be **no impact**.

d-e) Increased hazards due to design features and inadequate emergency access - *Potentially Significant Issues*

As described above in the a-b) discussion, construction of proposed CIPs could temporarily increase traffic or require temporary road or lane closures. Such closures could increase or cause potential road hazards or interfere with emergency access. In addition, the presence of slow-moving equipment and heavy vehicles along local roads could result in temporary safety hazards. Operation of the Proposed Program would not be anticipated to affect or cause potential road hazards or emergency access. For the reasons described above, these impacts would be **potentially significant** and will be investigated further in the EIR.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities – *Potentially Significant Issues*

The Proposed Program's construction activities, including potential construction activities within the public right-of-way, could potentially conflict with adopted non-motorized transportation plans. Potentially applicable plans include the City of Modesto's *Non-Motorized Transportation Master Plan* (2006) and the Stanislaus Council of Government's *Non-Motorized Transportation Master Plan* (2013). This impact would be **potentially significant**. The EIR will further address the potential for the Proposed Program to conflict with these and other applicable policies, plans or programs.

XVII. UTILITES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable RWQCB?		X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X		
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X		
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	X		
g) Comply with federal, State, and local statutes and regulations related to solid waste?			X

Explanations

a) Exceed wastewater treatment requirements of the RWQCB - *Less than Significant*

The Proposed Program includes improvements to the City's sewer collection system, the City's wastewater treatment facilities, and conveyance infrastructure. Once completed, the Program would accommodate population growth and ensure that wastewater treatment capacity at the Sutter and Jennings Plants is adequate to serve growth in the service area through the year 2035.

During project construction, portable toilets would be provided at the construction work areas. Wastewater generated from construction employees disposed of at either the Sutter Plant or the Jennings Plant in compliance with all State, RWQCB, and local requirements related to sewage disposal. Impacts associated with wastewater treatment requirements would be **less than significant**.

b) Require the construction of new water or wastewater treatment facilities or expansion of existing facilities – *Potentially Significant Issues*

The Proposed Program involves the construction and expansion of existing wastewater treatment facilities to ensure adequate wastewater treatment for the City's service area. As described throughout this initial study, construction and operation of such facilities could result in **potentially significant** impacts; such effects will be evaluated further in the EIR.

c) Require the construction of new stormwater drainage facilities or expansion of existing facilities – *Potentially Significant Issues*

The Proposed Program includes improvements to the City's sewer collection system and removing cross connections with stormwater sewers. Other improvements, such as new lift stations and pump stations would create new impervious surfaces that may increase surface runoff near those locations. See Section IX, *Hydrology and Water Quality*, for further discussion of potential stormwater drainage impacts associated with the project during and after project construction. Although such structures are not anticipated to require construction of new stormwater drainage facilities or expansion of such facilities, this impact is considered **potentially significant** and will be investigated further in the EIR.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources – *Less than Significant*

During construction, a small amount of water would be needed for dust control purposes. Operation of the Proposed Program would may require an incremental increase in water usage but such an increase would unlikely require additional water supply entitlements or resources. This impact would be **less than significant**.

e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments - *No Impact*

Given that the purpose of the Proposed Program is to address aging wastewater infrastructure and provide a reliable wastewater collection, conveyance, and wastewater treatment to the City's sewer service area, the Program itself would not result in an increased demand for wastewater treatment. There would be **no impact**.

f) Have available landfill capacity to accommodate the project's solid waste disposal needs - *Potentially Significant Issue*

Project construction would generate solid waste associated with various construction activities.

Construction-related activities would generate waste material during demolition of existing structures, excavation of soils, and installation of new infrastructure. Disposal of all solid waste material would comply with all federal, State, and local statutes and regulations. Where feasible, the excavated soil and demolition debris generated by the project would be recycled, reused, and/or disposed of onsite. Excess material may be transported for disposal at the Fink Road

Sanitary Landfill, located near Crows Landing in Stanislaus County (Stanislaus County 2016) or other nearby solid waste facilities.

Once construction is completed, the Jennings Plant would experience an increase in the total volume of biosolids. However, similar to current operating procedures, the material would be spread on approximately 2,450 acres of City-owned ranch lands near the Jennings Plant. Because no solid waste estimates associated with construction of proposed CIPs are available yet, impacts on landfill capacity are considered **potentially significant.** This topic will be investigated further in the EIR.

g) Comply with federal, State, and local statutes and regulations related to solid waste - *No Impact*

Any waste generated by construction or operation of the proposed CIPs would be disposed of in compliance with all applicable federal, State, and local regulations regarding solid waste. Therefore, **no impact** would occur.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE: Does the project:	Potentially Significant Issues	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)	X		
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X		

Explanations

a) Effects on environmental quality, fish or wildlife, and historic resources - *Potentially Significant Issues*

Construction activities associated with the various proposed improvements could result in **potentially significant** impacts on special-status plant and animal species as well as cultural and historical resources. These issues will be evaluated further in the EIR.

b) Cumulative Impacts - *Potentially Significant Issues*

As defined by the State of California, cumulative impacts reflect, “the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines, § 15355[b]).

The degree to which Program effects would contribute to a significant cumulative impact will be evaluated in the EIR. To meet the adequacy standard established by the CEQA Guidelines section 15130, the EIR will identify past, present, and reasonably probable future projects and programs producing related or cumulative impacts. Other projects or plans in the geographic scope of the Proposed Program may include the City of Modesto’s Water Master Plan Update

and the City of Modesto's Urban General Plan Update. For the purposes of this initial study, cumulative impacts are considered **potentially significant**.

c) Effects on Human Beings - *Potentially Significant Issues*

Construction activities of the Proposed Program could result in temporary adverse impacts on people due to effects, such as air pollutant and GHG emissions, noise disturbances, and increased traffic on local roads. Such impacts are considered **potentially significant.** Operation of the Proposed Program is anticipated to substantially benefit people through providing safe and reliable water. This topic will be evaluated further in the EIR.

C. Determination

On the basis of this initial evaluation:

	I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Project, nothing further is required.

City of Modesto

Jim Alves
Associate Civil Engineer

6-6-16
Date

D. References

Aesthetics

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Master Notification list for WWMP/WMP NOP

Organization	Name	Title	Street Address	City	State	Zip Code	Phone Number	Email	Notes	Send WWMP NOP Only	Send WWMP NOP/IS
Turlock Irrigation District	Casey Hashimoto	General Manager	P.O. Box 949	Turlock	CA	95381-0949	209-883-8222				1
Modesto Irrigation District	Patrick Ryan	Civil Engineering Manager	1231 Eleventh St	Modesto	CA	95352		patrick.ryan@mid.org		1	
City of Ceres	Michael Brinton		2220 Hackett	Ceres	CA	95307		Michael.Brinton@ci.ceres.ca.us	The City serves Ceres	1	
City of Turlock	Garner Reynolds	Regulatory Affairs Manager	156 S. Broadway	Turlock	CA	95380		greynolds@turlock.ca.us	WMP EIR Only	1	
Del Puerto Water District	Anthea Hansen	General Manager	17840 Ward Avenue	Patterson	CA	95363		ahansen@delpuertowd.org	NVRRWP Partner	1	
City of Riverbank	Michael Riddell	Deputy Development Services Director -Ops	2901 High St	Riverbank	CA	95367				1	
City of Patterson	Mike Willett	Public Works Director	1 Plaza Circle	Patterson	CA	95363		MWillett@ci.patterson.ca.us	Neigboring agency	1	
City of Waterford	Tim Ogden	City Manager	312 E Street	Waterford	CA	95386			As a courtesy	1	
Empire Sanitary District *			5017 Yosemite Blvd.	Modesto	CA	95357					1
Salida Sanitary District	Mike Gilton	General Manger	P.O. Box 445	Salida	CA	95368			Neighboring sanitary district	1	
Stanislaus LAFCO	Sarah Lytle-Pinhey	Executive Officer	1010 Tenth Street, 3rd Floor	Modesto	CA	95354				1	
StanCOG	Rosa De Leon Park	Executive Director	1111 I Street, Suite 308	Modesto	CA	95354				1	
Stanislaus County	Matt Machado	Stanislaus County Public Works Director	1716 Morgan Rd	Modesto	CA	95358		machadom@stancounty.com		1	
Stanislaus County	Miguel Galvez	Senior Planner	1010 Tenth Street, 3rd Floor	Modesto	CA	95354				1	
Stanislaus County	Keith Boggs	Assistant Executive Director	1010 10th Street, Suite 6800	Modesto	CA	95354		boggsk@stancounty.com		1	
Stanislaus County	Walter Ward	Manager, Water Resources Program	3800 Cornucopia Way, Suite C	Modesto	CA	95358		wward@envres.org			1
Stanislaus County	Jami Aggers	Director of Environmental Resources	3800 Cornucopia Way, Suite C	Modesto	CA	95358		jaggers@envres.org			1
Stanislaus County Clerk's Office	Lee Lundrigan	County Clerk-Recorder	1021 "I" Street	Modesto	CA	95354					1
Stanislaus County Library	Reference Desk		1500 "I" Street	Modesto	CA	95354					1
Modesto Police Department	Galen Carroll	Chief of Police	600 10th Street	Modesto	CA	95354				1	
Modesto City/County Airport	Mark Germanowski	Airport Manager	617 Airport Way	Modesto	CA	95354				1	
Non-governmental organizations											
The Nature Conservancy	Laura Jensen		555 Capitol Mall, Suite 1290	Sacramento	CA	95814				1	
Stanislaus County Farm Bureau	Wayne Zipser	Executive Manager	1201 L Street, PO Box 3070	Modesto	CA	95353-3070				1	
Audubon California	Meghan Hertel	Working Lands Director	400 Capitol Mall, Suite 1535	Sacramento	CA	95814		mhertel@audubon.org		1	
Friends of the Tuolumne River	Allison Boucher		1900 NE 3rd Street, Ste 106, PMB 314	Bend	OR	97701				1	
Tuolumne River Trust	Patrick Koepele	Executive Director	829 Thirteenth Street	Modesto	CA	95354				1	
Regulatory Agencies	**Name**	**Title**	**Street Address**	**City**	**State**	**Zip Code**	**Phone Number**	**Email**			
U.S. Fish and Wildlife Service	Jana Affonso	Deputy Division Chief, Sacramento Valley Branch	2800 Cottage Way, Room W-2605	Sacramento	CA	95825					1
NOAA National Marine Fisheries	Maria Rea	Assistant Regional Administrator, Central Valley Offic	650 Capitol Mall, Suite 5-100	Sacramento	CA	95814					1
Central Valley Flood Protection Board			3310 El Camino Avenue, Room 151	Sacramento	CA	95821					1
San Joaquin Valley Air Pollution Control District	Georgia Stewart	Planning Division	1990 East Gettysburg Avenue	Fresno	CA	93726-0244		georgia.stewart@valleyair.org			1
U.S. Army Corp of Engineers, Sacramento District	Kate Dadey	Chief, California South Branch	1325 J Street, Room 1350	Sacramento	CA	95814					1
School Districts	**Name**	**Title**	**Street Address**	**City**	**State**	**Zip Code**	**Phone Number**	**Email**			
Empire Union School District			116 N. McClure Rd	Modesto	CA	95357				1	
Hart Ransom School District	Matthew Shipley	Superintendent	3920 Shoemaker Ave	Modesto	CA	95358	209-523-9996	mshipley@hartransom.org		1	
Paradise Elementary School	Heath Thomason	Superintendent/Principal	3361 California Ave	Modesto	CA	95358		hthomason@paradiseesd.org		1	
Salida Union School District		Superintendent	4801 Sisk Rd	Salida	CA	95358		kkent@salida.k12.ca.us	WMP EIR Only	1	
Sylvan Union School District	Debra Hendricks	Superintendent	605 Sylvan Ave	Modesto	CA	95355		dhendricks@sylvan.k12.ca.us		1	
Stanislaus Union School District	Britta M. Skavdahl	Superintendent	2410 Janna Ave	Modesto	CA	95350				1	
Riverbank Unified School District			6715 Seventh Street	Riverbank	CA	95367			WMP EIR Only?	1	
Shiloh k-8 School			6633 Paradise Rd	Modesto	CA	95358			WMP EIR Only?	1	
Orville Wright School	Victoria Kyte	Principal	1602 Monterey Avenue	Modesto	CA	95354				1	
Modesto City Schools District	Pam Able	District Superintendent	426 Locust Street	Modesto	CA	95351				1	
Fire Districts	**Name**	**Title**	**Street Address**	**City**	**State**	**Zip Code**	**Phone Number**	**Email**			
Burbank-Paradise Fire District			1313 Beverly Drive	Modesto	CA	95351				1	
City of Ceres Fire Department	Chief	Nicholes	2220 Magnolia St	Ceres	CA	95307				1	
Salida Fire Protection District			P.O. Box 1335	Salida	CA	95368			WMP EIR Only	1	
Stanislaus Consolidated Fire Protection Distirct			3324 Topeka St.	Riverbank	CA	95367				1	
Turlock City Fire Department	Robert Talloni	Chief	244 N. Broadway	Turlock	CA	95380-5454			WMP EIR Only	1	
Turlock Rural Fire District			690 W. Canal Dr	Turlock	CA	95380			WMP EIR Only	1	
Woodland Avenue Fire Protection District	Mike Passalaqua	District Chief	3300 Woodland Ave	Modesto	CA	95358				1	
Modesto Fire Department	Sean Slamon	Fire Chief	600 11th Street	Modesto	CA	95354				1	

NOTE: Strike-throughs are mostly from the previous NVRRWP effort from which this list is based, so we need to review the entire list for those that apply to either th WMP or WWMP EIRs

TOTAL **39** **11**

Attachment B:
State Clearinghouse
Notice of Preparation Posting

California Home Monday, July 18, 2016

Wastewater Master Plan Update

City	Cross Street	Document Type	Description	Date Received
Modesto		Notice of Preparation	The program involves several improvements to the City of Modesto's collection system such as replacement or construction of new trunk sewers or pump station, new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include upgrading the influent pump station, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes construction of a new third outfall pipeline. At the Jennings plant, the Program includes upgrades to the secondary treatment facilities and construction of new primary treatment and solids handling facilities.	6/10/2016

CEQAnet HOME | NEW SEARCH

Attachment C:
Public Comments Received

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

Notice of Preparation

June 10, 2016

To: Reviewing Agencies

Re: Wastewater Master Plan Update
SCH# 2016062033

Attached for your review and comment is the Notice of Preparation (NOP) for the Wastewater Master Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jim Alves
City of Modesto
P.O. Box 642
1010 Tenth Street
Modesto, CA 95353

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2016062033
Project Title Wastewater Master Plan Update
Lead Agency Modesto, City of

Type NOP Notice of Preparation

Description The program involves several improvements to the City of Modesto's collection system such as replacement or construction of new trunk sewers or pump station, new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include upgrading the influent pump station, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes construction of a new third outfall pipeline. At the Jennings plant, the Program includes upgrades to the secondary treatment facilities and construction of new primary treatment and solids handling facilities.

Lead Agency Contact

Name Jim Alves
Agency City of Modesto
Phone 209-571-5557 **Fax**
email jalves@modestogov.com
Address P.O. Box 642
1010 Tenth Street
City Modesto **State** CA **Zip** 95353

Project Location

County Stanislaus
City Modesto
Region
Cross Streets
Lat / Long
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy#: 108,132,99
Airports Modesto City-County Airport
Railways Southern Pacific
Waterways Tuolumne River, San Joaquin River, Stanislaus River
Schools various
Land Use Various

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Growth Inducing; Cumulative Effects

Reviewing Agencies Caltrans, District 10; Caltrans, Division of Aeronautics; Department of Fish and Wildlife, Region 4; California Highway Patrol; Department of Water Resources; Public Utilities Commission; State Water Resources Control Board, Divison of Financial Assistance; Resources Agency; Department of Parks and Recreation; Native American Heritage Commission

Date Received 06/10/2016 **Start of Review** 06/10/2016 **End of Review** 07/11/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

Print Form

Appendix C

2016062033

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Notice of Preparation of a Draft Environmental Impact Report for the Wastewater Master Plan Update

Lead Agency: City of Modesto — Contact Person: Jim Alves

Mailing Address: P.O. Box 642 — Phone:

City: Modesto — Zip: 95353 — County: Stanislaus

Project Location: County: Stanislaus — City/Nearest Community: Modesto

Cross Streets: Various — Zip Code: various

Longitude/Latitude (degrees, minutes and seconds): ____° ____′ ____″ N / ____° ____′ ____″ W Total Acres: Various

Assessor's Parcel No.: Various — Section: ____ Twp.: ____ Range: ____ Base: ____

Within 2 Miles: State Hwy #: 108, 132, 99 — Waterways: Tuolumne River, San Joaquin River, Stanislaus River

Airports: Modesto City-County Airport — Railways: Southern Pacific — Schools: various

Document Type:

CEQA: ☒ NOP ☐ Draft EIR — NEPA: ☐ NOI Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) ____ ☐ Draft EIS ☐ Other: ____
☐ Mit Neg Dec Other: ____ ☐ FONSI

Governor's Office of Planning & Research
JUN 10 2016
STATE CLEARINGHOUSE

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☒ Other: Wastewater Sys

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational: ____
☐ Recreational: ____
☒ Water Facilities: Type wastewater infrast MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☒ Recreation/Parks ☒ Vegetation
☒ Agricultural Land ☒ Flood Plain/Flooding ☒ Schools/Universities ☒ Water Quality
☒ Air Quality ☒ Forest Land/Fire Hazard ☒ Septic Systems ☒ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☒ Sewer Capacity ☒ Wetland/Riparian
☒ Biological Resources ☒ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Growth Inducement
☐ Coastal Zone ☒ Noise ☒ Solid Waste ☒ Land Use
☒ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☒ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☐ Other: ____

Present Land Use/Zoning/General Plan Designation:

Various

Project Description: *(please use a separate page if necessary)*

The Program involves several improvements to the City of Modesto's collection system such as replacement or construction of new trunk sewers or pump station, new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include upgrading the influent pump station, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes construction of a new third outfall pipeline. At the Jennings Plant, the Program includes upgrades to the secondary treatment facilities and construction of new primary treatment and solids handling facilities.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

X	Air Resources Board	X	Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
	California Emergency Management Agency		Parks & Recreation, Department of
	California Highway Patrol		Pesticide Regulation, Department of
X	Caltrans District #10		Public Utilities Commission
	Caltrans Division of Aeronautics	X	Regional WQCB #5
	Caltrans Planning		Resources Agency
	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board	X	San Joaquin River Conservancy
X	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of	X	SWRCB: Water Quality
	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region #4		Tahoe Regional Planning Agency
	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of	X	Water Resources, Department of
	General Services, Department of		
	Health Services, Department of		Other:
	Housing & Community Development		Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date June 10, 2016 Ending Date July 10, 2016

Lead Agency (Complete if applicable):

Consulting Firm: Horizon Water and Environment
Address: 180 Grande Ave, Suite 1405
City/State/Zip: Oakland, CA 94612
Contact: Michael Stevenson
Phone: 510-986-1852

Applicant: City of Modesto
Address: P.O. Box 642
City/State/Zip: Modesto, CA 95353
Phone: 209-577-5200

Signature of Lead Agency Representative: _____ **Date:** 5/9/16

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

NOP Distribution List

HR

County: Stanislaus

SCH# 2016062033

esources Agency

- [ ] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Denise Peterson
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Lisa Johansen
- [ ] **Dept. of Conservation**
  Elizabeth Carpenter
- [ ] **California Energy Commission**
  Eric Knight
- [ ] **Cal Fire**
  Dan Foster
- [ ] **Central Valley Flood Protection Board**
  James Herota
- [ ] **Office of Historic Preservation**
  Ron Parsons
- [ ] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **California Department of Resources, Recycling & Recovery**
  Sue O'Leary
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [ ] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Curt Babcock
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [ ] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Craig Weightman
- [ ] **Fish & Wildlife Region 4**
  Julie Vance
- [ ] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  Becky Ota
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Cathy Buck/George Carollo
  Environmental Services Section
- [ ] **Delta Stewardship Council**
  Kevan Samsam
- [ ] **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Michael Machado
- [ ] **OES (Office of Emergency Services)**
  Monique Wilber
- [ ] **Native American Heritage Comm.**
  Debbie Treadway
- [ ] **Public Utilities Commission**
  Supervisor
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [ ] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans -- Planning HQ LD-IGR**
  Terri Pencovic
- [ ] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Eric Federicks -- South
  Susan Zanchi - North
- [ ] **Caltrans, District 4**
  Patricia Maurice
- [ ] **Caltrans, District 5**
  Larry Newland
- [ ] **Caltrans, District 6**
  Michael Navarro
- [ ] **Caltrans, District 7**
  Dianna Watson
- [ ] **Caltrans, District 8**
  Mark Roberts
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [ ] Airport & Freight
  Cathi Slaminski
- [ ] Transportation Projects
  Nesamani Kalandiyur
- [ ] Industrial/Energy Projects
  Mike Tollstrup
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Cindy Forbes -- Asst Deputy
  Division of Drinking Water
- [ ] **State Water Resources Control Board**
  Div. Drinking Water #_____
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
- [ ] **RWQCB 5F**
  Central Valley Region (5)
  Fresno Branch Office
- [ ] **RWQCB 5R**
  Central Valley Region (5)
  Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
- [ ] **RWQCB 6V**
  Lahontan Region (6)
  Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____

_____

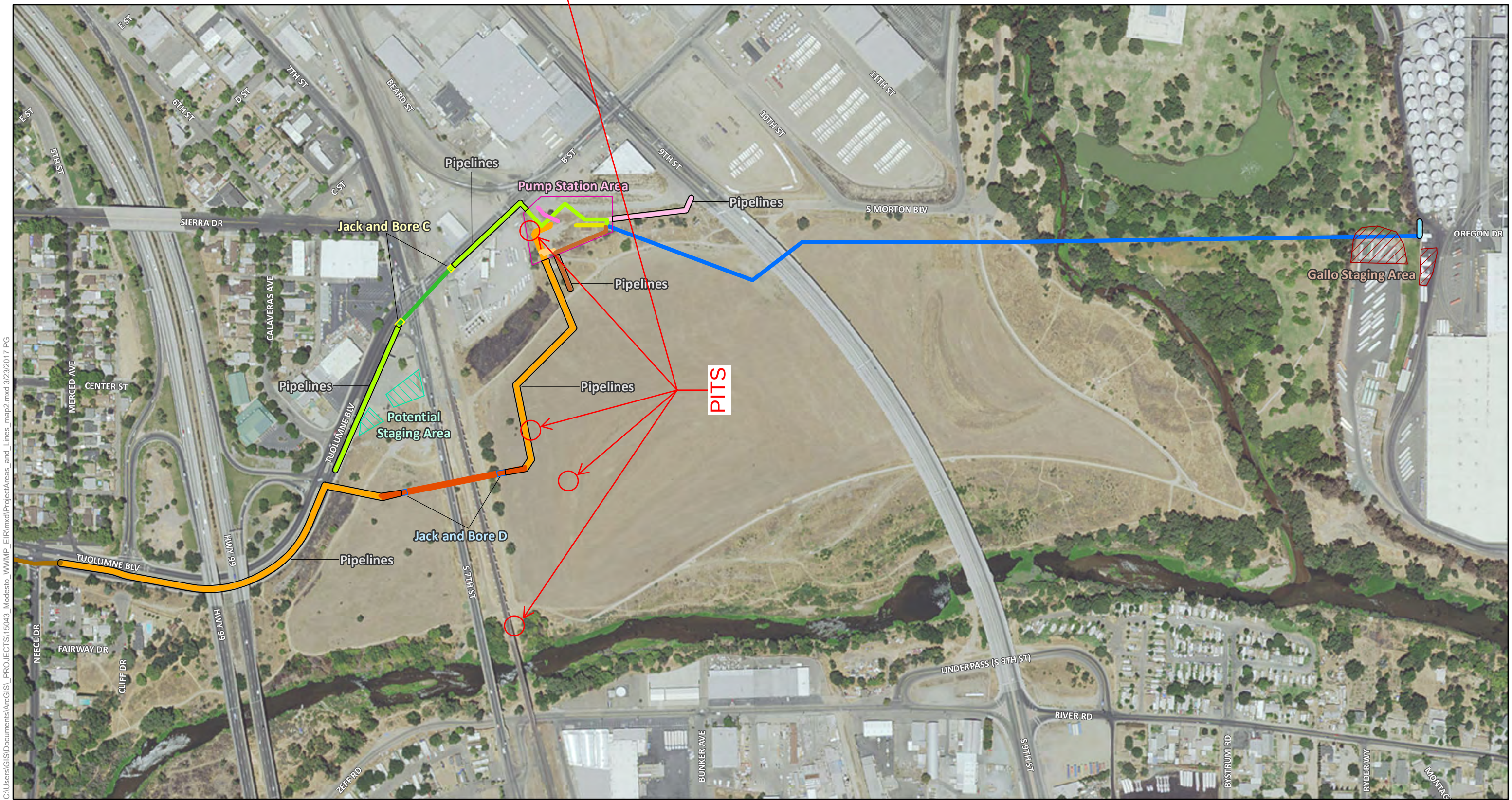
_____

- [ ] _____
  Conservancy

Last Updated 4/25/2016

Appendix B

Air Quality and Greenhouse Gas Modeling Results



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N

0 100 200 400

Feet

Horizon WATER and ENVIRONMENT

River Trunk Realignment Project

- Alignment A, Open Cut
- Alignment A, Trenchless
- Alignment B, Open Cut
- Alignment C, Open Cut
- Alignment C, Trenchless
- Algnmnt D Inter OF, Open Cut
- Alignment D, Open Cut
- Alignment D, Trenchless
- FA, Open Cut
- OF, Open Cut
- Overflow PS, Trenchless

Other Projects

- Gravity System

Project Areas

- Jack and Bore C
- Jack and Bore D
- Pipelines
- Pump Station Area
- Gallo Staging Area
- Potential Staging Area

Project Areas and Lines

Sheet 2 of 2

Modesto Wastewater Management Plan

PhaseName	OffRoad Equipment Type	Off Road Equipment Unit Amount	Usage Hours per Day	Horsepower	Load Factor	Number of Construction Days	Amount of Horsepower Use (gal/hp-hr)	Gallons of Diesel Use
RTPS - Site Prep	Excavators	1	8	158	0.38	25	31600	1488
RTPS - Site Prep	Off-Highway Trucks	0	8	402	0.38	25	80400	0
RTPS - Site Prep	Rubber Tired Loaders	1	8	203	0.36	25	40600	1912
RTPS - Site Prep	Scrapers	1	8	367	0.48	25	73400	3456
SPS - Site Prep	Excavators	1	8	158	0.38	11	13904	655
SPS - Site Prep	Off-Highway Trucks	0	8	402	0.38	11	35376	0
SPS - Site Prep	Rubber Tired Loaders	1	8	203	0.36	11	17864	841
Sutter Trunk - Lining	Cranes	1	6	231	0.29	11	15246	718
Sutter Trunk - Lining	Excavators	2	8	158	0.38	11	13904	1309
Sutter Trunk - Lining	Off-Highway Trucks	2	8	402	0.38	11	35376	3331
Sutter Trunk - Lining	Rubber Tired Loaders	1	8	203	0.36	11	17864	841
Alignment A	Bore/Drill Rigs	1	8	221	0.5	262	463216	21809
Alignment A	Cranes	1	6	231	0.29	262	363132	17097
Alignment A	Excavators	1	8	158	0.38	262	331168	15592
Alignment A	Off-Highway Trucks	1	8	402	0.38	262	842592	39672
Alignment A	Off-Highway Trucks	0	8	402	0.38	262	842592	0
Alignment A	Rubber Tired Loaders	1	8	203	0.36	262	425488	20033
Alignment B	Excavators	2	8	158	0.38	24	30336	2857
Alignment B	Off-Highway Trucks	2	8	402	0.38	24	77184	7268
Alignment B	Plate Compactors	1	8	8	0.43	24	1536	72
Alignment C	Excavators	2	8	158	0.38	89	112496	10593
Alignment C	Off-Highway Trucks	2	8	402	0.38	89	286224	26952
Alignment C	Plate Compactors	1	8	8	0.43	89	5696	268
Alignment D	Excavators	2	8	158	0.38	110	139040	13093
Alignment D	Off-Highway Trucks	4	8	402	0.38	110	353760	66624
Alignment D	Plate Compactors	1	8	8	0.43	110	7040	331
Gravity System	Excavators	2	8	158	0.38	220	278080	26186
Gravity System	Off-Highway Trucks	5	8	402	0.38	220	707520	166560
Gravity System	Plate Compactors	1	8	8	0.43	220	14080	663
SPS - Grading	Cranes	1	6	231	0.29	24	33264	1566
SPS - Grading	Excavators	1	8	158	0.38	24	30336	1428
SPS - Grading	Off-Highway Trucks	1	8	402	0.38	24	77184	3634
SPS - Grading	Rubber Tired Loaders	1	8	203	0.36	24	38976	1835
RTPS - Grading	Bore/Drill Rigs	1	8	221	0.5	130	229840	10822
RTPS - Grading	Cranes	1	8	231	0.29	130	240240	11311
RTPS - Grading	Excavators	2	8	158	0.38	130	164320	15473
RTPS - Grading	Off-Highway Trucks	1	8	402	0.38	130	418080	19684
RTPS - Grading	Off-Highway Trucks	1	8	402	0.38	130	418080	19684
RTPS - Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	130	100880	9499
SPS - Construction	Excavators	1	8	158	0.38	21	26544	1250
SPS - Construction	Off-Highway Trucks	2	8	402	0.38	21	67536	6360
SPS - Paving	Excavators	2	8	158	0.38	24	30336	2857
SPS - Paving	Off-Highway Trucks	0	8	402	0.38	24	77184	0
SPS - Paving	Pavers	1	8	130	0.42	24	24960	1175
SPS - Paving	Rubber Tired Loaders	1	8	203	0.36	24	38976	1835
SPS - Architectural	Off-Highway Trucks	2	8	402	0.38	5	16080	1514
SPS - Architectural	Rubber Tired Loaders	1	8	203	0.36	5	8120	382
RTPS - Construction	Aerial Lifts	1	8	63	0.31	458	230832	10868
RTPS - Construction	Cranes	1	8	231	0.29	458	846384	39850
RTPS - Construction	Excavators	1	8	158	0.38	458	578912	27257
RTPS - Construction	Off-Highway Trucks	0	8	402	0.38	458	1472928	0
RTPS - Construction	Off-Highway Trucks	2	8	402	0.38	458	1472928	138699
RTPS - Paving	Excavators	2	8	158	0.38	17	21488	2023
RTPS - Paving	Off-Highway Trucks	0	8	402	0.38	17	54672	0
RTPS - Paving	Pavers	1	8	130	0.42	17	17680	832
RTPS - Paving	Rubber Tired Loaders	1	8	203	0.36	17	27608	1300
RTPS - Architectural Coating	Off-Highway Trucks	2	8	402	0.38	5	16080	1514
RTPS - Architectural Coating	Rubber Tired Loaders	1	6	203	0.36	5	6090	287

TOTAL:	783,163

gallons of diesel

Table. Fuel Use Calculations

Phase Name	Number Days in Construction	Worker Trip Number (daily, one-way)	Hauling Trip Number (total for construction phase)	Worker Trip Length	Hauling Trip Length	Worker Fuel Rate (gallon/mile)	Hauling Fuel Rate (gallon/mile)	Worker Fuel Use (gallons)	Hauling Fuel Rate (gallons)
RTPS - Site Prep	25	10	2063	10.8	20	0.0460707	0.1810911	249	7472
SPS - Site Prep	11	10	2063	10.8	20	0.0460707	0.1810911	109	7472
Sutter Trunk - Lining	11	5	0	10.8	20	0.0460707	0.1810911	55	0
Alignment A	262	30	0	10.8	20	0.0460707	0.1810911	7822	0
Alignment B	24	10	0	10.8	20	0.0460707	0.1810911	239	0
Alignment C	89	20	0	10.8	20	0.0460707	0.1810911	1771	0
Alignment D	110	20	0	10.8	20	0.0460707	0.1810911	2189	0
Gravity System	220	20	0	10.8	20	0.0460707	0.1810911	4379	0
SPS - Grading	24	10	2063	10.8	20	0.0460707	0.1810911	239	7472
RTPS - Grading	130	20	2063	10.8	20	0.0460707	0.1810911	2587	7472
SPS - Construction	21	10	0	10.8	20	0.0460707	0.1810911	209	0
SPS - Paving	24	10	0	10.8	20	0.0460707	0.1810911	239	0
SPS - Architectural	5	5	0	10.8	20	0.0460707	0.1810911	25	0
RTPS - Construction	458	20	0	10.8	20	0.0460707	0.1810911	9115	0
RTPS - Paving	17	10	0	10.8	20	0.0460707	0.1810911	169	0
RTPS - Architectural Coating	5	5	0	10.8	20	0.0460707	0.1810911	25	0
							TOTAL:	29,421	29,887

Operational Fuel Use (Assume 1 worker, 260 work days/year)
52

Modesto WWMP

Stanislaus County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	57.00	1000sqft	1.31	57,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Modesto Irrigation District				
CO2 Intensity (lb/MWhr)	833.46	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From Total Pump Station Area - Request #9

Construction Phase - Based on information in Request #9 and January 2018 feedback from Carollo

Off-road Equipment - Based on Request #9. Off-highway trucks used for trucks for pipe delivery.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9. Off-highway trucks used for concrete delivery trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for concrete delivery trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for concrete trucks and pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Trips and VMT - Based on Request 9

Grading - Based on information from Request 9, but divided evenly between available phases. 5 acres / 4 phases

Vehicle Trips - 1 trip per day

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - no natural gas

Water And Wastewater - no indoor water use at pumpt station

Solid Waste - minimal solid waste generation

Construction Off-road Equipment Mitigation - Added Tier 3 Mitigation

Operational Off-Road Equipment - remove pump

Stationary Sources - Emergency Generators and Fire Pumps - Based on PDR 2016

Architectural Coating - No coating, just fencing.

Area Coating - No coating, just fencing.

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	22.00
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tblOffRoadEquipment	PhaseName		RTPS - Construction
tblOffRoadEquipment	PhaseName		RTPS - Construction
tblOffRoadEquipment	PhaseName		RTPS - Paving
tblOffRoadEquipment	PhaseName		RTPS - Architectural Coating
tblOffRoadEquipment	PhaseName		Sutter Trunk - Lining
tblOffRoadEquipment	PhaseName		Alignment A
tblOffRoadEquipment	PhaseName		Alignment A
tblOffRoadEquipment	PhaseName		Alignment B
tblOffRoadEquipment	PhaseName		Alignment C
tblOffRoadEquipment	PhaseName		Alignment D
tblOffRoadEquipment	PhaseName		Gravity System
tblOffRoadEquipment	PhaseName		RTPS - Grading
tblOffRoadEquipment	PhaseName		RTPS - Grading
tblOffRoadEquipment	PhaseName		SPS - Site Prep
tblOffRoadEquipment	PhaseName		Alignment B
tblOffRoadEquipment	PhaseName		Alignment C
tblOffRoadEquipment	PhaseName		Alignment D
tblOffRoadEquipment	PhaseName		Gravity System
tblOffRoadEquipment	PhaseName		RTPS - Site Prep
tblOffRoadEquipment	PhaseName		SPS - Grading
tblOffRoadEquipment	PhaseName		SPS - Paving
tblOffRoadEquipment	PhaseName		SPS - Architectural
tblOffRoadEquipment	PhaseName		RTPS - Paving
tblOffRoadEquipment	PhaseName		RTPS - Architectural Coating
tblOffRoadEquipment	PhaseName		Sutter Trunk - Lining
tblOffRoadEquipment	PhaseName		Alignment A
tblOffRoadEquipment	PhaseName		SPS - Site Prep

tblOffRoadEquipment	PhaseName		RTPS - Site Prep
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	70.68	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	VendorTripNumber	9.00	0.00
tblTripsAndVMT	VendorTripNumber	9.00	0.00
tblTripsAndVMT	WorkerTripNumber	24.00	10.00
tblTripsAndVMT	WorkerTripNumber	24.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	5.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleTrips	ST_TR	1.32	0.02
tblVehicleTrips	SU_TR	0.68	0.02
tblVehicleTrips	WD_TR	6.97	0.02
tblWater	IndoorWaterUseRate	13,181,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	1.0969	8.2437	4.9450	0.0143	0.1321	0.2930	0.4251	0.0348	0.2699	0.3047	0.0000	1,317.2404	1,317.2404	0.3185	0.0000	1,325.2030
2019	0.5123	5.2902	3.4904	9.3700e-003	0.0593	0.2038	0.2631	0.0154	0.1875	0.2029	0.0000	841.6250	841.6250	0.2508	0.0000	847.8941
2020	0.2359	2.3164	1.6142	4.4500e-003	0.0175	0.0893	0.1068	4.6500e-003	0.0821	0.0868	0.0000	391.4718	391.4718	0.1219	0.0000	394.5195
2021	0.4078	0.1122	0.1088	2.3000e-004	7.8000e-004	4.6700e-003	5.4500e-003	2.1000e-004	4.2900e-003	4.5000e-003	0.0000	20.5133	20.5133	6.4300e-003	0.0000	20.6740
Maximum	**1.0969**	**8.2437**	**4.9450**	**0.0143**	**0.1321**	**0.2930**	**0.4251**	**0.0348**	**0.2699**	**0.3047**	**0.0000**	**1,317.2404**	**1,317.2404**	**0.3185**	**0.0000**	**1,325.2030**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.6400	5.8504	7.3323	0.0143	0.1321	0.2032	0.3353	0.0348	0.2076	0.2424	0.0000	1,317.2393	1,317.2393	0.3185	0.0000	1,325.2018
2019	0.1596	4.0434	5.9141	9.3700e-003	0.0593	0.1661	0.2254	0.0154	0.1705	0.1859	0.0000	841.6241	841.6241	0.2508	0.0000	847.8931
2020	0.0700	2.0386	2.9293	4.4500e-003	0.0175	0.0846	0.1021	4.6500e-003	0.0870	0.0916	0.0000	391.4713	391.4713	0.1219	0.0000	394.5190
2021	0.4018	0.1092	0.1571	2.3000e-004	7.8000e-004	4.7700e-003	5.5500e-003	2.1000e-004	4.8000e-003	5.0000e-003	0.0000	20.5132	20.5132	6.4300e-003	0.0000	20.6740
Maximum	**0.6400**	**5.8504**	**7.3323**	**0.0143**	**0.1321**	**0.2032**	**0.3353**	**0.0348**	**0.2076**	**0.2424**	**0.0000**	**1,317.2393**	**1,317.2393**	**0.3185**	**0.0000**	**1,325.2018**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**43.57**	**24.56**	**-60.78**	**0.00**	**0.00**	**22.37**	**16.51**	**0.00**	**13.59**	**12.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2018	9-30-2018	1.0111	0.7253
2	10-1-2018	12-31-2018	1.7572	1.2485
3	1-1-2019	3-31-2019	0.3815	0.3017
		Highest	1.7572	1.2485

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2623	0.0000	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0200e-003	1.0200e-003	0.0000	0.0000	1.0900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	193.7247	193.7247	6.7400e-003	1.3900e-003	194.3088
Mobile	4.9000e-004	4.3700e-003	5.3200e-003	2.0000e-005	1.2700e-003	2.0000e-005	1.2900e-003	3.4000e-004	2.0000e-005	3.6000e-004	0.0000	1.8901	1.8901	1.2000e-004	0.0000	1.8931
Stationary	0.1490	0.4467	0.3983	7.2000e-004		0.0256	0.0256		0.0256	0.0256	0.0000	69.1528	69.1528	9.7000e-003	0.0000	69.3952
Waste						0.0000	0.0000		0.0000	0.0000	0.2030	0.0000	0.2030	0.0120	0.0000	0.5029
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4118**	**0.4510**	**0.4042**	**7.4000e-004**	**1.2700e-003**	**0.0256**	**0.0269**	**3.4000e-004**	**0.0256**	**0.0259**	**0.2030**	**264.7686**	**264.9716**	**0.0286**	**1.3900e-003**	**266.1011**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2623	0.0000	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0200e-003	1.0200e-003	0.0000	0.0000	1.0900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	193.7247	193.7247	6.7400e-003	1.3900e-003	194.3088
Mobile	4.9000e-004	4.3700e-003	5.3200e-003	2.0000e-005	1.2700e-003	2.0000e-005	1.2900e-003	3.4000e-004	2.0000e-005	3.6000e-004	0.0000	1.8901	1.8901	1.2000e-004	0.0000	1.8931
Stationary	0.1490	0.4467	0.3983	7.2000e-004		0.0256	0.0256		0.0256	0.0256	0.0000	69.1528	69.1528	9.7000e-003	0.0000	69.3952
Waste						0.0000	0.0000		0.0000	0.0000	0.2030	0.0000	0.2030	0.0120	0.0000	0.5029
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.4118**	**0.4510**	**0.4042**	**7.4000e-004**	**1.2700e-003**	**0.0256**	**0.0269**	**3.4000e-004**	**0.0256**	**0.0259**	**0.2030**	**264.7686**	**264.9716**	**0.0286**	**1.3900e-003**	**266.1011**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	RTPS - Site Prep	Site Preparation	7/1/2018	8/3/2018	5	25	
2	Sutter Trunk - Lining	Trenching	7/1/2018	7/16/2018	5	11	
3	Alignment A	Trenching	7/1/2018	7/2/2019	5	262	
4	Alignment B	Trenching	7/1/2018	8/2/2018	5	24	
5	Alignment C	Trenching	7/1/2018	11/1/2018	5	89	
6	Alignment D	Trenching	7/1/2018	11/30/2018	5	110	
7	Gravity System	Trenching	7/1/2018	5/3/2019	5	220	
8	RTPS - Grading	Grading	8/3/2018	1/31/2019	5	130	
9	SPS - Site Prep	Site Preparation	9/1/2018	9/17/2018	5	11	
10	SPS - Grading	Grading	9/18/2018	10/19/2018	5	24	
11	SPS - Construction	Building Construction	10/20/2018	11/19/2018	5	21	
12	SPS - Paving	Paving	11/20/2018	12/21/2018	5	24	
13	SPS - Architectural	Architectural Coating	12/22/2018	12/28/2018	5	5	
14	RTPS - Construction	Building Construction	1/31/2019	11/2/2020	5	458	
15	RTPS - Paving	Paving	11/3/2021	11/25/2021	5	17	
16	RTPS - Architectural Coating	Architectural Coating	11/26/2021	12/2/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 85,500; Non-Residential Outdoor: 28,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Modesto WWMP - Stanislaus County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
RTPS - Site Prep	Excavators	1	8.00	158	0.38
RTPS - Site Prep	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Site Prep	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Site Prep	Scrapers	1	8.00	367	0.48
Sutter Trunk - Lining	Cranes	1	6.00	231	0.29
Sutter Trunk - Lining	Excavators	2	8.00	158	0.38
Sutter Trunk - Lining	Off-Highway Trucks	2	4.00	402	0.38
Sutter Trunk - Lining	Rubber Tired Loaders	1	8.00	203	0.36
Alignment A	Bore/Drill Rigs	1	8.00	221	0.50
Alignment A	Cranes	1	6.00	231	0.29
Alignment A	Excavators	1	8.00	158	0.38
Alignment A	Off-Highway Trucks	1	8.00	402	0.38
Alignment A	Off-Highway Trucks	0	8.00	402	0.38
Alignment A	Rubber Tired Loaders	1	8.00	203	0.36
Alignment B	Excavators	2	8.00	158	0.38
Alignment B	Off-Highway Trucks	2	4.00	402	0.38
Alignment B	Plate Compactors	1	8.00	8	0.43
Alignment C	Excavators	2	8.00	158	0.38
Alignment C	Off-Highway Trucks	2	4.00	402	0.38
Alignment C	Plate Compactors	1	8.00	8	0.43
Alignment D	Excavators	2	8.00	158	0.38
Alignment D	Off-Highway Trucks	2	4.00	402	0.38
Alignment D	Plate Compactors	1	8.00	8	0.43
Gravity System	Excavators	2	8.00	158	0.38
Gravity System	Off-Highway Trucks	2	4.00	402	0.38
Gravity System	Plate Compactors	1	8.00	8	0.43

RTPS - Grading	Bore/Drill Rigs	1	8.00	221	0.50
RTPS - Grading	Cranes	1	8.00	231	0.29
RTPS - Grading	Excavators	2	8.00	158	0.38
RTPS - Grading	Off-Highway Trucks	1	8.00	402	0.38
RTPS - Grading	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
SPS - Site Prep	Excavators	1	8.00	158	0.38
SPS - Site Prep	Off-Highway Trucks	0	8.00	402	0.38
SPS - Site Prep	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Grading	Cranes	1	6.00	231	0.29
SPS - Grading	Excavators	1	8.00	158	0.38
SPS - Grading	Off-Highway Trucks	0	8.00	402	0.38
SPS - Grading	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Construction	Excavators	1	8.00	158	0.38
SPS - Construction	Off-Highway Trucks	1	8.00	402	0.38
SPS - Construction	Off-Highway Trucks	1	4.00	402	0.38
SPS - Paving	Excavators	2	8.00	158	0.38
SPS - Paving	Off-Highway Trucks	0	8.00	402	0.38
SPS - Paving	Pavers	1	8.00	130	0.42
SPS - Paving	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Architectural	Off-Highway Trucks	2	4.00	402	0.38
SPS - Architectural	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Construction	Aerial Lifts	1	8.00	63	0.31
RTPS - Construction	Cranes	1	8.00	231	0.29
RTPS - Construction	Excavators	1	8.00	158	0.38
RTPS - Construction	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Construction	Off-Highway Trucks	2	8.00	402	0.38

RTPS - Paving	Excavators	2	8.00	158	0.38
RTPS - Paving	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Paving	Pavers	1	8.00	130	0.42
RTPS - Paving	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Architectural Coating	Off-Highway Trucks	2	4.00	402	0.38
RTPS - Architectural Coating	Rubber Tired Loaders	1	6.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
RTPS - Site Prep	4	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Sutter Trunk - Lining	6	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment A	5	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment B	5	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment C	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment D	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Gravity System	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Grading	7	20.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Site Prep	3	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Grading	4	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Construction	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Architectural	3	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Construction	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Architectural Coating	3	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 RTPS - Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0233	0.2827	0.1725	3.3000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	30.3141	30.3141	9.4400e-003	0.0000	30.5500
Total	**0.0233**	**0.2827**	**0.1725**	**3.3000e-004**	**1.6000e-003**	**0.0111**	**0.0127**	**2.1000e-004**	**0.0102**	**0.0105**	**0.0000**	**30.3141**	**30.3141**	**9.4400e-003**	**0.0000**	**30.5500**

3.2 RTPS - Site Prep - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.3000e-003	0.3243	0.0444	8.4000e-004	0.0176	1.3200e-003	0.0189	4.8300e-003	1.2700e-003	6.1000e-003	0.0000	79.9973	79.9973	5.1700e-003	0.0000	80.1264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.9000e-004	5.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.9761	0.9761	4.0000e-005	0.0000	0.9770
Total	**9.9800e-003**	**0.3248**	**0.0495**	**8.5000e-004**	**0.0186**	**1.3300e-003**	**0.0199**	**5.1000e-003**	**1.2800e-003**	**6.3700e-003**	**0.0000**	**80.9734**	**80.9734**	**5.2100e-003**	**0.0000**	**81.1034**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1800e-003	0.1582	0.1918	3.3000e-004		6.3200e-003	6.3200e-003		6.3200e-003	6.3200e-003	0.0000	30.3141	30.3141	9.4400e-003	0.0000	30.5500
Total	**8.1800e-003**	**0.1582**	**0.1918**	**3.3000e-004**	**1.6000e-003**	**6.3200e-003**	**7.9200e-003**	**2.1000e-004**	**6.3200e-003**	**6.5300e-003**	**0.0000**	**30.3141**	**30.3141**	**9.4400e-003**	**0.0000**	**30.5500**

3.2 RTPS - Site Prep - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.3000e-003	0.3243	0.0444	8.4000e-004	0.0176	1.3200e-003	0.0189	4.8300e-003	1.2700e-003	6.1000e-003	0.0000	79.9973	79.9973	5.1700e-003	0.0000	80.1264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	4.9000e-004	5.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.9761	0.9761	4.0000e-005	0.0000	0.9770
Total	**9.9800e-003**	**0.3248**	**0.0495**	**8.5000e-004**	**0.0186**	**1.3300e-003**	**0.0199**	**5.1000e-003**	**1.2800e-003**	**6.3700e-003**	**0.0000**	**80.9734**	**80.9734**	**5.2100e-003**	**0.0000**	**81.1034**

3.3 Sutter Trunk - Lining - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0122	0.1373	0.0791	1.9000e-004		5.5300e-003	5.5300e-003		5.0900e-003	5.0900e-003	0.0000	17.1295	17.1295	5.3300e-003	0.0000	17.2628
Total	**0.0122**	**0.1373**	**0.0791**	**1.9000e-004**		**5.5300e-003**	**5.5300e-003**		**5.0900e-003**	**5.0900e-003**	**0.0000**	**17.1295**	**17.1295**	**5.3300e-003**	**0.0000**	**17.2628**

3.3 Sutter Trunk - Lining - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2147	0.2147	1.0000e-005	0.0000	0.2149
Total	**1.5000e-004**	**1.1000e-004**	**1.1200e-003**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2147**	**0.2147**	**1.0000e-005**	**0.0000**	**0.2149**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1300e-003	0.0823	0.1220	1.9000e-004		3.4400e-003	3.4400e-003		3.5200e-003	3.5200e-003	0.0000	17.1295	17.1295	5.3300e-003	0.0000	17.2628
Total	**3.1300e-003**	**0.0823**	**0.1220**	**1.9000e-004**		**3.4400e-003**	**3.4400e-003**		**3.5200e-003**	**3.5200e-003**	**0.0000**	**17.1295**	**17.1295**	**5.3300e-003**	**0.0000**	**17.2628**

3.3 Sutter Trunk - Lining - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2147	0.2147	1.0000e-005	0.0000	0.2149
Total	**1.5000e-004**	**1.1000e-004**	**1.1200e-003**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2147**	**0.2147**	**1.0000e-005**	**0.0000**	**0.2149**

3.4 Alignment A - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1455	1.7068	0.8643	2.5100e-003		0.0638	0.0638		0.0587	0.0587	0.0000	229.2367	229.2367	0.0714	0.0000	231.0208
Total	**0.1455**	**1.7068**	**0.8643**	**2.5100e-003**		**0.0638**	**0.0638**		**0.0587**	**0.0587**	**0.0000**	**229.2367**	**229.2367**	**0.0714**	**0.0000**	**231.0208**

3.4 Alignment A - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0107	7.7500e-003	0.0802	1.7000e-004	0.0157	1.3000e-004	0.0158	4.1700e-003	1.2000e-004	4.2900e-003	0.0000	15.3438	15.3438	5.9000e-004	0.0000	15.3586
Total	**0.0107**	**7.7500e-003**	**0.0802**	**1.7000e-004**	**0.0157**	**1.3000e-004**	**0.0158**	**4.1700e-003**	**1.2000e-004**	**4.2900e-003**	**0.0000**	**15.3438**	**15.3438**	**5.9000e-004**	**0.0000**	**15.3586**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0442	1.1155	1.5279	2.5100e-003		0.0444	0.0444		0.0454	0.0454	0.0000	229.2364	229.2364	0.0714	0.0000	231.0205
Total	**0.0442**	**1.1155**	**1.5279**	**2.5100e-003**		**0.0444**	**0.0444**		**0.0454**	**0.0454**	**0.0000**	**229.2364**	**229.2364**	**0.0714**	**0.0000**	**231.0205**

3.4 Alignment A - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0107	7.7500e-003	0.0802	1.7000e-004	0.0157	1.3000e-004	0.0158	4.1700e-003	1.2000e-004	4.2900e-003	0.0000	15.3438	15.3438	5.9000e-004	0.0000	15.3586
Total	**0.0107**	**7.7500e-003**	**0.0802**	**1.7000e-004**	**0.0157**	**1.3000e-004**	**0.0158**	**4.1700e-003**	**1.2000e-004**	**4.2900e-003**	**0.0000**	**15.3438**	**15.3438**	**5.9000e-004**	**0.0000**	**15.3586**

3.4 Alignment A - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1328	1.4996	0.8335	2.5100e-003		0.0556	0.0556		0.0511	0.0511	0.0000	225.4020	225.4020	0.0713	0.0000	227.1849
Total	**0.1328**	**1.4996**	**0.8335**	**2.5100e-003**		**0.0556**	**0.0556**		**0.0511**	**0.0511**	**0.0000**	**225.4020**	**225.4020**	**0.0713**	**0.0000**	**227.1849**

3.4 Alignment A - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6800e-003	6.7900e-003	0.0710	1.7000e-004	0.0157	1.2000e-004	0.0158	4.1700e-003	1.1000e-004	4.2900e-003	0.0000	14.9023	14.9023	5.2000e-004	0.0000	14.9153
Total	**9.6800e-003**	**6.7900e-003**	**0.0710**	**1.7000e-004**	**0.0157**	**1.2000e-004**	**0.0158**	**4.1700e-003**	**1.1000e-004**	**4.2900e-003**	**0.0000**	**14.9023**	**14.9023**	**5.2000e-004**	**0.0000**	**14.9153**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0467	1.1601	1.5360	2.5100e-003		0.0461	0.0461		0.0469	0.0469	0.0000	225.4017	225.4017	0.0713	0.0000	227.1846
Total	**0.0467**	**1.1601**	**1.5360**	**2.5100e-003**		**0.0461**	**0.0461**		**0.0469**	**0.0469**	**0.0000**	**225.4017**	**225.4017**	**0.0713**	**0.0000**	**227.1846**

3.4 Alignment A - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6800e-003	6.7900e-003	0.0710	1.7000e-004	0.0157	1.2000e-004	0.0158	4.1700e-003	1.1000e-004	4.2900e-003	0.0000	14.9023	14.9023	5.2000e-004	0.0000	14.9153
Total	**9.6800e-003**	**6.7900e-003**	**0.0710**	**1.7000e-004**	**0.0157**	**1.2000e-004**	**0.0158**	**4.1700e-003**	**1.1000e-004**	**4.2900e-003**	**0.0000**	**14.9023**	**14.9023**	**5.2000e-004**	**0.0000**	**14.9153**

3.5 Alignment B - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0167	0.1772	0.1316	2.9000e-004		7.3700e-003	7.3700e-003		6.7900e-003	6.7900e-003	0.0000	26.1625	26.1625	8.0700e-003	0.0000	26.3641
Total	**0.0167**	**0.1772**	**0.1316**	**2.9000e-004**		**7.3700e-003**	**7.3700e-003**		**6.7900e-003**	**6.7900e-003**	**0.0000**	**26.1625**	**26.1625**	**8.0700e-003**	**0.0000**	**26.3641**

3.5 Alignment B - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.7000e-004	4.9000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9370	0.9370	4.0000e-005	0.0000	0.9379
Total	**6.6000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**9.6000e-004**	**1.0000e-005**	**9.7000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.9370**	**0.9370**	**4.0000e-005**	**0.0000**	**0.9379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6900e-003	0.1190	0.1983	2.9000e-004		5.2100e-003	5.2100e-003		5.3900e-003	5.3900e-003	0.0000	26.1624	26.1624	8.0700e-003	0.0000	26.3641
Total	**3.6900e-003**	**0.1190**	**0.1983**	**2.9000e-004**		**5.2100e-003**	**5.2100e-003**		**5.3900e-003**	**5.3900e-003**	**0.0000**	**26.1624**	**26.1624**	**8.0700e-003**	**0.0000**	**26.3641**

3.5 Alignment B - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.7000e-004	4.9000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9370	0.9370	4.0000e-005	0.0000	0.9379
Total	**6.6000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**9.6000e-004**	**1.0000e-005**	**9.7000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.9370**	**0.9370**	**4.0000e-005**	**0.0000**	**0.9379**

3.6 Alignment C - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0619	0.6572	0.4879	1.0700e-003		0.0273	0.0273		0.0252	0.0252	0.0000	97.0192	97.0192	0.0299	0.0000	97.7670
Total	**0.0619**	**0.6572**	**0.4879**	**1.0700e-003**		**0.0273**	**0.0273**		**0.0252**	**0.0252**	**0.0000**	**97.0192**	**97.0192**	**0.0299**	**0.0000**	**97.7670**

3.6 Alignment C - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8600e-003	3.5100e-003	0.0363	8.0000e-005	7.1100e-003	6.0000e-005	7.1700e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	6.9496	6.9496	2.7000e-004	0.0000	6.9563
Total	**4.8600e-003**	**3.5100e-003**	**0.0363**	**8.0000e-005**	**7.1100e-003**	**6.0000e-005**	**7.1700e-003**	**1.8900e-003**	**5.0000e-005**	**1.9400e-003**	**0.0000**	**6.9496**	**6.9496**	**2.7000e-004**	**0.0000**	**6.9563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0137	0.4414	0.7353	1.0700e-003		0.0193	0.0193		0.0200	0.0200	0.0000	97.0191	97.0191	0.0299	0.0000	97.7669
Total	**0.0137**	**0.4414**	**0.7353**	**1.0700e-003**		**0.0193**	**0.0193**		**0.0200**	**0.0200**	**0.0000**	**97.0191**	**97.0191**	**0.0299**	**0.0000**	**97.7669**

3.6 Alignment C - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8600e-003	3.5100e-003	0.0363	8.0000e-005	7.1100e-003	6.0000e-005	7.1700e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	6.9496	6.9496	2.7000e-004	0.0000	6.9563
Total	**4.8600e-003**	**3.5100e-003**	**0.0363**	**8.0000e-005**	**7.1100e-003**	**6.0000e-005**	**7.1700e-003**	**1.8900e-003**	**5.0000e-005**	**1.9400e-003**	**0.0000**	**6.9496**	**6.9496**	**2.7000e-004**	**0.0000**	**6.9563**

3.7 Alignment D - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0765	0.8122	0.6030	1.3200e-003		0.0338	0.0338		0.0311	0.0311	0.0000	119.9113	119.9113	0.0370	0.0000	120.8357
Total	**0.0765**	**0.8122**	**0.6030**	**1.3200e-003**		**0.0338**	**0.0338**		**0.0311**	**0.0311**	**0.0000**	**119.9113**	**119.9113**	**0.0370**	**0.0000**	**120.8357**

3.7 Alignment D - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0100e-003	4.3400e-003	0.0449	1.0000e-004	8.7900e-003	7.0000e-005	8.8600e-003	2.3400e-003	7.0000e-005	2.4000e-003	0.0000	8.5894	8.5894	3.3000e-004	0.0000	8.5977
Total	**6.0100e-003**	**4.3400e-003**	**0.0449**	**1.0000e-004**	**8.7900e-003**	**7.0000e-005**	**8.8600e-003**	**2.3400e-003**	**7.0000e-005**	**2.4000e-003**	**0.0000**	**8.5894**	**8.5894**	**3.3000e-004**	**0.0000**	**8.5977**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0169	0.5456	0.9088	1.3200e-003		0.0239	0.0239		0.0247	0.0247	0.0000	119.9112	119.9112	0.0370	0.0000	120.8355
Total	**0.0169**	**0.5456**	**0.9088**	**1.3200e-003**		**0.0239**	**0.0239**		**0.0247**	**0.0247**	**0.0000**	**119.9112**	**119.9112**	**0.0370**	**0.0000**	**120.8355**

3.7 Alignment D - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0100e-003	4.3400e-003	0.0449	1.0000e-004	8.7900e-003	7.0000e-005	8.8600e-003	2.3400e-003	7.0000e-005	2.4000e-003	0.0000	8.5894	8.5894	3.3000e-004	0.0000	8.5977
Total	**6.0100e-003**	**4.3400e-003**	**0.0449**	**1.0000e-004**	**8.7900e-003**	**7.0000e-005**	**8.8600e-003**	**2.3400e-003**	**7.0000e-005**	**2.4000e-003**	**0.0000**	**8.5894**	**8.5894**	**3.3000e-004**	**0.0000**	**8.5977**

3.8 Gravity System - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0912	0.9673	0.7181	1.5700e-003		0.0402	0.0402		0.0371	0.0371	0.0000	142.8035	142.8035	0.0440	0.0000	143.9043
Total	**0.0912**	**0.9673**	**0.7181**	**1.5700e-003**		**0.0402**	**0.0402**		**0.0371**	**0.0371**	**0.0000**	**142.8035**	**142.8035**	**0.0440**	**0.0000**	**143.9043**

3.8 Gravity System - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1500e-003	5.1600e-003	0.0535	1.1000e-004	0.0105	9.0000e-005	0.0106	2.7800e-003	8.0000e-005	2.8600e-003	0.0000	10.2292	10.2292	3.9000e-004	0.0000	10.2391
Total	**7.1500e-003**	**5.1600e-003**	**0.0535**	**1.1000e-004**	**0.0105**	**9.0000e-005**	**0.0106**	**2.7800e-003**	**8.0000e-005**	**2.8600e-003**	**0.0000**	**10.2292**	**10.2292**	**3.9000e-004**	**0.0000**	**10.2391**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0201	0.6497	1.0823	1.5700e-003		0.0284	0.0284		0.0294	0.0294	0.0000	142.8033	142.8033	0.0440	0.0000	143.9041
Total	**0.0201**	**0.6497**	**1.0823**	**1.5700e-003**		**0.0284**	**0.0284**		**0.0294**	**0.0294**	**0.0000**	**142.8033**	**142.8033**	**0.0440**	**0.0000**	**143.9041**

3.8 Gravity System - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1500e-003	5.1600e-003	0.0535	1.1000e-004	0.0105	9.0000e-005	0.0106	2.7800e-003	8.0000e-005	2.8600e-003	0.0000	10.2292	10.2292	3.9000e-004	0.0000	10.2391
Total	**7.1500e-003**	**5.1600e-003**	**0.0535**	**1.1000e-004**	**0.0105**	**9.0000e-005**	**0.0106**	**2.7800e-003**	**8.0000e-005**	**2.8600e-003**	**0.0000**	**10.2292**	**10.2292**	**3.9000e-004**	**0.0000**	**10.2391**

3.8 Gravity System - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0566	0.5698	0.4777	1.0700e-003		0.0236	0.0236		0.0217	0.0217	0.0000	95.4527	95.4527	0.0299	0.0000	96.2003
Total	**0.0566**	**0.5698**	**0.4777**	**1.0700e-003**		**0.0236**	**0.0236**		**0.0217**	**0.0217**	**0.0000**	**95.4527**	**95.4527**	**0.0299**	**0.0000**	**96.2003**

3.8 Gravity System - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3900e-003	3.0700e-003	0.0321	7.0000e-005	7.1100e-003	6.0000e-005	7.1700e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	6.7497	6.7497	2.4000e-004	0.0000	6.7555
Total	**4.3900e-003**	**3.0700e-003**	**0.0321**	**7.0000e-005**	**7.1100e-003**	**6.0000e-005**	**7.1700e-003**	**1.8900e-003**	**5.0000e-005**	**1.9400e-003**	**0.0000**	**6.7497**	**6.7497**	**2.4000e-004**	**0.0000**	**6.7555**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.4717	0.7407	1.0700e-003		0.0205	0.0205		0.0210	0.0210	0.0000	95.4526	95.4526	0.0299	0.0000	96.2002
Total	**0.0154**	**0.4717**	**0.7407**	**1.0700e-003**		**0.0205**	**0.0205**		**0.0210**	**0.0210**	**0.0000**	**95.4526**	**95.4526**	**0.0299**	**0.0000**	**96.2002**

3.8 Gravity System - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3900e-003	3.0700e-003	0.0321	7.0000e-005	7.1100e-003	6.0000e-005	7.1700e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	6.7497	6.7497	2.4000e-004	0.0000	6.7555
Total	**4.3900e-003**	**3.0700e-003**	**0.0321**	**7.0000e-005**	**7.1100e-003**	**6.0000e-005**	**7.1700e-003**	**1.8900e-003**	**5.0000e-005**	**1.9400e-003**	**0.0000**	**6.7497**	**6.7497**	**2.4000e-004**	**0.0000**	**6.7555**

3.9 RTPS - Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1474	1.6474	1.0721	2.4000e-003		0.0744	0.0744		0.0684	0.0684	0.0000	219.3409	219.3409	0.0683	0.0000	221.0480
Total	**0.1474**	**1.6474**	**1.0721**	**2.4000e-003**	**1.6000e-003**	**0.0744**	**0.0760**	**2.1000e-004**	**0.0684**	**0.0687**	**0.0000**	**219.3409**	**219.3409**	**0.0683**	**0.0000**	**221.0480**

3.9 RTPS - Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.6500e-003	0.2670	0.0365	6.9000e-004	0.0168	1.0900e-003	0.0179	4.5500e-003	1.0400e-003	5.6000e-003	0.0000	65.8439	65.8439	4.2500e-003	0.0000	65.9502
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8400e-003	4.2200e-003	0.0437	9.0000e-005	8.5500e-003	7.0000e-005	8.6200e-003	2.2700e-003	6.0000e-005	2.3400e-003	0.0000	8.3552	8.3552	3.2000e-004	0.0000	8.3632
Total	**0.0135**	**0.2712**	**0.0802**	**7.8000e-004**	**0.0254**	**1.1600e-003**	**0.0265**	**6.8200e-003**	**1.1000e-003**	**7.9400e-003**	**0.0000**	**74.1991**	**74.1991**	**4.5700e-003**	**0.0000**	**74.3134**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0447	1.1048	1.5700	2.4000e-003		0.0510	0.0510		0.0518	0.0518	0.0000	219.3407	219.3407	0.0683	0.0000	221.0478
Total	**0.0447**	**1.1048**	**1.5700**	**2.4000e-003**	**1.6000e-003**	**0.0510**	**0.0526**	**2.1000e-004**	**0.0518**	**0.0520**	**0.0000**	**219.3407**	**219.3407**	**0.0683**	**0.0000**	**221.0478**

3.9 RTPS - Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.6500e-003	0.2670	0.0365	6.9000e-004	0.0168	1.0900e-003	0.0179	4.5500e-003	1.0400e-003	5.6000e-003	0.0000	65.8439	65.8439	4.2500e-003	0.0000	65.9502
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8400e-003	4.2200e-003	0.0437	9.0000e-005	8.5500e-003	7.0000e-005	8.6200e-003	2.2700e-003	6.0000e-005	2.3400e-003	0.0000	8.3552	8.3552	3.2000e-004	0.0000	8.3632
Total	**0.0135**	**0.2712**	**0.0802**	**7.8000e-004**	**0.0254**	**1.1600e-003**	**0.0265**	**6.8200e-003**	**1.1000e-003**	**7.9400e-003**	**0.0000**	**74.1991**	**74.1991**	**4.5700e-003**	**0.0000**	**74.3134**

3.9 RTPS - Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0285	0.3097	0.2241	5.2000e-004		0.0137	0.0137		0.0126	0.0126	0.0000	46.3578	46.3578	0.0147	0.0000	46.7244
Total	**0.0285**	**0.3097**	**0.2241**	**5.2000e-004**	**1.6000e-003**	**0.0137**	**0.0153**	**2.1000e-004**	**0.0126**	**0.0128**	**0.0000**	**46.3578**	**46.3578**	**0.0147**	**0.0000**	**46.7244**

3.9 RTPS - Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0542	7.6000e-003	1.5000e-004	0.0140	2.1000e-004	0.0142	3.5200e-003	2.0000e-004	3.7300e-003	0.0000	13.9965	13.9965	9.0000e-004	0.0000	14.0189
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1300e-003	7.9000e-004	8.3100e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.7443	1.7443	6.0000e-005	0.0000	1.7458
Total	**2.7000e-003**	**0.0550**	**0.0159**	**1.7000e-004**	**0.0158**	**2.2000e-004**	**0.0161**	**4.0100e-003**	**2.1000e-004**	**4.2300e-003**	**0.0000**	**15.7408**	**15.7408**	**9.6000e-004**	**0.0000**	**15.7647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.2453	0.3389	5.2000e-004		0.0113	0.0113		0.0114	0.0114	0.0000	46.3577	46.3577	0.0147	0.0000	46.7244
Total	**0.0100**	**0.2453**	**0.3389**	**5.2000e-004**	**1.6000e-003**	**0.0113**	**0.0129**	**2.1000e-004**	**0.0114**	**0.0116**	**0.0000**	**46.3577**	**46.3577**	**0.0147**	**0.0000**	**46.7244**

3.9 RTPS - Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0542	7.6000e-003	1.5000e-004	0.0140	2.1000e-004	0.0142	3.5200e-003	2.0000e-004	3.7300e-003	0.0000	13.9965	13.9965	9.0000e-004	0.0000	14.0189
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1300e-003	7.9000e-004	8.3100e-003	2.0000e-005	1.8400e-003	1.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.7443	1.7443	6.0000e-005	0.0000	1.7458
Total	**2.7000e-003**	**0.0550**	**0.0159**	**1.7000e-004**	**0.0158**	**2.2000e-004**	**0.0161**	**4.0100e-003**	**2.1000e-004**	**4.2300e-003**	**0.0000**	**15.7408**	**15.7408**	**9.6000e-004**	**0.0000**	**15.7647**

3.10 SPS - Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9500e-003	0.0463	0.0276	6.0000e-005		1.8200e-003	1.8200e-003		1.6700e-003	1.6700e-003	0.0000	5.7302	5.7302	1.7800e-003	0.0000	5.7748
Total	**3.9500e-003**	**0.0463**	**0.0276**	**6.0000e-005**	**1.6000e-003**	**1.8200e-003**	**3.4200e-003**	**2.1000e-004**	**1.6700e-003**	**1.8800e-003**	**0.0000**	**5.7302**	**5.7302**	**1.7800e-003**	**0.0000**	**5.7748**

3.10 SPS - Site Prep - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.3000e-003	0.3243	0.0444	8.4000e-004	0.0176	1.3200e-003	0.0189	4.8300e-003	1.2700e-003	6.1000e-003	0.0000	79.9973	79.9973	5.1700e-003	0.0000	80.1264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.2000e-004	2.2400e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4295	0.4295	2.0000e-005	0.0000	0.4299
Total	**9.6000e-003**	**0.3246**	**0.0466**	**8.4000e-004**	**0.0180**	**1.3200e-003**	**0.0194**	**4.9500e-003**	**1.2700e-003**	**6.2200e-003**	**0.0000**	**80.4268**	**80.4268**	**5.1900e-003**	**0.0000**	**80.5563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5500e-003	0.0300	0.0400	6.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	5.7302	5.7302	1.7800e-003	0.0000	5.7748
Total	**1.5500e-003**	**0.0300**	**0.0400**	**6.0000e-005**	**1.6000e-003**	**1.2800e-003**	**2.8800e-003**	**2.1000e-004**	**1.2800e-003**	**1.4900e-003**	**0.0000**	**5.7302**	**5.7302**	**1.7800e-003**	**0.0000**	**5.7748**

3.10 SPS - Site Prep - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.3000e-003	0.3243	0.0444	8.4000e-004	0.0176	1.3200e-003	0.0189	4.8300e-003	1.2700e-003	6.1000e-003	0.0000	79.9973	79.9973	5.1700e-003	0.0000	80.1264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.2000e-004	2.2400e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4295	0.4295	2.0000e-005	0.0000	0.4299
Total	**9.6000e-003**	**0.3246**	**0.0466**	**8.4000e-004**	**0.0180**	**1.3200e-003**	**0.0194**	**4.9500e-003**	**1.2700e-003**	**6.2200e-003**	**0.0000**	**80.4268**	**80.4268**	**5.1900e-003**	**0.0000**	**80.5563**

3.11 SPS - Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1624	0.0828	1.9000e-004		6.6300e-003	6.6300e-003		6.1000e-003	6.1000e-003	0.0000	17.2426	17.2426	5.3700e-003	0.0000	17.3768
Total	**0.0138**	**0.1624**	**0.0828**	**1.9000e-004**	**1.6000e-003**	**6.6300e-003**	**8.2300e-003**	**2.1000e-004**	**6.1000e-003**	**6.3100e-003**	**0.0000**	**17.2426**	**17.2426**	**5.3700e-003**	**0.0000**	**17.3768**

3.11 SPS - Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.3000e-003	0.3243	0.0444	8.4000e-004	0.0176	1.3200e-003	0.0189	4.8300e-003	1.2700e-003	6.1000e-003	0.0000	79.9973	79.9973	5.1700e-003	0.0000	80.1264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.7000e-004	4.9000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9370	0.9370	4.0000e-005	0.0000	0.9379
Total	**9.9600e-003**	**0.3248**	**0.0493**	**8.5000e-004**	**0.0186**	**1.3300e-003**	**0.0199**	**5.0800e-003**	**1.2800e-003**	**6.3600e-003**	**0.0000**	**80.9343**	**80.9343**	**5.2100e-003**	**0.0000**	**81.0643**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6000e-003	0.0000	1.6000e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0900	0.1149	1.9000e-004		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	17.2426	17.2426	5.3700e-003	0.0000	17.3768
Total	**4.6600e-003**	**0.0900**	**0.1149**	**1.9000e-004**	**1.6000e-003**	**3.7200e-003**	**5.3200e-003**	**2.1000e-004**	**3.7200e-003**	**3.9300e-003**	**0.0000**	**17.2426**	**17.2426**	**5.3700e-003**	**0.0000**	**17.3768**

3.11 SPS - Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.3000e-003	0.3243	0.0444	8.4000e-004	0.0176	1.3200e-003	0.0189	4.8300e-003	1.2700e-003	6.1000e-003	0.0000	79.9973	79.9973	5.1700e-003	0.0000	80.1264
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.7000e-004	4.9000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9370	0.9370	4.0000e-005	0.0000	0.9379
Total	**9.9600e-003**	**0.3248**	**0.0493**	**8.5000e-004**	**0.0186**	**1.3300e-003**	**0.0199**	**5.0800e-003**	**1.2800e-003**	**6.3600e-003**	**0.0000**	**80.9343**	**80.9343**	**5.2100e-003**	**0.0000**	**81.0643**

3.12 SPS - Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0152	0.1636	0.1006	2.6000e-004		6.3600e-003	6.3600e-003		5.8500e-003	5.8500e-003	0.0000	23.9470	23.9470	7.4600e-003	0.0000	24.1334
Total	**0.0152**	**0.1636**	**0.1006**	**2.6000e-004**		**6.3600e-003**	**6.3600e-003**		**5.8500e-003**	**5.8500e-003**	**0.0000**	**23.9470**	**23.9470**	**7.4600e-003**	**0.0000**	**24.1334**

3.12 SPS - Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.1000e-004	4.2800e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8199	0.8199	3.0000e-005	0.0000	0.8207
Total	**5.7000e-004**	**4.1000e-004**	**4.2800e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.8199**	**0.8199**	**3.0000e-005**	**0.0000**	**0.8207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1700e-003	0.1046	0.1780	2.6000e-004		4.3500e-003	4.3500e-003		4.5800e-003	4.5800e-003	0.0000	23.9470	23.9470	7.4600e-003	0.0000	24.1334
Total	**2.1700e-003**	**0.1046**	**0.1780**	**2.6000e-004**		**4.3500e-003**	**4.3500e-003**		**4.5800e-003**	**4.5800e-003**	**0.0000**	**23.9470**	**23.9470**	**7.4600e-003**	**0.0000**	**24.1334**

3.12 SPS - Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.1000e-004	4.2800e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8199	0.8199	3.0000e-005	0.0000	0.8207
Total	**5.7000e-004**	**4.1000e-004**	**4.2800e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.8199**	**0.8199**	**3.0000e-005**	**0.0000**	**0.8207**

3.13 SPS - Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1815	0.1346	2.6000e-004		7.8900e-003	7.8900e-003		7.2600e-003	7.2600e-003	0.0000	23.3092	23.3092	7.2600e-003	0.0000	23.4906
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0160**	**0.1815**	**0.1346**	**2.6000e-004**		**7.8900e-003**	**7.8900e-003**		**7.2600e-003**	**7.2600e-003**	**0.0000**	**23.3092**	**23.3092**	**7.2600e-003**	**0.0000**	**23.4906**

3.13 SPS - Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.7000e-004	4.9000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9370	0.9370	4.0000e-005	0.0000	0.9379
Total	**6.6000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**9.6000e-004**	**1.0000e-005**	**9.7000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.9370**	**0.9370**	**4.0000e-005**	**0.0000**	**0.9379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2900e-003	0.1217	0.1770	2.6000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003	0.0000	23.3092	23.3092	7.2600e-003	0.0000	23.4906
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.2900e-003**	**0.1217**	**0.1770**	**2.6000e-004**		**5.5000e-003**	**5.5000e-003**		**5.5000e-003**	**5.5000e-003**	**0.0000**	**23.3092**	**23.3092**	**7.2600e-003**	**0.0000**	**23.4906**

3.13 SPS - Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.7000e-004	4.9000e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.9370	0.9370	4.0000e-005	0.0000	0.9379
Total	**6.6000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**9.6000e-004**	**1.0000e-005**	**9.7000e-004**	**2.5000e-004**	**1.0000e-005**	**2.6000e-004**	**0.0000**	**0.9370**	**0.9370**	**4.0000e-005**	**0.0000**	**0.9379**

3.14 SPS - Architectural - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0100e-003	0.0341	0.0148	5.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	4.4418	4.4418	1.3800e-003	0.0000	4.4763
Total	**0.3993**	**0.0341**	**0.0148**	**5.0000e-005**		**1.2100e-003**	**1.2100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**4.4418**	**4.4418**	**1.3800e-003**	**0.0000**	**4.4763**

3.14 SPS - Architectural - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0976	0.0976	0.0000	0.0000	0.0977
Total	**7.0000e-005**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0976**	**0.0976**	**0.0000**	**0.0000**	**0.0977**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	0.0200	0.0301	5.0000e-005		7.8000e-004	7.8000e-004		8.1000e-004	8.1000e-004	0.0000	4.4418	4.4418	1.3800e-003	0.0000	4.4763
Total	**0.3968**	**0.0200**	**0.0301**	**5.0000e-005**		**7.8000e-004**	**7.8000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**4.4418**	**4.4418**	**1.3800e-003**	**0.0000**	**4.4763**

3.14 SPS - Architectural - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0976	0.0976	0.0000	0.0000	0.0977
Total	**7.0000e-005**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0976**	**0.0976**	**0.0000**	**0.0000**	**0.0977**

3.15 RTPS - Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2659	2.8380	1.7498	4.6600e-003		0.1104	0.1104		0.1015	0.1015	0.0000	418.8943	418.8943	0.1325	0.0000	422.2076
Total	**0.2659**	**2.8380**	**1.7498**	**4.6600e-003**		**0.1104**	**0.1104**		**0.1015**	**0.1015**	**0.0000**	**418.8943**	**418.8943**	**0.1325**	**0.0000**	**422.2076**

3.15 RTPS - Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0118	8.2500e-003	0.0863	2.0000e-004	0.0191	1.5000e-004	0.0193	5.0800e-003	1.4000e-004	5.2200e-003	0.0000	18.1255	18.1255	6.3000e-004	0.0000	18.1413
Total	**0.0118**	**8.2500e-003**	**0.0863**	**2.0000e-004**	**0.0191**	**1.5000e-004**	**0.0193**	**5.0800e-003**	**1.4000e-004**	**5.2200e-003**	**0.0000**	**18.1255**	**18.1255**	**6.3000e-004**	**0.0000**	**18.1413**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0589	2.0932	3.0932	4.6600e-003		0.0877	0.0877		0.0907	0.0907	0.0000	418.8938	418.8938	0.1325	0.0000	422.2071
Total	**0.0589**	**2.0932**	**3.0932**	**4.6600e-003**		**0.0877**	**0.0877**		**0.0907**	**0.0907**	**0.0000**	**418.8938**	**418.8938**	**0.1325**	**0.0000**	**422.2071**

3.15 RTPS - Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0118	8.2500e-003	0.0863	2.0000e-004	0.0191	1.5000e-004	0.0193	5.0800e-003	1.4000e-004	5.2200e-003	0.0000	18.1255	18.1255	6.3000e-004	0.0000	18.1413
Total	**0.0118**	**8.2500e-003**	**0.0863**	**2.0000e-004**	**0.0191**	**1.5000e-004**	**0.0193**	**5.0800e-003**	**1.4000e-004**	**5.2200e-003**	**0.0000**	**18.1255**	**18.1255**	**6.3000e-004**	**0.0000**	**18.1413**

3.15 RTPS - Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2260	2.3097	1.5437	4.2700e-003		0.0892	0.0892		0.0820	0.0820	0.0000	375.3708	375.3708	0.1214	0.0000	378.4059
Total	**0.2260**	**2.3097**	**1.5437**	**4.2700e-003**		**0.0892**	**0.0892**		**0.0820**	**0.0820**	**0.0000**	**375.3708**	**375.3708**	**0.1214**	**0.0000**	**378.4059**

3.15 RTPS - Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8300e-003	6.6600e-003	0.0705	1.8000e-004	0.0175	1.3000e-004	0.0176	4.6500e-003	1.2000e-004	4.7700e-003	0.0000	16.1009	16.1009	5.0000e-004	0.0000	16.1136
Total	**9.8300e-003**	**6.6600e-003**	**0.0705**	**1.8000e-004**	**0.0175**	**1.3000e-004**	**0.0176**	**4.6500e-003**	**1.2000e-004**	**4.7700e-003**	**0.0000**	**16.1009**	**16.1009**	**5.0000e-004**	**0.0000**	**16.1136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0601	2.0319	2.8589	4.2700e-003		0.0844	0.0844		0.0868	0.0868	0.0000	375.3704	375.3704	0.1214	0.0000	378.4055
Total	**0.0601**	**2.0319**	**2.8589**	**4.2700e-003**		**0.0844**	**0.0844**		**0.0868**	**0.0868**	**0.0000**	**375.3704**	**375.3704**	**0.1214**	**0.0000**	**378.4055**

3.15 RTPS - Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8300e-003	6.6600e-003	0.0705	1.8000e-004	0.0175	1.3000e-004	0.0176	4.6500e-003	1.2000e-004	4.7700e-003	0.0000	16.1009	16.1009	5.0000e-004	0.0000	16.1136
Total	**9.8300e-003**	**6.6600e-003**	**0.0705**	**1.8000e-004**	**0.0175**	**1.3000e-004**	**0.0176**	**4.6500e-003**	**1.2000e-004**	**4.7700e-003**	**0.0000**	**16.1009**	**16.1009**	**5.0000e-004**	**0.0000**	**16.1136**

3.16 RTPS - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9000e-003	0.0915	0.0939	1.8000e-004		3.9400e-003	3.9400e-003		3.6200e-003	3.6200e-003	0.0000	15.8900	15.8900	5.1400e-003	0.0000	16.0185
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9000e-003**	**0.0915**	**0.0939**	**1.8000e-004**		**3.9400e-003**	**3.9400e-003**		**3.6200e-003**	**3.6200e-003**	**0.0000**	**15.8900**	**15.8900**	**5.1400e-003**	**0.0000**	**16.0185**

3.16 RTPS - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.3000e-004	2.4900e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.8000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.6052	0.6052	2.0000e-005	0.0000	0.6056
Total	**3.5000e-004**	**2.3000e-004**	**2.4900e-003**	**1.0000e-005**	**6.8000e-004**	**1.0000e-005**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6052**	**0.6052**	**2.0000e-005**	**0.0000**	**0.6056**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4600e-003	0.0862	0.1254	1.8000e-004		3.9000e-003	3.9000e-003		3.9000e-003	3.9000e-003	0.0000	15.8900	15.8900	5.1400e-003	0.0000	16.0184
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4600e-003**	**0.0862**	**0.1254**	**1.8000e-004**		**3.9000e-003**	**3.9000e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**15.8900**	**15.8900**	**5.1400e-003**	**0.0000**	**16.0184**

3.16 RTPS - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.3000e-004	2.4900e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.8000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.6052	0.6052	2.0000e-005	0.0000	0.6056
Total	**3.5000e-004**	**2.3000e-004**	**2.4900e-003**	**1.0000e-005**	**6.8000e-004**	**1.0000e-005**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6052**	**0.6052**	**2.0000e-005**	**0.0000**	**0.6056**

3.17 RTPS - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1600e-003	0.0204	0.0120	4.0000e-005		7.2000e-004	7.2000e-004		6.7000e-004	6.7000e-004	0.0000	3.9291	3.9291	1.2700e-003	0.0000	3.9609
Total	**0.3985**	**0.0204**	**0.0120**	**4.0000e-005**		**7.2000e-004**	**7.2000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**3.9291**	**3.9291**	**1.2700e-003**	**0.0000**	**3.9609**

3.17 RTPS - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0890	0.0890	0.0000	0.0000	0.0891
Total	**5.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0890**	**0.0890**	**0.0000**	**0.0000**	**0.0891**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	0.0227	0.0289	4.0000e-005		8.7000e-004	8.7000e-004		8.9000e-004	8.9000e-004	0.0000	3.9291	3.9291	1.2700e-003	0.0000	3.9609
Total	**0.3970**	**0.0227**	**0.0289**	**4.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.9000e-004**	**8.9000e-004**	**0.0000**	**3.9291**	**3.9291**	**1.2700e-003**	**0.0000**	**3.9609**

3.17 RTPS - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0890	0.0890	0.0000	0.0000	0.0891
Total	**5.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0890**	**0.0890**	**0.0000**	**0.0000**	**0.0891**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.9000e-004	4.3700e-003	5.3200e-003	2.0000e-005	1.2700e-003	2.0000e-005	1.2900e-003	3.4000e-004	2.0000e-005	3.6000e-004	0.0000	1.8901	1.8901	1.2000e-004	0.0000	1.8931
Unmitigated	4.9000e-004	4.3700e-003	5.3200e-003	2.0000e-005	1.2700e-003	2.0000e-005	1.2900e-003	3.4000e-004	2.0000e-005	3.6000e-004	0.0000	1.8901	1.8901	1.2000e-004	0.0000	1.8931

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1.14	1.14	1.14	3,328	3,328
Total	1.14	1.14	1.14	3,328	3,328

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	193.7247	193.7247	6.7400e-003	1.3900e-003	194.3088
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	193.7247	193.7247	6.7400e-003	1.3900e-003	194.3088
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	512430	193.7247	6.7400e-003	1.3900e-003	194.3088
Total		**193.7247**	**6.7400e-003**	**1.3900e-003**	**194.3088**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	512430	193.7247	6.7400e-003	1.3900e-003	194.3088
Total		**193.7247**	**6.7400e-003**	**1.3900e-003**	**194.3088**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2623	0.0000	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0200e-003	1.0200e-003	0.0000	0.0000	1.0900e-003
Unmitigated	0.2623	0.0000	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0200e-003	1.0200e-003	0.0000	0.0000	1.0900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0200e-003	1.0200e-003	0.0000	0.0000	1.0900e-003
Total	**0.2623**	**0.0000**	**5.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0200e-003**	**1.0200e-003**	**0.0000**	**0.0000**	**1.0900e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0200e-003	1.0200e-003	0.0000	0.0000	1.0900e-003
Total	**0.2623**	**0.0000**	**5.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0200e-003**	**1.0200e-003**	**0.0000**	**0.0000**	**1.0900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2030	0.0120	0.0000	0.5029
Unmitigated	0.2030	0.0120	0.0000	0.5029

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1	0.2030	0.0120	0.0000	0.5029
Total		**0.2030**	**0.0120**	**0.0000**	**0.5029**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1	0.2030	0.0120	0.0000	0.5029
Total		**0.2030**	**0.0120**	**0.0000**	**0.5029**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0	200	208	0.73	Diesel
Emergency Generator	2	0	200	38	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 300 HP)	0.1365	0.3816	0.3481	6.6000e-004		0.0201	0.0201		0.0201	0.0201	0.0000	63.3647	63.3647	8.8800e-003	0.0000	63.5868
Emergency Generator - Diesel (25 - 50 HP)	0.0125	0.0650	0.0502	6.0000e-005		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003	0.0000	5.7881	5.7881	8.1000e-004	0.0000	5.8084
Total	**0.1490**	**0.4467**	**0.3983**	**7.2000e-004**		**0.0256**	**0.0256**		**0.0256**	**0.0256**	**0.0000**	**69.1528**	**69.1528**	**9.6900e-003**	**0.0000**	**69.3952**

11.0 Vegetation

Modesto WWMP

Stanislaus County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	57.00	1000sqft	1.31	57,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Modesto Irrigation District				
CO2 Intensity (lb/MWhr)	833.46	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From Total Pump Station Area - Request #9

Construction Phase - Based on information in Request #9 and January 2018 feedback from Carollo

Off-road Equipment - Based on Request #9. Off-highway trucks used for trucks for pipe delivery.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9. Off-highway trucks used for concrete delivery trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for concrete delivery trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for concrete trucks and pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Trips and VMT - Based on Request 9

Grading - Based on information from Request 9, but divided evenly between available phases. 5 acres / 4 phases

Vehicle Trips - 1 trip per day

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - no natural gas

Water And Wastewater - no indoor water use at pumpt station

Solid Waste - minimal solid waste generation

Construction Off-road Equipment Mitigation - Added Tier 3 Mitigation

Operational Off-Road Equipment - remove pump

Stationary Sources - Emergency Generators and Fire Pumps - Based on PDR 2016

Architectural Coating - No coating, just fencing.

Area Coating - No coating, just fencing.

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	EF_Parking	150.00	0.00

tblAreaCoating	Area_EF_Parking	150	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	22.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	37.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
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tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	25.00	1.25
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tblGrading	MaterialExported	0.00	11,500.00

tblGrading	MaterialExported	0.00	11,500.00
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tblOffRoadEquipment	PhaseName		Alignment A
tblOffRoadEquipment	PhaseName		RTPS - Grading
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tblOffRoadEquipment	PhaseName		Alignment A
tblOffRoadEquipment	PhaseName		RTPS - Grading
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tblOffRoadEquipment	PhaseName		RTPS - Construction
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tblOffRoadEquipment	PhaseName		Alignment A
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Modesto WWMP - Stanislaus County, Summer

tblOffRoadEquipment	PhaseName		RTPS - Site Prep
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tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	70.68	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
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tblTripsAndVMT	VendorTripNumber	9.00	0.00
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tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleTrips	ST_TR	1.32	0.02
tblVehicleTrips	SU_TR	0.68	0.02
tblVehicleTrips	WD_TR	6.97	0.02
tblWater	IndoorWaterUseRate	13,181,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	166.6934	172.3730	93.9786	0.3452	4.9002	5.4390	9.7044	1.2886	5.0108	5.7203	0.0000	35,405.5305	35,405.5305	6.5418	0.0000	35,563.0698
2019	8.6408	91.2592	61.9591	0.1675	2.0172	3.5173	5.5345	0.5149	3.2374	3.7523	0.0000	16,642.6539	16,642.6539	4.6801	0.0000	16,759.6549
2020	2.1660	21.1492	14.8404	0.0408	0.1643	0.8154	0.9797	0.0436	0.7502	0.7938	0.0000	3,956.3218	3,956.3218	1.2278	0.0000	3,987.0157
2021	159.4036	10.7905	11.3861	0.0221	0.0822	0.4637	0.5459	0.0218	0.4266	0.4484	0.0000	2,146.6375	2,146.6375	0.6690	0.0000	2,163.3622
Maximum	**166.6934**	**172.3730**	**93.9786**	**0.3452**	**4.9002**	**5.4390**	**9.7044**	**1.2886**	**5.0108**	**5.7203**	**0.0000**	**35,405.5305**	**35,405.5305**	**6.5418**	**0.0000**	**35,563.0698**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	161.1469	135.6832	135.6958	0.3452	4.9002	3.6590	8.3328	1.2886	3.7414	4.7823	0.0000	35,405.5304	35,405.5304	6.5418	0.0000	35,563.0698
2019	3.0615	72.0441	99.8182	0.1675	2.0172	2.8996	4.9168	0.5149	2.9611	3.4760	0.0000	16,642.6539	16,642.6539	4.6801	0.0000	16,759.6549
2020	0.6508	18.6122	26.8510	0.0408	0.1643	0.7722	0.9365	0.0436	0.7942	0.8378	0.0000	3,956.3217	3,956.3217	1.2278	0.0000	3,987.0157
2021	158.8102	10.1627	15.0892	0.0221	0.0822	0.4591	0.5412	0.0218	0.4590	0.4808	0.0000	2,146.6375	2,146.6375	0.6690	0.0000	2,163.3622
Maximum	**161.1469**	**135.6832**	**135.6958**	**0.3452**	**4.9002**	**3.6590**	**8.3328**	**1.2886**	**3.7414**	**4.7823**	**0.0000**	**35,405.5304**	**35,405.5304**	**6.5418**	**0.0000**	**35,563.0698**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.93**	**19.98**	**-52.31**	**0.00**	**0.00**	**23.89**	**12.15**	**0.00**	**15.59**	**10.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.1700e-003	0.0235	0.0321	1.2000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		12.1203	12.1203	7.3000e-004		12.1385
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.4407**	**0.0235**	**0.0380**	**1.2000e-004**	**7.1500e-003**	**1.6000e-004**	**7.3000e-003**	**1.9200e-003**	**1.5000e-004**	**2.0700e-003**		**12.1328**	**12.1328**	**7.6000e-004**	**0.0000**	**12.1518**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.1700e-003	0.0235	0.0321	1.2000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		12.1203	12.1203	7.3000e-004		12.1385
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.4407**	**0.0235**	**0.0380**	**1.2000e-004**	**7.1500e-003**	**1.6000e-004**	**7.3000e-003**	**1.9200e-003**	**1.5000e-004**	**2.0700e-003**		**12.1328**	**12.1328**	**7.6000e-004**	**0.0000**	**12.1518**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Modesto WWMP - Stanislaus County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	RTPS - Site Prep	Site Preparation	7/1/2018	8/3/2018	5	25	
2	Sutter Trunk - Lining	Trenching	7/1/2018	7/16/2018	5	11	
3	Alignment A	Trenching	7/1/2018	7/2/2019	5	262	
4	Alignment B	Trenching	7/1/2018	8/2/2018	5	24	
5	Alignment C	Trenching	7/1/2018	11/1/2018	5	89	
6	Alignment D	Trenching	7/1/2018	11/30/2018	5	110	
7	Gravity System	Trenching	7/1/2018	5/3/2019	5	220	
8	RTPS - Grading	Grading	8/3/2018	1/31/2019	5	130	
9	SPS - Site Prep	Site Preparation	9/1/2018	9/17/2018	5	11	
10	SPS - Grading	Grading	9/18/2018	10/19/2018	5	24	
11	SPS - Construction	Building Construction	10/20/2018	11/19/2018	5	21	
12	SPS - Paving	Paving	11/20/2018	12/21/2018	5	24	
13	SPS - Architectural	Architectural Coating	12/22/2018	12/28/2018	5	5	
14	RTPS - Construction	Building Construction	1/31/2019	11/2/2020	5	458	
15	RTPS - Paving	Paving	11/3/2021	11/25/2021	5	17	
16	RTPS - Architectural Coating	Architectural Coating	11/26/2021	12/2/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 85,500; Non-Residential Outdoor: 28,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Modesto WWMP - Stanislaus County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
RTPS - Site Prep	Excavators	1	8.00	158	0.38
RTPS - Site Prep	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Site Prep	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Site Prep	Scrapers	1	8.00	367	0.48
Sutter Trunk - Lining	Cranes	1	6.00	231	0.29
Sutter Trunk - Lining	Excavators	2	8.00	158	0.38
Sutter Trunk - Lining	Off-Highway Trucks	2	4.00	402	0.38
Sutter Trunk - Lining	Rubber Tired Loaders	1	8.00	203	0.36
Alignment A	Bore/Drill Rigs	1	8.00	221	0.50
Alignment A	Cranes	1	6.00	231	0.29
Alignment A	Excavators	1	8.00	158	0.38
Alignment A	Off-Highway Trucks	1	8.00	402	0.38
Alignment A	Off-Highway Trucks	0	8.00	402	0.38
Alignment A	Rubber Tired Loaders	1	8.00	203	0.36
Alignment B	Excavators	2	8.00	158	0.38
Alignment B	Off-Highway Trucks	2	4.00	402	0.38
Alignment B	Plate Compactors	1	8.00	8	0.43
Alignment C	Excavators	2	8.00	158	0.38
Alignment C	Off-Highway Trucks	2	4.00	402	0.38
Alignment C	Plate Compactors	1	8.00	8	0.43
Alignment D	Excavators	2	8.00	158	0.38
Alignment D	Off-Highway Trucks	2	4.00	402	0.38
Alignment D	Plate Compactors	1	8.00	8	0.43
Gravity System	Excavators	2	8.00	158	0.38
Gravity System	Off-Highway Trucks	2	4.00	402	0.38
Gravity System	Plate Compactors	1	8.00	8	0.43

RTPS - Grading	Bore/Drill Rigs	1	8.00	221	0.50
RTPS - Grading	Cranes	1	8.00	231	0.29
RTPS - Grading	Excavators	2	8.00	158	0.38
RTPS - Grading	Off-Highway Trucks	1	8.00	402	0.38
RTPS - Grading	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
SPS - Site Prep	Excavators	1	8.00	158	0.38
SPS - Site Prep	Off-Highway Trucks	0	8.00	402	0.38
SPS - Site Prep	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Grading	Cranes	1	6.00	231	0.29
SPS - Grading	Excavators	1	8.00	158	0.38
SPS - Grading	Off-Highway Trucks	0	8.00	402	0.38
SPS - Grading	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Construction	Excavators	1	8.00	158	0.38
SPS - Construction	Off-Highway Trucks	1	8.00	402	0.38
SPS - Construction	Off-Highway Trucks	1	4.00	402	0.38
SPS - Paving	Excavators	2	8.00	158	0.38
SPS - Paving	Off-Highway Trucks	0	8.00	402	0.38
SPS - Paving	Pavers	1	8.00	130	0.42
SPS - Paving	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Architectural	Off-Highway Trucks	2	4.00	402	0.38
SPS - Architectural	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Construction	Aerial Lifts	1	8.00	63	0.31
RTPS - Construction	Cranes	1	8.00	231	0.29
RTPS - Construction	Excavators	1	8.00	158	0.38
RTPS - Construction	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Construction	Off-Highway Trucks	2	8.00	402	0.38

RTPS - Paving	Excavators	2	8.00	158	0.38
RTPS - Paving	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Paving	Pavers	1	8.00	130	0.42
RTPS - Paving	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Architectural Coating	Off-Highway Trucks	2	4.00	402	0.38
RTPS - Architectural Coating	Rubber Tired Loaders	1	6.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
RTPS - Site Prep	4	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Sutter Trunk - Lining	6	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment A	5	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment B	5	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment C	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment D	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Gravity System	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Grading	7	20.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Site Prep	3	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Grading	4	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Construction	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Architectural	3	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Construction	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Architectural Coating	3	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 RTPS - Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1277	0.0000	0.1277	0.0170	0.0000	0.0170			0.0000			0.0000
Off-Road	1.8659	22.6124	13.7978	0.0266		0.8900	0.8900		0.8188	0.8188		2,673.2464	2,673.2464	0.8322		2,694.0518
Total	**1.8659**	**22.6124**	**13.7978**	**0.0266**	**0.1277**	**0.8900**	**1.0177**	**0.0170**	**0.8188**	**0.8359**		**2,673.2464**	**2,673.2464**	**0.8322**		**2,694.0518**

3.2 RTPS - Site Prep - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7337	25.2991	3.3622	0.0678	1.4420	0.1050	1.5470	0.3952	0.1004	0.4956		7,115.0830	7,115.0830	0.4338		7,125.9280
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.7954**	**25.3353**	**3.8308**	**0.0687**	**1.5242**	**0.1056**	**1.6298**	**0.4170**	**0.1010**	**0.5180**		**7,209.3499**	**7,209.3499**	**0.4375**		**7,220.2860**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1277	0.0000	0.1277	0.0170	0.0000	0.0170			0.0000			0.0000
Off-Road	0.6546	12.6551	15.3472	0.0266		0.5054	0.5054		0.5054	0.5054	0.0000	2,673.2464	2,673.2464	0.8322		2,694.0518
Total	**0.6546**	**12.6551**	**15.3472**	**0.0266**	**0.1277**	**0.5054**	**0.6331**	**0.0170**	**0.5054**	**0.5225**	**0.0000**	**2,673.2464**	**2,673.2464**	**0.8322**		**2,694.0518**

3.2 RTPS - Site Prep - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7337	25.2991	3.3622	0.0678	1.4420	0.1050	1.5470	0.3952	0.1004	0.4956		7,115.0830	7,115.0830	0.4338		7,125.9280
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.7954**	**25.3353**	**3.8308**	**0.0687**	**1.5242**	**0.1056**	**1.6298**	**0.4170**	**0.1010**	**0.5180**		**7,209.3499**	**7,209.3499**	**0.4375**		**7,220.2860**

3.3 Sutter Trunk - Lining - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2095	24.9573	14.3798	0.0341		1.0062	1.0062		0.9257	0.9257		3,433.0971	3,433.0971	1.0688		3,459.8164
Total	**2.2095**	**24.9573**	**14.3798**	**0.0341**		**1.0062**	**1.0062**		**0.9257**	**0.9257**		**3,433.0971**	**3,433.0971**	**1.0688**		**3,459.8164**

3.3 Sutter Trunk - Lining - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0309	0.0181	0.2343	4.7000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		47.1335	47.1335	1.8200e-003		47.1790
Total	**0.0309**	**0.0181**	**0.2343**	**4.7000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**47.1335**	**47.1335**	**1.8200e-003**		**47.1790**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5684	14.9655	22.1781	0.0341		0.6256	0.6256		0.6402	0.6402	0.0000	3,433.0971	3,433.0971	1.0688		3,459.8164
Total	**0.5684**	**14.9655**	**22.1781**	**0.0341**		**0.6256**	**0.6256**		**0.6402**	**0.6402**	**0.0000**	**3,433.0971**	**3,433.0971**	**1.0688**		**3,459.8164**

3.3 Sutter Trunk - Lining - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0309	0.0181	0.2343	4.7000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		47.1335	47.1335	1.8200e-003		47.1790
Total	**0.0309**	**0.0181**	**0.2343**	**4.7000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**47.1335**	**47.1335**	**1.8200e-003**		**47.1790**

3.4 Alignment A - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2215	26.0575	13.1958	0.0384		0.9746	0.9746		0.8966	0.8966		3,857.8655	3,857.8655	1.2010		3,887.8906
Total	**2.2215**	**26.0575**	**13.1958**	**0.0384**		**0.9746**	**0.9746**		**0.8966**	**0.8966**		**3,857.8655**	**3,857.8655**	**1.2010**		**3,887.8906**

3.4 Alignment A - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1853	0.1085	1.4058	2.8500e-003	0.2464	1.9700e-003	0.2484	0.0654	1.8200e-003	0.0672		282.8007	282.8007	0.0109		283.0741
Total	**0.1853**	**0.1085**	**1.4058**	**2.8500e-003**	**0.2464**	**1.9700e-003**	**0.2484**	**0.0654**	**1.8200e-003**	**0.0672**		**282.8007**	**282.8007**	**0.0109**		**283.0741**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6752	17.0302	23.3272	0.0384		0.6785	0.6785		0.6931	0.6931	0.0000	3,857.8655	3,857.8655	1.2010		3,887.8906
Total	**0.6752**	**17.0302**	**23.3272**	**0.0384**		**0.6785**	**0.6785**		**0.6931**	**0.6931**	**0.0000**	**3,857.8655**	**3,857.8655**	**1.2010**		**3,887.8906**

3.4 Alignment A - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1853	0.1085	1.4058	2.8500e-003	0.2464	1.9700e-003	0.2484	0.0654	1.8200e-003	0.0672		282.8007	282.8007	0.0109		283.0741
Total	**0.1853**	**0.1085**	**1.4058**	**2.8500e-003**	**0.2464**	**1.9700e-003**	**0.2484**	**0.0654**	**1.8200e-003**	**0.0672**		**282.8007**	**282.8007**	**0.0109**		**283.0741**

3.4 Alignment A - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0268	22.8948	12.7255	0.0383		0.8483	0.8483		0.7804	0.7804		3,793.3305	3,793.3305	1.2002		3,823.3348
Total	**2.0268**	**22.8948**	**12.7255**	**0.0383**		**0.8483**	**0.8483**		**0.7804**	**0.7804**		**3,793.3305**	**3,793.3305**	**1.2002**		**3,823.3348**

3.4 Alignment A - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1675	0.0952	1.2475	2.7600e-003	0.2464	1.9000e-003	0.2484	0.0654	1.7500e-003	0.0671		274.7030	274.7030	9.6700e-003		274.9448
Total	**0.1675**	**0.0952**	**1.2475**	**2.7600e-003**	**0.2464**	**1.9000e-003**	**0.2484**	**0.0654**	**1.7500e-003**	**0.0671**		**274.7030**	**274.7030**	**9.6700e-003**		**274.9448**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7133	17.7114	23.4501	0.0383		0.7040	0.7040		0.7165	0.7165	0.0000	3,793.3305	3,793.3305	1.2002		3,823.3348
Total	**0.7133**	**17.7114**	**23.4501**	**0.0383**		**0.7040**	**0.7040**		**0.7165**	**0.7165**	**0.0000**	**3,793.3305**	**3,793.3305**	**1.2002**		**3,823.3348**

3.4 Alignment A - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1675	0.0952	1.2475	2.7600e-003	0.2464	1.9000e-003	0.2484	0.0654	1.7500e-003	0.0671		274.7030	274.7030	9.6700e-003		274.9448
Total	**0.1675**	**0.0952**	**1.2475**	**2.7600e-003**	**0.2464**	**1.9000e-003**	**0.2484**	**0.0654**	**1.7500e-003**	**0.0671**		**274.7030**	**274.7030**	**9.6700e-003**		**274.9448**

3.5 Alignment B - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.5 Alignment B - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.0618**	**0.0362**	**0.4686**	**9.5000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**94.2669**	**94.2669**	**3.6500e-003**		**94.3580**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.5 Alignment B - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.0618**	**0.0362**	**0.4686**	**9.5000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**94.2669**	**94.2669**	**3.6500e-003**		**94.3580**

3.6 Alignment C - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.6 Alignment C - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.1235**	**0.0724**	**0.9372**	**1.9000e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**188.5338**	**188.5338**	**7.2900e-003**		**188.7161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.6 Alignment C - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.1235**	**0.0724**	**0.9372**	**1.9000e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**188.5338**	**188.5338**	**7.2900e-003**		**188.7161**

3.7 Alignment D - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.7 Alignment D - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.1235**	**0.0724**	**0.9372**	**1.9000e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**188.5338**	**188.5338**	**7.2900e-003**		**188.7161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.7 Alignment D - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.1235**	**0.0724**	**0.9372**	**1.9000e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**188.5338**	**188.5338**	**7.2900e-003**		**188.7161**

3.8 Gravity System - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.8 Gravity System - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.1235**	**0.0724**	**0.9372**	**1.9000e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**188.5338**	**188.5338**	**7.2900e-003**		**188.7161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.8 Gravity System - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.1235**	**0.0724**	**0.9372**	**1.9000e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**188.5338**	**188.5338**	**7.2900e-003**		**188.7161**

3.8 Gravity System - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2715	12.8046	10.7337	0.0240		0.5299	0.5299		0.4883	0.4883		2,364.4621	2,364.4621	0.7408		2,382.9811
Total	**1.2715**	**12.8046**	**10.7337**	**0.0240**		**0.5299**	**0.5299**		**0.4883**	**0.4883**		**2,364.4621**	**2,364.4621**	**0.7408**		**2,382.9811**

3.8 Gravity System - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1117	0.0634	0.8317	1.8400e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		183.1354	183.1354	6.4500e-003		183.2965
Total	**0.1117**	**0.0634**	**0.8317**	**1.8400e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**183.1354**	**183.1354**	**6.4500e-003**		**183.2965**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3455	10.6006	16.6460	0.0240		0.4597	0.4597		0.4722	0.4722	0.0000	2,364.4621	2,364.4621	0.7408		2,382.9811
Total	**0.3455**	**10.6006**	**16.6460**	**0.0240**		**0.4597**	**0.4597**		**0.4722**	**0.4722**	**0.0000**	**2,364.4621**	**2,364.4621**	**0.7408**		**2,382.9811**

3.8 Gravity System - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1117	0.0634	0.8317	1.8400e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		183.1354	183.1354	6.4500e-003		183.2965
Total	**0.1117**	**0.0634**	**0.8317**	**1.8400e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**183.1354**	**183.1354**	**6.4500e-003**		**183.2965**

3.9 RTPS - Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	2.7558	30.7931	20.0400	0.0449		1.3905	1.3905		1.2793	1.2793		4,519.2895	4,519.2895	1.4069		4,554.4624
Total	**2.7558**	**30.7931**	**20.0400**	**0.0449**	**0.0246**	**1.3905**	**1.4151**	**3.2700e-003**	**1.2793**	**1.2826**		**4,519.2895**	**4,519.2895**	**1.4069**		**4,554.4624**

3.9 RTPS - Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1411	4.8652	0.6466	0.0130	0.3224	0.0202	0.3426	0.0871	0.0193	0.1064		1,368.2852	1,368.2852	0.0834		1,370.3708
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.2646**	**4.9376**	**1.5838**	**0.0149**	**0.4867**	**0.0215**	**0.5082**	**0.1306**	**0.0205**	**0.1512**		**1,556.8190**	**1,556.8190**	**0.0907**		**1,559.0868**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	0.8350	20.6507	29.3462	0.0449		0.9528	0.9528		0.9674	0.9674	0.0000	4,519.2895	4,519.2895	1.4069		4,554.4624
Total	**0.8350**	**20.6507**	**29.3462**	**0.0449**	**0.0246**	**0.9528**	**0.9773**	**3.2700e-003**	**0.9674**	**0.9706**	**0.0000**	**4,519.2895**	**4,519.2895**	**1.4069**		**4,554.4624**

3.9 RTPS - Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1411	4.8652	0.6466	0.0130	0.3224	0.0202	0.3426	0.0871	0.0193	0.1064		1,368.2852	1,368.2852	0.0834		1,370.3708
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1235	0.0724	0.9372	1.9000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		188.5338	188.5338	7.2900e-003		188.7161
Total	**0.2646**	**4.9376**	**1.5838**	**0.0149**	**0.4867**	**0.0215**	**0.5082**	**0.1306**	**0.0205**	**0.1512**		**1,556.8190**	**1,556.8190**	**0.0907**		**1,559.0868**

3.9 RTPS - Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	2.4804	26.9268	19.4885	0.0449		1.1915	1.1915		1.0962	1.0962		4,443.5369	4,443.5369	1.4059		4,478.6841
Total	**2.4804**	**26.9268**	**19.4885**	**0.0449**	**0.0246**	**1.1915**	**1.2161**	**3.2700e-003**	**1.0962**	**1.0995**		**4,443.5369**	**4,443.5369**	**1.4059**		**4,478.6841**

3.9 RTPS - Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1344	4.5986	0.6264	0.0129	1.2533	0.0183	1.2716	0.3156	0.0175	0.3331		1,353.1824	1,353.1824	0.0817		1,355.2242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1117	0.0634	0.8317	1.8400e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		183.1354	183.1354	6.4500e-003		183.2965
Total	**0.2460**	**4.6620**	**1.4580**	**0.0147**	**1.4176**	**0.0196**	**1.4372**	**0.3591**	**0.0187**	**0.3778**		**1,536.3178**	**1,536.3178**	**0.0881**		**1,538.5207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	0.8731	21.3319	29.4691	0.0449		0.9782	0.9782		0.9908	0.9908	0.0000	4,443.5369	4,443.5369	1.4059		4,478.6841
Total	**0.8731**	**21.3319**	**29.4691**	**0.0449**	**0.0246**	**0.9782**	**1.0028**	**3.2700e-003**	**0.9908**	**0.9940**	**0.0000**	**4,443.5369**	**4,443.5369**	**1.4059**		**4,478.6841**

3.9 RTPS - Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1344	4.5986	0.6264	0.0129	1.2533	0.0183	1.2716	0.3156	0.0175	0.3331		1,353.1824	1,353.1824	0.0817		1,355.2242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1117	0.0634	0.8317	1.8400e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		183.1354	183.1354	6.4500e-003		183.2965
Total	**0.2460**	**4.6620**	**1.4580**	**0.0147**	**1.4176**	**0.0196**	**1.4372**	**0.3591**	**0.0187**	**0.3778**		**1,536.3178**	**1,536.3178**	**0.0881**		**1,538.5207**

3.10 SPS - Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2902	0.0000	0.2902	0.0387	0.0000	0.0387			0.0000			0.0000
Off-Road	0.7190	8.4208	5.0111	0.0114		0.3307	0.3307		0.3043	0.3043		1,148.4475	1,148.4475	0.3575		1,157.3857
Total	**0.7190**	**8.4208**	**5.0111**	**0.0114**	**0.2902**	**0.3307**	**0.6209**	**0.0387**	**0.3043**	**0.3430**		**1,148.4475**	**1,148.4475**	**0.3575**		**1,157.3857**

3.10 SPS - Site Prep - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6674	57.4979	7.6413	0.1540	3.2773	0.2385	3.5158	0.8981	0.2282	1.1263		16,170.6432	16,170.6432	0.9859		16,195.2908
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**1.7292**	**57.5341**	**8.1099**	**0.1549**	**3.3595**	**0.2392**	**3.5986**	**0.9199**	**0.2288**	**1.1487**		**16,264.9101**	**16,264.9101**	**0.9896**		**16,289.6489**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2902	0.0000	0.2902	0.0387	0.0000	0.0387			0.0000			0.0000
Off-Road	0.2817	5.4470	7.2692	0.0114		0.2320	0.2320		0.2320	0.2320	0.0000	1,148.4475	1,148.4475	0.3575		1,157.3857
Total	**0.2817**	**5.4470**	**7.2692**	**0.0114**	**0.2902**	**0.2320**	**0.5222**	**0.0387**	**0.2320**	**0.2707**	**0.0000**	**1,148.4475**	**1,148.4475**	**0.3575**		**1,157.3857**

3.10 SPS - Site Prep - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6674	57.4979	7.6413	0.1540	3.2773	0.2385	3.5158	0.8981	0.2282	1.1263		16,170.6432	16,170.6432	0.9859		16,195.2908
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**1.7292**	**57.5341**	**8.1099**	**0.1549**	**3.3595**	**0.2392**	**3.5986**	**0.9199**	**0.2288**	**1.1487**		**16,264.9101**	**16,264.9101**	**0.9896**		**16,289.6489**

3.11 SPS - Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1330	0.0000	0.1330	0.0177	0.0000	0.0177			0.0000			0.0000
Off-Road	1.1470	13.5364	6.9025	0.0157		0.5522	0.5522		0.5080	0.5080		1,583.8960	1,583.8960	0.4931		1,596.2232
Total	**1.1470**	**13.5364**	**6.9025**	**0.0157**	**0.1330**	**0.5522**	**0.6851**	**0.0177**	**0.5080**	**0.5257**		**1,583.8960**	**1,583.8960**	**0.4931**		**1,596.2232**

3.11 SPS - Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7642	26.3532	3.5023	0.0706	1.5021	0.1093	1.6114	0.4116	0.1046	0.5162		7,411.5448	7,411.5448	0.4519		7,422.8416
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.8260**	**26.3894**	**3.9709**	**0.0715**	**1.5843**	**0.1100**	**1.6942**	**0.4334**	**0.1052**	**0.5386**		**7,505.8117**	**7,505.8117**	**0.4555**		**7,517.1997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1330	0.0000	0.1330	0.0177	0.0000	0.0177			0.0000			0.0000
Off-Road	0.3881	7.5028	9.5731	0.0157		0.3100	0.3100		0.3100	0.3100	0.0000	1,583.8960	1,583.8960	0.4931		1,596.2232
Total	**0.3881**	**7.5028**	**9.5731**	**0.0157**	**0.1330**	**0.3100**	**0.4430**	**0.0177**	**0.3100**	**0.3277**	**0.0000**	**1,583.8960**	**1,583.8960**	**0.4931**		**1,596.2232**

3.11 SPS - Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7642	26.3532	3.5023	0.0706	1.5021	0.1093	1.6114	0.4116	0.1046	0.5162		7,411.5448	7,411.5448	0.4519		7,422.8416
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.8260**	**26.3894**	**3.9709**	**0.0715**	**1.5843**	**0.1100**	**1.6942**	**0.4334**	**0.1052**	**0.5386**		**7,505.8117**	**7,505.8117**	**0.4555**		**7,517.1997**

3.12 SPS - Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4491	15.5834	9.5781	0.0250		0.6059	0.6059		0.5575	0.5575		2,514.0092	2,514.0092	0.7827		2,533.5753
Total	**1.4491**	**15.5834**	**9.5781**	**0.0250**		**0.6059**	**0.6059**		**0.5575**	**0.5575**		**2,514.0092**	**2,514.0092**	**0.7827**		**2,533.5753**

3.12 SPS - Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.0618**	**0.0362**	**0.4686**	**9.5000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**94.2669**	**94.2669**	**3.6500e-003**		**94.3580**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2070	9.9656	16.9485	0.0250		0.4142	0.4142		0.4360	0.4360	0.0000	2,514.0092	2,514.0092	0.7827		2,533.5753
Total	**0.2070**	**9.9656**	**16.9485**	**0.0250**		**0.4142**	**0.4142**		**0.4360**	**0.4360**	**0.0000**	**2,514.0092**	**2,514.0092**	**0.7827**		**2,533.5753**

3.12 SPS - Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.0618**	**0.0362**	**0.4686**	**9.5000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**94.2669**	**94.2669**	**3.6500e-003**		**94.3580**

3.13 SPS - Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3343	15.1252	11.2134	0.0213		0.6572	0.6572		0.6046	0.6046		2,141.1655	2,141.1655	0.6666		2,157.8298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3343**	**15.1252**	**11.2134**	**0.0213**		**0.6572**	**0.6572**		**0.6046**	**0.6046**		**2,141.1655**	**2,141.1655**	**0.6666**		**2,157.8298**

3.13 SPS - Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.0618**	**0.0362**	**0.4686**	**9.5000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**94.2669**	**94.2669**	**3.6500e-003**		**94.3580**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5244	10.1378	14.7502	0.0213		0.4585	0.4585		0.4585	0.4585	0.0000	2,141.1655	2,141.1655	0.6666		2,157.8298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5244**	**10.1378**	**14.7502**	**0.0213**		**0.4585**	**0.4585**		**0.4585**	**0.4585**	**0.0000**	**2,141.1655**	**2,141.1655**	**0.6666**		**2,157.8298**

3.13 SPS - Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0618	0.0362	0.4686	9.5000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		94.2669	94.2669	3.6500e-003		94.3580
Total	**0.0618**	**0.0362**	**0.4686**	**9.5000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**94.2669**	**94.2669**	**3.6500e-003**		**94.3580**

3.14 SPS - Architectural - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.2031	13.6499	5.9371	0.0195		0.4845	0.4845		0.4457	0.4457		1,958.4786	1,958.4786	0.6097		1,973.7211
Total	**159.7201**	**13.6499**	**5.9371**	**0.0195**		**0.4845**	**0.4845**		**0.4457**	**0.4457**		**1,958.4786**	**1,958.4786**	**0.6097**		**1,973.7211**

3.14 SPS - Architectural - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0309	0.0181	0.2343	4.7000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		47.1335	47.1335	1.8200e-003		47.1790
Total	**0.0309**	**0.0181**	**0.2343**	**4.7000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**47.1335**	**47.1335**	**1.8200e-003**		**47.1790**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2080	7.9962	12.0382	0.0195		0.3105	0.3105		0.3250	0.3250	0.0000	1,958.4786	1,958.4786	0.6097		1,973.7211
Total	**158.7250**	**7.9962**	**12.0382**	**0.0195**		**0.3105**	**0.3105**		**0.3250**	**0.3250**	**0.0000**	**1,958.4786**	**1,958.4786**	**0.6097**		**1,973.7211**

3.14 SPS - Architectural - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0309	0.0181	0.2343	4.7000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		47.1335	47.1335	1.8200e-003		47.1790
Total	**0.0309**	**0.0181**	**0.2343**	**4.7000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**47.1335**	**47.1335**	**1.8200e-003**		**47.1790**

3.15 RTPS - Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2253	23.7489	14.6426	0.0390		0.9236	0.9236		0.8497	0.8497		3,864.0328	3,864.0328	1.2225		3,894.5963
Total	**2.2253**	**23.7489**	**14.6426**	**0.0390**		**0.9236**	**0.9236**		**0.8497**	**0.8497**		**3,864.0328**	**3,864.0328**	**1.2225**		**3,894.5963**

3.15 RTPS - Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1117	0.0634	0.8317	1.8400e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		183.1354	183.1354	6.4500e-003		183.2965
Total	**0.1117**	**0.0634**	**0.8317**	**1.8400e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**183.1354**	**183.1354**	**6.4500e-003**		**183.2965**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4929	17.5160	25.8842	0.0390		0.7337	0.7337		0.7588	0.7588	0.0000	3,864.0328	3,864.0328	1.2225		3,894.5963
Total	**0.4929**	**17.5160**	**25.8842**	**0.0390**		**0.7337**	**0.7337**		**0.7588**	**0.7588**	**0.0000**	**3,864.0328**	**3,864.0328**	**1.2225**		**3,894.5963**

3.15 RTPS - Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1117	0.0634	0.8317	1.8400e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		183.1354	183.1354	6.4500e-003		183.2965
Total	**0.1117**	**0.0634**	**0.8317**	**1.8400e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**183.1354**	**183.1354**	**6.4500e-003**		**183.2965**

3.15 RTPS - Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0642	21.0933	14.0976	0.0390		0.8142	0.8142		0.7490	0.7490		3,778.7719	3,778.7719	1.2221		3,809.3252
Total	**2.0642**	**21.0933**	**14.0976**	**0.0390**		**0.8142**	**0.8142**		**0.7490**	**0.7490**		**3,778.7719**	**3,778.7719**	**1.2221**		**3,809.3252**

3.15 RTPS - Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0559	0.7428	1.7800e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		177.5499	177.5499	5.6300e-003		177.6905
Total	**0.1018**	**0.0559**	**0.7428**	**1.7800e-003**	**0.1643**	**1.2300e-003**	**0.1655**	**0.0436**	**1.1300e-003**	**0.0447**		**177.5499**	**177.5499**	**5.6300e-003**		**177.6905**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5490	18.5562	26.1082	0.0390		0.7710	0.7710		0.7931	0.7931	0.0000	3,778.7719	3,778.7719	1.2221		3,809.3252
Total	**0.5490**	**18.5562**	**26.1082**	**0.0390**		**0.7710**	**0.7710**		**0.7931**	**0.7931**	**0.0000**	**3,778.7719**	**3,778.7719**	**1.2221**		**3,809.3252**

3.15 RTPS - Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0559	0.7428	1.7800e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		177.5499	177.5499	5.6300e-003		177.6905
Total	**0.1018**	**0.0559**	**0.7428**	**1.7800e-003**	**0.1643**	**1.2300e-003**	**0.1655**	**0.0436**	**1.1300e-003**	**0.0447**		**177.5499**	**177.5499**	**5.6300e-003**		**177.6905**

3.16 RTPS - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0476	10.7656	11.0471	0.0213		0.4631	0.4631		0.4261	0.4261		2,060.6710	2,060.6710	0.6665		2,077.3326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0476**	**10.7656**	**11.0471**	**0.0213**		**0.4631**	**0.4631**		**0.4261**	**0.4261**		**2,060.6710**	**2,060.6710**	**0.6665**		**2,077.3326**

3.16 RTPS - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0470	0.0249	0.3390	8.6000e-004	0.0822	6.0000e-004	0.0827	0.0218	5.5000e-004	0.0223		85.9665	85.9665	2.5300e-003		86.0297
Total	**0.0470**	**0.0249**	**0.3390**	**8.6000e-004**	**0.0822**	**6.0000e-004**	**0.0827**	**0.0218**	**5.5000e-004**	**0.0223**		**85.9665**	**85.9665**	**2.5300e-003**		**86.0297**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5244	10.1378	14.7502	0.0213		0.4585	0.4585		0.4585	0.4585	0.0000	2,060.6710	2,060.6710	0.6665		2,077.3326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5244**	**10.1378**	**14.7502**	**0.0213**		**0.4585**	**0.4585**		**0.4585**	**0.4585**	**0.0000**	**2,060.6710**	**2,060.6710**	**0.6665**		**2,077.3326**

3.16 RTPS - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0470	0.0249	0.3390	8.6000e-004	0.0822	6.0000e-004	0.0827	0.0218	5.5000e-004	0.0223		85.9665	85.9665	2.5300e-003		86.0297
Total	**0.0470**	**0.0249**	**0.3390**	**8.6000e-004**	**0.0822**	**6.0000e-004**	**0.0827**	**0.0218**	**5.5000e-004**	**0.0223**		**85.9665**	**85.9665**	**2.5300e-003**		**86.0297**

3.17 RTPS - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.8632	8.1612	4.8034	0.0179		0.2897	0.2897		0.2665	0.2665		1,732.4427	1,732.4427	0.5603		1,746.4503
Total	**159.3802**	**8.1612**	**4.8034**	**0.0179**		**0.2897**	**0.2897**		**0.2665**	**0.2665**		**1,732.4427**	**1,732.4427**	**0.5603**		**1,746.4503**

3.17 RTPS - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0235	0.0125	0.1695	4.3000e-004	0.0411	3.0000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.9832	42.9832	1.2600e-003		43.0148
Total	**0.0235**	**0.0125**	**0.1695**	**4.3000e-004**	**0.0411**	**3.0000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**42.9832**	**42.9832**	**1.2600e-003**		**43.0148**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2698	9.0857	11.5587	0.0179		0.3486	0.3486		0.3579	0.3579	0.0000	1,732.4427	1,732.4427	0.5603		1,746.4503
Total	**158.7868**	**9.0857**	**11.5587**	**0.0179**		**0.3486**	**0.3486**		**0.3579**	**0.3579**	**0.0000**	**1,732.4427**	**1,732.4427**	**0.5603**		**1,746.4503**

3.17 RTPS - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0235	0.0125	0.1695	4.3000e-004	0.0411	3.0000e-004	0.0414	0.0109	2.7000e-004	0.0112		42.9832	42.9832	1.2600e-003		43.0148
Total	**0.0235**	**0.0125**	**0.1695**	**4.3000e-004**	**0.0411**	**3.0000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**42.9832**	**42.9832**	**1.2600e-003**		**43.0148**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.1700e-003	0.0235	0.0321	1.2000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		12.1203	12.1203	7.3000e-004		12.1385
Unmitigated	3.1700e-003	0.0235	0.0321	1.2000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		12.1203	12.1203	7.3000e-004		12.1385

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1.14	1.14	1.14	3,328	3,328
Total	1.14	1.14	1.14	3,328	3,328

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Unmitigated	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Total	**1.4375**	**5.0000e-005**	**5.8600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0125**	**0.0125**	**3.0000e-005**		**0.0133**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Total	**1.4375**	**5.0000e-005**	**5.8600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0125**	**0.0125**	**3.0000e-005**		**0.0133**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0	200	208	0.73	Diesel
Emergency Generator	2	0	200	38	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (175 - 300 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Emergency Generator - Diesel (25 - 50 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Modesto WWMP

Stanislaus County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	57.00	1000sqft	1.31	57,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	46
Climate Zone	3			**Operational Year**	2020
Utility Company	Modesto Irrigation District				
CO2 Intensity (lb/MWhr)	833.46	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From Total Pump Station Area - Request #9

Construction Phase - Based on information in Request #9 and January 2018 feedback from Carollo

Off-road Equipment - Based on Request #9. Off-highway trucks used for trucks for pipe delivery.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9. Off-highway trucks used for concrete delivery trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for concrete delivery trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo. Off-highway trucks used for concrete trucks and pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January feedback from Carollo.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Off-road Equipment - Based on Request #9 and January communication with Carollo. Off-highway trucks used for pickup trucks.

Trips and VMT - Based on Request 9

Grading - Based on information from Request 9, but divided evenly between available phases. 5 acres / 4 phases

Vehicle Trips - 1 trip per day

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - no natural gas

Water And Wastewater - no indoor water use at pumpt station

Solid Waste - minimal solid waste generation

Construction Off-road Equipment Mitigation - Added Tier 3 Mitigation

Operational Off-Road Equipment - remove pump

Stationary Sources - Emergency Generators and Fire Pumps - Based on PDR 2016

Architectural Coating - No coating, just fencing.

Area Coating - No coating, just fencing.

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tblArchitecturalCoating	EF_Parking	150.00	0.00

tblAreaCoating	Area_EF_Parking	150	0
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	22.00
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tblOffRoadEquipment	PhaseName		SPS - Paving
tblOffRoadEquipment	PhaseName		SPS - Architectural
tblOffRoadEquipment	PhaseName		RTPS - Paving
tblOffRoadEquipment	PhaseName		RTPS - Architectural Coating
tblOffRoadEquipment	PhaseName		Sutter Trunk - Lining
tblOffRoadEquipment	PhaseName		Alignment A
tblOffRoadEquipment	PhaseName		SPS - Site Prep

Modesto WWMP - Stanislaus County, Winter

tblOffRoadEquipment	PhaseName		RTPS - Site Prep
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	70.68	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,063.00
tblTripsAndVMT	VendorTripNumber	9.00	0.00
tblTripsAndVMT	VendorTripNumber	9.00	0.00
tblTripsAndVMT	WorkerTripNumber	24.00	10.00
tblTripsAndVMT	WorkerTripNumber	24.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	5.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	18.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	10.00
tblVehicleTrips	ST_TR	1.32	0.02
tblVehicleTrips	SU_TR	0.68	0.02
tblVehicleTrips	WD_TR	6.97	0.02
tblWater	IndoorWaterUseRate	13,181,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	166.6726	174.2605	93.7072	0.3404	4.9002	5.4414	9.7103	1.2886	5.0131	5.7260	0.0000	34,917.8035	34,917.8035	6.5887	0.0000	35,078.3966
2019	8.6160	91.4446	61.5215	0.1662	2.0172	3.5177	5.5349	0.5149	3.2378	3.7527	0.0000	16,518.4556	16,518.4556	4.6866	0.0000	16,635.6193
2020	2.1599	21.1600	14.7344	0.0406	0.1643	0.8154	0.9797	0.0436	0.7502	0.7938	0.0000	3,935.4827	3,935.4827	1.2271	0.0000	3,966.1601
2021	159.4022	10.7953	11.3366	0.0220	0.0822	0.4637	0.5459	0.0218	0.4266	0.4484	0.0000	2,136.5517	2,136.5517	0.6687	0.0000	2,153.2689
Maximum	**166.6726**	**174.2605**	**93.7072**	**0.3404**	**4.9002**	**5.4414**	**9.7103**	**1.2886**	**5.0131**	**5.7260**	**0.0000**	**34,917.8035**	**34,917.8035**	**6.5887**	**0.0000**	**35,078.3966**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	161.1261	137.5707	135.4244	0.3404	4.9002	3.6614	8.3387	1.2886	3.7437	4.7880	0.0000	34,917.8034	34,917.8034	6.5887	0.0000	35,078.3966
2019	3.0367	72.2295	99.3806	0.1662	2.0172	2.9000	4.9172	0.5149	2.9615	3.4764	0.0000	16,518.4556	16,518.4556	4.6866	0.0000	16,635.6193
2020	0.6448	18.6230	26.7450	0.0406	0.1643	0.7722	0.9365	0.0436	0.7942	0.8378	0.0000	3,935.4827	3,935.4827	1.2271	0.0000	3,966.1601
2021	158.8088	10.1675	15.0398	0.0220	0.0822	0.4591	0.5412	0.0218	0.4590	0.4808	0.0000	2,136.5517	2,136.5517	0.6687	0.0000	2,153.2689
Maximum	**161.1261**	**137.5707**	**135.4244**	**0.3404**	**4.9002**	**3.6614**	**8.3387**	**1.2886**	**3.7437**	**4.7880**	**0.0000**	**34,917.8034**	**34,917.8034**	**6.5887**	**0.0000**	**35,078.3966**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.93**	**19.84**	**-52.56**	**0.00**	**0.00**	**23.89**	**12.15**	**0.00**	**15.58**	**10.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.5800e-003	0.0242	0.0299	1.1000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		11.1588	11.1588	7.7000e-004		11.1780
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.4401**	**0.0243**	**0.0357**	**1.1000e-004**	**7.1500e-003**	**1.6000e-004**	**7.3000e-003**	**1.9200e-003**	**1.5000e-004**	**2.0700e-003**		**11.1713**	**11.1713**	**8.0000e-004**	**0.0000**	**11.1913**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.5800e-003	0.0242	0.0299	1.1000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		11.1588	11.1588	7.7000e-004		11.1780
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**1.4401**	**0.0243**	**0.0357**	**1.1000e-004**	**7.1500e-003**	**1.6000e-004**	**7.3000e-003**	**1.9200e-003**	**1.5000e-004**	**2.0700e-003**		**11.1713**	**11.1713**	**8.0000e-004**	**0.0000**	**11.1913**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Modesto WWMP - Stanislaus County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	RTPS - Site Prep	Site Preparation	7/1/2018	8/3/2018	5	25	
2	Sutter Trunk - Lining	Trenching	7/1/2018	7/16/2018	5	11	
3	Alignment A	Trenching	7/1/2018	7/2/2019	5	262	
4	Alignment B	Trenching	7/1/2018	8/2/2018	5	24	
5	Alignment C	Trenching	7/1/2018	11/1/2018	5	89	
6	Alignment D	Trenching	7/1/2018	11/30/2018	5	110	
7	Gravity System	Trenching	7/1/2018	5/3/2019	5	220	
8	RTPS - Grading	Grading	8/3/2018	1/31/2019	5	130	
9	SPS - Site Prep	Site Preparation	9/1/2018	9/17/2018	5	11	
10	SPS - Grading	Grading	9/18/2018	10/19/2018	5	24	
11	SPS - Construction	Building Construction	10/20/2018	11/19/2018	5	21	
12	SPS - Paving	Paving	11/20/2018	12/21/2018	5	24	
13	SPS - Architectural	Architectural Coating	12/22/2018	12/28/2018	5	5	
14	RTPS - Construction	Building Construction	1/31/2019	11/2/2020	5	458	
15	RTPS - Paving	Paving	11/3/2021	11/25/2021	5	17	
16	RTPS - Architectural Coating	Architectural Coating	11/26/2021	12/2/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 85,500; Non-Residential Outdoor: 28,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Modesto WWMP - Stanislaus County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
RTPS - Site Prep	Excavators	1	8.00	158	0.38
RTPS - Site Prep	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Site Prep	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Site Prep	Scrapers	1	8.00	367	0.48
Sutter Trunk - Lining	Cranes	1	6.00	231	0.29
Sutter Trunk - Lining	Excavators	2	8.00	158	0.38
Sutter Trunk - Lining	Off-Highway Trucks	2	4.00	402	0.38
Sutter Trunk - Lining	Rubber Tired Loaders	1	8.00	203	0.36
Alignment A	Bore/Drill Rigs	1	8.00	221	0.50
Alignment A	Cranes	1	6.00	231	0.29
Alignment A	Excavators	1	8.00	158	0.38
Alignment A	Off-Highway Trucks	1	8.00	402	0.38
Alignment A	Off-Highway Trucks	0	8.00	402	0.38
Alignment A	Rubber Tired Loaders	1	8.00	203	0.36
Alignment B	Excavators	2	8.00	158	0.38
Alignment B	Off-Highway Trucks	2	4.00	402	0.38
Alignment B	Plate Compactors	1	8.00	8	0.43
Alignment C	Excavators	2	8.00	158	0.38
Alignment C	Off-Highway Trucks	2	4.00	402	0.38
Alignment C	Plate Compactors	1	8.00	8	0.43
Alignment D	Excavators	2	8.00	158	0.38
Alignment D	Off-Highway Trucks	2	4.00	402	0.38
Alignment D	Plate Compactors	1	8.00	8	0.43
Gravity System	Excavators	2	8.00	158	0.38
Gravity System	Off-Highway Trucks	2	4.00	402	0.38
Gravity System	Plate Compactors	1	8.00	8	0.43

RTPS - Grading	Bore/Drill Rigs	1	8.00	221	0.50
RTPS - Grading	Cranes	1	8.00	231	0.29
RTPS - Grading	Excavators	2	8.00	158	0.38
RTPS - Grading	Off-Highway Trucks	1	8.00	402	0.38
RTPS - Grading	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
SPS - Site Prep	Excavators	1	8.00	158	0.38
SPS - Site Prep	Off-Highway Trucks	0	8.00	402	0.38
SPS - Site Prep	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Grading	Cranes	1	6.00	231	0.29
SPS - Grading	Excavators	1	8.00	158	0.38
SPS - Grading	Off-Highway Trucks	0	8.00	402	0.38
SPS - Grading	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Construction	Excavators	1	8.00	158	0.38
SPS - Construction	Off-Highway Trucks	1	8.00	402	0.38
SPS - Construction	Off-Highway Trucks	1	4.00	402	0.38
SPS - Paving	Excavators	2	8.00	158	0.38
SPS - Paving	Off-Highway Trucks	0	8.00	402	0.38
SPS - Paving	Pavers	1	8.00	130	0.42
SPS - Paving	Rubber Tired Loaders	1	8.00	203	0.36
SPS - Architectural	Off-Highway Trucks	2	4.00	402	0.38
SPS - Architectural	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Construction	Aerial Lifts	1	8.00	63	0.31
RTPS - Construction	Cranes	1	8.00	231	0.29
RTPS - Construction	Excavators	1	8.00	158	0.38
RTPS - Construction	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Construction	Off-Highway Trucks	2	8.00	402	0.38

RTPS - Paving	Excavators	2	8.00	158	0.38
RTPS - Paving	Off-Highway Trucks	0	8.00	402	0.38
RTPS - Paving	Pavers	1	8.00	130	0.42
RTPS - Paving	Rubber Tired Loaders	1	8.00	203	0.36
RTPS - Architectural Coating	Off-Highway Trucks	2	4.00	402	0.38
RTPS - Architectural Coating	Rubber Tired Loaders	1	6.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
RTPS - Site Prep	4	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Sutter Trunk - Lining	6	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment A	5	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment B	5	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment C	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Alignment D	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Gravity System	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Grading	7	20.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Site Prep	3	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Grading	4	10.00	0.00	2,063.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Construction	3	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
SPS - Architectural	3	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Construction	5	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
RTPS - Architectural Coating	3	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 RTPS - Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1277	0.0000	0.1277	0.0170	0.0000	0.0170			0.0000			0.0000
Off-Road	1.8659	22.6124	13.7978	0.0266		0.8900	0.8900		0.8188	0.8188		2,673.2464	2,673.2464	0.8322		2,694.0518
Total	**1.8659**	**22.6124**	**13.7978**	**0.0266**	**0.1277**	**0.8900**	**1.0177**	**0.0170**	**0.8188**	**0.8359**		**2,673.2464**	**2,673.2464**	**0.8322**		**2,694.0518**

3.2 RTPS - Site Prep - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7580	26.0305	3.8136	0.0664	1.4420	0.1074	1.5494	0.3952	0.1027	0.4979		6,970.9619	6,970.9619	0.4853		6,983.0940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.8163**	**26.0737**	**4.2194**	**0.0672**	**1.5242**	**0.1080**	**1.6322**	**0.4170**	**0.1033**	**0.5203**		**7,054.1901**	**7,054.1901**	**0.4885**		**7,066.4035**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1277	0.0000	0.1277	0.0170	0.0000	0.0170			0.0000			0.0000
Off-Road	0.6546	12.6551	15.3472	0.0266		0.5054	0.5054		0.5054	0.5054	0.0000	2,673.2464	2,673.2464	0.8322		2,694.0518
Total	**0.6546**	**12.6551**	**15.3472**	**0.0266**	**0.1277**	**0.5054**	**0.6331**	**0.0170**	**0.5054**	**0.5225**	**0.0000**	**2,673.2464**	**2,673.2464**	**0.8322**		**2,694.0518**

3.2 RTPS - Site Prep - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7580	26.0305	3.8136	0.0664	1.4420	0.1074	1.5494	0.3952	0.1027	0.4979		6,970.9619	6,970.9619	0.4853		6,983.0940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.8163**	**26.0737**	**4.2194**	**0.0672**	**1.5242**	**0.1080**	**1.6322**	**0.4170**	**0.1033**	**0.5203**		**7,054.1901**	**7,054.1901**	**0.4885**		**7,066.4035**

3.3 Sutter Trunk - Lining - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2095	24.9573	14.3798	0.0341		1.0062	1.0062		0.9257	0.9257		3,433.0971	3,433.0971	1.0688		3,459.8164
Total	**2.2095**	**24.9573**	**14.3798**	**0.0341**		**1.0062**	**1.0062**		**0.9257**	**0.9257**		**3,433.0971**	**3,433.0971**	**1.0688**		**3,459.8164**

3.3 Sutter Trunk - Lining - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0216	0.2029	4.2000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		41.6141	41.6141	1.6200e-003		41.6547
Total	**0.0292**	**0.0216**	**0.2029**	**4.2000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**41.6141**	**41.6141**	**1.6200e-003**		**41.6547**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5684	14.9655	22.1781	0.0341		0.6256	0.6256		0.6402	0.6402	0.0000	3,433.0971	3,433.0971	1.0688		3,459.8164
Total	**0.5684**	**14.9655**	**22.1781**	**0.0341**		**0.6256**	**0.6256**		**0.6402**	**0.6402**	**0.0000**	**3,433.0971**	**3,433.0971**	**1.0688**		**3,459.8164**

3.3 Sutter Trunk - Lining - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0216	0.2029	4.2000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		41.6141	41.6141	1.6200e-003		41.6547
Total	**0.0292**	**0.0216**	**0.2029**	**4.2000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**41.6141**	**41.6141**	**1.6200e-003**		**41.6547**

3.4 Alignment A - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2215	26.0575	13.1958	0.0384		0.9746	0.9746		0.8966	0.8966		3,857.8655	3,857.8655	1.2010		3,887.8906
Total	**2.2215**	**26.0575**	**13.1958**	**0.0384**		**0.9746**	**0.9746**		**0.8966**	**0.8966**		**3,857.8655**	**3,857.8655**	**1.2010**		**3,887.8906**

3.4 Alignment A - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1751	0.1297	1.2173	2.5100e-003	0.2464	1.9700e-003	0.2484	0.0654	1.8200e-003	0.0672		249.6848	249.6848	9.7500e-003		249.9285
Total	**0.1751**	**0.1297**	**1.2173**	**2.5100e-003**	**0.2464**	**1.9700e-003**	**0.2484**	**0.0654**	**1.8200e-003**	**0.0672**		**249.6848**	**249.6848**	**9.7500e-003**		**249.9285**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6752	17.0302	23.3272	0.0384		0.6785	0.6785		0.6931	0.6931	0.0000	3,857.8655	3,857.8655	1.2010		3,887.8906
Total	**0.6752**	**17.0302**	**23.3272**	**0.0384**		**0.6785**	**0.6785**		**0.6931**	**0.6931**	**0.0000**	**3,857.8655**	**3,857.8655**	**1.2010**		**3,887.8906**

3.4 Alignment A - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1751	0.1297	1.2173	2.5100e-003	0.2464	1.9700e-003	0.2484	0.0654	1.8200e-003	0.0672		249.6848	249.6848	9.7500e-003		249.9285
Total	**0.1751**	**0.1297**	**1.2173**	**2.5100e-003**	**0.2464**	**1.9700e-003**	**0.2484**	**0.0654**	**1.8200e-003**	**0.0672**		**249.6848**	**249.6848**	**9.7500e-003**		**249.9285**

3.4 Alignment A - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0268	22.8948	12.7255	0.0383		0.8483	0.8483		0.7804	0.7804		3,793.3305	3,793.3305	1.2002		3,823.3348
Total	**2.0268**	**22.8948**	**12.7255**	**0.0383**		**0.8483**	**0.8483**		**0.7804**	**0.7804**		**3,793.3305**	**3,793.3305**	**1.2002**		**3,823.3348**

3.4 Alignment A - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1577	0.1136	1.0744	2.4400e-003	0.2464	1.9000e-003	0.2484	0.0654	1.7500e-003	0.0671		242.4865	242.4865	8.5700e-003		242.7008
Total	**0.1577**	**0.1136**	**1.0744**	**2.4400e-003**	**0.2464**	**1.9000e-003**	**0.2484**	**0.0654**	**1.7500e-003**	**0.0671**		**242.4865**	**242.4865**	**8.5700e-003**		**242.7008**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7133	17.7114	23.4501	0.0383		0.7040	0.7040		0.7165	0.7165	0.0000	3,793.3305	3,793.3305	1.2002		3,823.3348
Total	**0.7133**	**17.7114**	**23.4501**	**0.0383**		**0.7040**	**0.7040**		**0.7165**	**0.7165**	**0.0000**	**3,793.3305**	**3,793.3305**	**1.2002**		**3,823.3348**

3.4 Alignment A - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1577	0.1136	1.0744	2.4400e-003	0.2464	1.9000e-003	0.2484	0.0654	1.7500e-003	0.0671		242.4865	242.4865	8.5700e-003		242.7008
Total	**0.1577**	**0.1136**	**1.0744**	**2.4400e-003**	**0.2464**	**1.9000e-003**	**0.2484**	**0.0654**	**1.7500e-003**	**0.0671**		**242.4865**	**242.4865**	**8.5700e-003**		**242.7008**

3.5 Alignment B - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.5 Alignment B - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.0584**	**0.0432**	**0.4058**	**8.4000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**83.2283**	**83.2283**	**3.2500e-003**		**83.3095**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.5 Alignment B - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.0584**	**0.0432**	**0.4058**	**8.4000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**83.2283**	**83.2283**	**3.2500e-003**		**83.3095**

3.6 Alignment C - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.6 Alignment C - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.1167**	**0.0865**	**0.8115**	**1.6700e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**166.4566**	**166.4566**	**6.5000e-003**		**166.6190**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.6 Alignment C - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.1167**	**0.0865**	**0.8115**	**1.6700e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**166.4566**	**166.4566**	**6.5000e-003**		**166.6190**

3.7 Alignment D - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.7 Alignment D - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.1167**	**0.0865**	**0.8115**	**1.6700e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**166.4566**	**166.4566**	**6.5000e-003**		**166.6190**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.7 Alignment D - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.1167**	**0.0865**	**0.8115**	**1.6700e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**166.4566**	**166.4566**	**6.5000e-003**		**166.6190**

3.8 Gravity System - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3917	14.7681	10.9635	0.0240		0.6139	0.6139		0.5656	0.5656		2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**1.3917**	**14.7681**	**10.9635**	**0.0240**		**0.6139**	**0.6139**		**0.5656**	**0.5656**		**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.8 Gravity System - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.1167**	**0.0865**	**0.8115**	**1.6700e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**166.4566**	**166.4566**	**6.5000e-003**		**166.6190**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3074	9.9194	16.5230	0.0240		0.4342	0.4342		0.4488	0.4488	0.0000	2,403.2657	2,403.2657	0.7410		2,421.7910
Total	**0.3074**	**9.9194**	**16.5230**	**0.0240**		**0.4342**	**0.4342**		**0.4488**	**0.4488**	**0.0000**	**2,403.2657**	**2,403.2657**	**0.7410**		**2,421.7910**

3.8 Gravity System - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.1167**	**0.0865**	**0.8115**	**1.6700e-003**	**0.1643**	**1.3100e-003**	**0.1656**	**0.0436**	**1.2100e-003**	**0.0448**		**166.4566**	**166.4566**	**6.5000e-003**		**166.6190**

3.8 Gravity System - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2715	12.8046	10.7337	0.0240		0.5299	0.5299		0.4883	0.4883		2,364.4621	2,364.4621	0.7408		2,382.9811
Total	**1.2715**	**12.8046**	**10.7337**	**0.0240**		**0.5299**	**0.5299**		**0.4883**	**0.4883**		**2,364.4621**	**2,364.4621**	**0.7408**		**2,382.9811**

3.8 Gravity System - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1052	0.0758	0.7163	1.6300e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		161.6576	161.6576	5.7200e-003		161.8006
Total	**0.1052**	**0.0758**	**0.7163**	**1.6300e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**161.6576**	**161.6576**	**5.7200e-003**		**161.8006**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3455	10.6006	16.6460	0.0240		0.4597	0.4597		0.4722	0.4722	0.0000	2,364.4621	2,364.4621	0.7408		2,382.9811
Total	**0.3455**	**10.6006**	**16.6460**	**0.0240**		**0.4597**	**0.4597**		**0.4722**	**0.4722**	**0.0000**	**2,364.4621**	**2,364.4621**	**0.7408**		**2,382.9811**

3.8 Gravity System - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1052	0.0758	0.7163	1.6300e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		161.6576	161.6576	5.7200e-003		161.8006
Total	**0.1052**	**0.0758**	**0.7163**	**1.6300e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**161.6576**	**161.6576**	**5.7200e-003**		**161.8006**

3.9 RTPS - Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	2.7558	30.7931	20.0400	0.0449		1.3905	1.3905		1.2793	1.2793		4,519.2895	4,519.2895	1.4069		4,554.4624
Total	**2.7558**	**30.7931**	**20.0400**	**0.0449**	**0.0246**	**1.3905**	**1.4151**	**3.2700e-003**	**1.2793**	**1.2826**		**4,519.2895**	**4,519.2895**	**1.4069**		**4,554.4624**

3.9 RTPS - Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1458	5.0059	0.7334	0.0128	0.3224	0.0206	0.3431	0.0871	0.0198	0.1068		1,340.5696	1,340.5696	0.0933		1,342.9027
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.2625**	**5.0923**	**1.5449**	**0.0144**	**0.4867**	**0.0220**	**0.5087**	**0.1306**	**0.0210**	**0.1516**		**1,507.0261**	**1,507.0261**	**0.0998**		**1,509.5217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	0.8350	20.6507	29.3462	0.0449		0.9528	0.9528		0.9674	0.9674	0.0000	4,519.2895	4,519.2895	1.4069		4,554.4624
Total	**0.8350**	**20.6507**	**29.3462**	**0.0449**	**0.0246**	**0.9528**	**0.9773**	**3.2700e-003**	**0.9674**	**0.9706**	**0.0000**	**4,519.2895**	**4,519.2895**	**1.4069**		**4,554.4624**

3.9 RTPS - Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1458	5.0059	0.7334	0.0128	0.3224	0.0206	0.3431	0.0871	0.0198	0.1068		1,340.5696	1,340.5696	0.0933		1,342.9027
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1167	0.0865	0.8115	1.6700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2100e-003	0.0448		166.4566	166.4566	6.5000e-003		166.6190
Total	**0.2625**	**5.0923**	**1.5449**	**0.0144**	**0.4867**	**0.0220**	**0.5087**	**0.1306**	**0.0210**	**0.1516**		**1,507.0261**	**1,507.0261**	**0.0998**		**1,509.5217**

3.9 RTPS - Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	2.4804	26.9268	19.4885	0.0449		1.1915	1.1915		1.0962	1.0962		4,443.5369	4,443.5369	1.4059		4,478.6841
Total	**2.4804**	**26.9268**	**19.4885**	**0.0449**	**0.0246**	**1.1915**	**1.2161**	**3.2700e-003**	**1.0962**	**1.0995**		**4,443.5369**	**4,443.5369**	**1.4059**		**4,478.6841**

3.9 RTPS - Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1388	4.7285	0.7081	0.0126	1.2533	0.0187	1.2721	0.3156	0.0179	0.3335		1,325.6338	1,325.6338	0.0915		1,327.9206
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1052	0.0758	0.7163	1.6300e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		161.6576	161.6576	5.7200e-003		161.8006
Total	**0.2440**	**4.8043**	**1.4243**	**0.0143**	**1.4176**	**0.0200**	**1.4376**	**0.3591**	**0.0191**	**0.3782**		**1,487.2915**	**1,487.2915**	**0.0972**		**1,489.7211**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0246	0.0000	0.0246	3.2700e-003	0.0000	3.2700e-003			0.0000			0.0000
Off-Road	0.8731	21.3319	29.4691	0.0449		0.9782	0.9782		0.9908	0.9908	0.0000	4,443.5369	4,443.5369	1.4059		4,478.6841
Total	**0.8731**	**21.3319**	**29.4691**	**0.0449**	**0.0246**	**0.9782**	**1.0028**	**3.2700e-003**	**0.9908**	**0.9940**	**0.0000**	**4,443.5369**	**4,443.5369**	**1.4059**		**4,478.6841**

3.9 RTPS - Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1388	4.7285	0.7081	0.0126	1.2533	0.0187	1.2721	0.3156	0.0179	0.3335		1,325.6338	1,325.6338	0.0915		1,327.9206
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1052	0.0758	0.7163	1.6300e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		161.6576	161.6576	5.7200e-003		161.8006
Total	**0.2440**	**4.8043**	**1.4243**	**0.0143**	**1.4176**	**0.0200**	**1.4376**	**0.3591**	**0.0191**	**0.3782**		**1,487.2915**	**1,487.2915**	**0.0972**		**1,489.7211**

3.10 SPS - Site Prep - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2902	0.0000	0.2902	0.0387	0.0000	0.0387			0.0000			0.0000
Off-Road	0.7190	8.4208	5.0111	0.0114		0.3307	0.3307		0.3043	0.3043		1,148.4475	1,148.4475	0.3575		1,157.3857
Total	**0.7190**	**8.4208**	**5.0111**	**0.0114**	**0.2902**	**0.3307**	**0.6209**	**0.0387**	**0.3043**	**0.3430**		**1,148.4475**	**1,148.4475**	**0.3575**		**1,157.3857**

3.10 SPS - Site Prep - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7226	59.1602	8.6674	0.1509	3.2773	0.2440	3.5213	0.8981	0.2334	1.1315		15,843.0951	15,843.0951	1.1029		15,870.6683
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**1.7810**	**59.2035**	**9.0731**	**0.1517**	**3.3595**	**0.2446**	**3.6041**	**0.9199**	**0.2340**	**1.1539**		**15,926.3234**	**15,926.3234**	**1.1062**		**15,953.9777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2902	0.0000	0.2902	0.0387	0.0000	0.0387			0.0000			0.0000
Off-Road	0.2817	5.4470	7.2692	0.0114		0.2320	0.2320		0.2320	0.2320	0.0000	1,148.4475	1,148.4475	0.3575		1,157.3857
Total	**0.2817**	**5.4470**	**7.2692**	**0.0114**	**0.2902**	**0.2320**	**0.5222**	**0.0387**	**0.2320**	**0.2707**	**0.0000**	**1,148.4475**	**1,148.4475**	**0.3575**		**1,157.3857**

3.10 SPS - Site Prep - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7226	59.1602	8.6674	0.1509	3.2773	0.2440	3.5213	0.8981	0.2334	1.1315		15,843.0951	15,843.0951	1.1029		15,870.6683
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**1.7810**	**59.2035**	**9.0731**	**0.1517**	**3.3595**	**0.2446**	**3.6041**	**0.9199**	**0.2340**	**1.1539**		**15,926.3234**	**15,926.3234**	**1.1062**		**15,953.9777**

3.11 SPS - Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1330	0.0000	0.1330	0.0177	0.0000	0.0177			0.0000			0.0000
Off-Road	1.1470	13.5364	6.9025	0.0157		0.5522	0.5522		0.5080	0.5080		1,583.8960	1,583.8960	0.4931		1,596.2232
Total	**1.1470**	**13.5364**	**6.9025**	**0.0157**	**0.1330**	**0.5522**	**0.6851**	**0.0177**	**0.5080**	**0.5257**		**1,583.8960**	**1,583.8960**	**0.4931**		**1,596.2232**

3.11 SPS - Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7895	27.1151	3.9725	0.0692	1.5021	0.1118	1.6139	0.4116	0.1070	0.5186		7,261.4186	7,261.4186	0.5055		7,274.0563
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.8479**	**27.1583**	**4.3783**	**0.0700**	**1.5843**	**0.1125**	**1.6967**	**0.4334**	**0.1076**	**0.5410**		**7,344.6469**	**7,344.6469**	**0.5088**		**7,357.3658**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1330	0.0000	0.1330	0.0177	0.0000	0.0177			0.0000			0.0000
Off-Road	0.3881	7.5028	9.5731	0.0157		0.3100	0.3100		0.3100	0.3100	0.0000	1,583.8960	1,583.8960	0.4931		1,596.2232
Total	**0.3881**	**7.5028**	**9.5731**	**0.0157**	**0.1330**	**0.3100**	**0.4430**	**0.0177**	**0.3100**	**0.3277**	**0.0000**	**1,583.8960**	**1,583.8960**	**0.4931**		**1,596.2232**

3.11 SPS - Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7895	27.1151	3.9725	0.0692	1.5021	0.1118	1.6139	0.4116	0.1070	0.5186		7,261.4186	7,261.4186	0.5055		7,274.0563
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.8479**	**27.1583**	**4.3783**	**0.0700**	**1.5843**	**0.1125**	**1.6967**	**0.4334**	**0.1076**	**0.5410**		**7,344.6469**	**7,344.6469**	**0.5088**		**7,357.3658**

3.12 SPS - Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4491	15.5834	9.5781	0.0250		0.6059	0.6059		0.5575	0.5575		2,514.0092	2,514.0092	0.7827		2,533.5753
Total	**1.4491**	**15.5834**	**9.5781**	**0.0250**		**0.6059**	**0.6059**		**0.5575**	**0.5575**		**2,514.0092**	**2,514.0092**	**0.7827**		**2,533.5753**

3.12 SPS - Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.0584**	**0.0432**	**0.4058**	**8.4000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**83.2283**	**83.2283**	**3.2500e-003**		**83.3095**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2070	9.9656	16.9485	0.0250		0.4142	0.4142		0.4360	0.4360	0.0000	2,514.0092	2,514.0092	0.7827		2,533.5753
Total	**0.2070**	**9.9656**	**16.9485**	**0.0250**		**0.4142**	**0.4142**		**0.4360**	**0.4360**	**0.0000**	**2,514.0092**	**2,514.0092**	**0.7827**		**2,533.5753**

3.12 SPS - Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.0584**	**0.0432**	**0.4058**	**8.4000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**83.2283**	**83.2283**	**3.2500e-003**		**83.3095**

3.13 SPS - Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3343	15.1252	11.2134	0.0213		0.6572	0.6572		0.6046	0.6046		2,141.1655	2,141.1655	0.6666		2,157.8298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3343**	**15.1252**	**11.2134**	**0.0213**		**0.6572**	**0.6572**		**0.6046**	**0.6046**		**2,141.1655**	**2,141.1655**	**0.6666**		**2,157.8298**

3.13 SPS - Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.0584**	**0.0432**	**0.4058**	**8.4000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**83.2283**	**83.2283**	**3.2500e-003**		**83.3095**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5244	10.1378	14.7502	0.0213		0.4585	0.4585		0.4585	0.4585	0.0000	2,141.1655	2,141.1655	0.6666		2,157.8298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5244**	**10.1378**	**14.7502**	**0.0213**		**0.4585**	**0.4585**		**0.4585**	**0.4585**	**0.0000**	**2,141.1655**	**2,141.1655**	**0.6666**		**2,157.8298**

3.13 SPS - Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0432	0.4058	8.4000e-004	0.0822	6.6000e-004	0.0828	0.0218	6.1000e-004	0.0224		83.2283	83.2283	3.2500e-003		83.3095
Total	**0.0584**	**0.0432**	**0.4058**	**8.4000e-004**	**0.0822**	**6.6000e-004**	**0.0828**	**0.0218**	**6.1000e-004**	**0.0224**		**83.2283**	**83.2283**	**3.2500e-003**		**83.3095**

3.14 SPS - Architectural - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.2031	13.6499	5.9371	0.0195		0.4845	0.4845		0.4457	0.4457		1,958.4786	1,958.4786	0.6097		1,973.7211
Total	**159.7201**	**13.6499**	**5.9371**	**0.0195**		**0.4845**	**0.4845**		**0.4457**	**0.4457**		**1,958.4786**	**1,958.4786**	**0.6097**		**1,973.7211**

3.14 SPS - Architectural - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0216	0.2029	4.2000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		41.6141	41.6141	1.6200e-003		41.6547
Total	**0.0292**	**0.0216**	**0.2029**	**4.2000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**41.6141**	**41.6141**	**1.6200e-003**		**41.6547**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2080	7.9962	12.0382	0.0195		0.3105	0.3105		0.3250	0.3250	0.0000	1,958.4786	1,958.4786	0.6097		1,973.7211
Total	**158.7250**	**7.9962**	**12.0382**	**0.0195**		**0.3105**	**0.3105**		**0.3250**	**0.3250**	**0.0000**	**1,958.4786**	**1,958.4786**	**0.6097**		**1,973.7211**

3.14 SPS - Architectural - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0216	0.2029	4.2000e-004	0.0411	3.3000e-004	0.0414	0.0109	3.0000e-004	0.0112		41.6141	41.6141	1.6200e-003		41.6547
Total	**0.0292**	**0.0216**	**0.2029**	**4.2000e-004**	**0.0411**	**3.3000e-004**	**0.0414**	**0.0109**	**3.0000e-004**	**0.0112**		**41.6141**	**41.6141**	**1.6200e-003**		**41.6547**

3.15 RTPS - Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2253	23.7489	14.6426	0.0390		0.9236	0.9236		0.8497	0.8497		3,864.0328	3,864.0328	1.2225		3,894.5963
Total	**2.2253**	**23.7489**	**14.6426**	**0.0390**		**0.9236**	**0.9236**		**0.8497**	**0.8497**		**3,864.0328**	**3,864.0328**	**1.2225**		**3,894.5963**

3.15 RTPS - Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1052	0.0758	0.7163	1.6300e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		161.6576	161.6576	5.7200e-003		161.8006
Total	**0.1052**	**0.0758**	**0.7163**	**1.6300e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**161.6576**	**161.6576**	**5.7200e-003**		**161.8006**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4929	17.5160	25.8842	0.0390		0.7337	0.7337		0.7588	0.7588	0.0000	3,864.0328	3,864.0328	1.2225		3,894.5963
Total	**0.4929**	**17.5160**	**25.8842**	**0.0390**		**0.7337**	**0.7337**		**0.7588**	**0.7588**	**0.0000**	**3,864.0328**	**3,864.0328**	**1.2225**		**3,894.5963**

3.15 RTPS - Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1052	0.0758	0.7163	1.6300e-003	0.1643	1.2700e-003	0.1656	0.0436	1.1700e-003	0.0448		161.6576	161.6576	5.7200e-003		161.8006
Total	**0.1052**	**0.0758**	**0.7163**	**1.6300e-003**	**0.1643**	**1.2700e-003**	**0.1656**	**0.0436**	**1.1700e-003**	**0.0448**		**161.6576**	**161.6576**	**5.7200e-003**		**161.8006**

3.15 RTPS - Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0642	21.0933	14.0976	0.0390		0.8142	0.8142		0.7490	0.7490		3,778.7719	3,778.7719	1.2221		3,809.3252
Total	**2.0642**	**21.0933**	**14.0976**	**0.0390**		**0.8142**	**0.8142**		**0.7490**	**0.7490**		**3,778.7719**	**3,778.7719**	**1.2221**		**3,809.3252**

3.15 RTPS - Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0957	0.0667	0.6368	1.5700e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		156.7108	156.7108	4.9600e-003		156.8349
Total	**0.0957**	**0.0667**	**0.6368**	**1.5700e-003**	**0.1643**	**1.2300e-003**	**0.1655**	**0.0436**	**1.1300e-003**	**0.0447**		**156.7108**	**156.7108**	**4.9600e-003**		**156.8349**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5490	18.5562	26.1082	0.0390		0.7710	0.7710		0.7931	0.7931	0.0000	3,778.7719	3,778.7719	1.2221		3,809.3252
Total	**0.5490**	**18.5562**	**26.1082**	**0.0390**		**0.7710**	**0.7710**		**0.7931**	**0.7931**	**0.0000**	**3,778.7719**	**3,778.7719**	**1.2221**		**3,809.3252**

3.15 RTPS - Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0957	0.0667	0.6368	1.5700e-003	0.1643	1.2300e-003	0.1655	0.0436	1.1300e-003	0.0447		156.7108	156.7108	4.9600e-003		156.8349
Total	**0.0957**	**0.0667**	**0.6368**	**1.5700e-003**	**0.1643**	**1.2300e-003**	**0.1655**	**0.0436**	**1.1300e-003**	**0.0447**		**156.7108**	**156.7108**	**4.9600e-003**		**156.8349**

3.16 RTPS - Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0476	10.7656	11.0471	0.0213		0.4631	0.4631		0.4261	0.4261		2,060.6710	2,060.6710	0.6665		2,077.3326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0476**	**10.7656**	**11.0471**	**0.0213**		**0.4631**	**0.4631**		**0.4261**	**0.4261**		**2,060.6710**	**2,060.6710**	**0.6665**		**2,077.3326**

3.16 RTPS - Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0442	0.0297	0.2895	7.6000e-004	0.0822	6.0000e-004	0.0827	0.0218	5.5000e-004	0.0223		75.8807	75.8807	2.2200e-003		75.9363
Total	**0.0442**	**0.0297**	**0.2895**	**7.6000e-004**	**0.0822**	**6.0000e-004**	**0.0827**	**0.0218**	**5.5000e-004**	**0.0223**		**75.8807**	**75.8807**	**2.2200e-003**		**75.9363**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5244	10.1378	14.7502	0.0213		0.4585	0.4585		0.4585	0.4585	0.0000	2,060.6710	2,060.6710	0.6665		2,077.3326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5244**	**10.1378**	**14.7502**	**0.0213**		**0.4585**	**0.4585**		**0.4585**	**0.4585**	**0.0000**	**2,060.6710**	**2,060.6710**	**0.6665**		**2,077.3326**

3.16 RTPS - Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0442	0.0297	0.2895	7.6000e-004	0.0822	6.0000e-004	0.0827	0.0218	5.5000e-004	0.0223		75.8807	75.8807	2.2200e-003		75.9363
Total	**0.0442**	**0.0297**	**0.2895**	**7.6000e-004**	**0.0822**	**6.0000e-004**	**0.0827**	**0.0218**	**5.5000e-004**	**0.0223**		**75.8807**	**75.8807**	**2.2200e-003**		**75.9363**

3.17 RTPS - Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.8632	8.1612	4.8034	0.0179		0.2897	0.2897		0.2665	0.2665		1,732.4427	1,732.4427	0.5603		1,746.4503
Total	**159.3802**	**8.1612**	**4.8034**	**0.0179**		**0.2897**	**0.2897**		**0.2665**	**0.2665**		**1,732.4427**	**1,732.4427**	**0.5603**		**1,746.4503**

3.17 RTPS - Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0149	0.1448	3.8000e-004	0.0411	3.0000e-004	0.0414	0.0109	2.7000e-004	0.0112		37.9403	37.9403	1.1100e-003		37.9681
Total	**0.0221**	**0.0149**	**0.1448**	**3.8000e-004**	**0.0411**	**3.0000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**37.9403**	**37.9403**	**1.1100e-003**		**37.9681**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	158.5170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2698	9.0857	11.5587	0.0179		0.3486	0.3486		0.3579	0.3579	0.0000	1,732.4427	1,732.4427	0.5603		1,746.4503
Total	**158.7868**	**9.0857**	**11.5587**	**0.0179**		**0.3486**	**0.3486**		**0.3579**	**0.3579**	**0.0000**	**1,732.4427**	**1,732.4427**	**0.5603**		**1,746.4503**

3.17 RTPS - Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0149	0.1448	3.8000e-004	0.0411	3.0000e-004	0.0414	0.0109	2.7000e-004	0.0112		37.9403	37.9403	1.1100e-003		37.9681
Total	**0.0221**	**0.0149**	**0.1448**	**3.8000e-004**	**0.0411**	**3.0000e-004**	**0.0414**	**0.0109**	**2.7000e-004**	**0.0112**		**37.9403**	**37.9403**	**1.1100e-003**		**37.9681**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5800e-003	0.0242	0.0299	1.1000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		11.1588	11.1588	7.7000e-004		11.1780
Unmitigated	2.5800e-003	0.0242	0.0299	1.1000e-004	7.1500e-003	1.4000e-004	7.2800e-003	1.9200e-003	1.3000e-004	2.0500e-003		11.1588	11.1588	7.7000e-004		11.1780

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1.14	1.14	1.14	3,328	3,328
Total	1.14	1.14	1.14	3,328	3,328

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.501303	0.035285	0.172289	0.136094	0.027047	0.006047	0.027345	0.084787	0.001820	0.001183	0.004865	0.000869	0.001067

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Unmitigated	1.4375	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Total	**1.4375**	**5.0000e-005**	**5.8600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0125**	**0.0125**	**3.0000e-005**		**0.0133**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2172					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0125	0.0125	3.0000e-005		0.0133
Total	**1.4375**	**5.0000e-005**	**5.8600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0125**	**0.0125**	**3.0000e-005**		**0.0133**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	4	0	200	208	0.73	Diesel
Emergency Generator	2	0	200	38	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (175 - 300 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Emergency Generator - Diesel (25 - 50 HP)	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

11.0 Vegetation

Appendix C

Biological Resources Technical Information

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly a. ected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

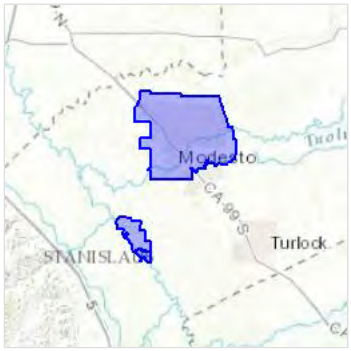
Project information

NAME

City of Modesto Wastewater Master Plan

LOCATION

Stanislaus County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Not for consultation

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.

2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin Kit Fox Vulpes macrotis mutica No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard Gambelia silus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is a **fi**nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is a **fi**nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpaci. cus There is a **fi**nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Steelhead Oncorhynchus (=Salmo) mykiss There is a **fi**nal critical habitat designated for this species. Your location overlaps the designated critical habitat. https://ecos.fws.gov/ecp/species/1007	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is a **fi**nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

Vernal Pool Fairy Shrimp Branchinecta lynchi There is a **fi**nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi There is a **fi**nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Steelhead Oncorhynchus (=Salmo) mykiss Northern California DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss South-Central California Coast DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss Southern California DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss Central California Coast DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss California Central Valley DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special

attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Migrating
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Year-round
Black Rail Laterallus jamaicensis https://ecos.fws.gov/ecp/species/7717	Breeding
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Year-round
Calliope Hummingbird Stellula calliope https://ecos.fws.gov/ecp/species/9526	Migrating
Costa's Hummingbird Calypte costae https://ecos.fws.gov/ecp/species/9470	Year-round
Fox Sparrow Passerella iliaca	Wintering
Least Bittern Ixobrychus exilis https://ecos.fws.gov/ecp/species/6175	Breeding
Lesser Yellowlegs Tringa flavipes https://ecos.fws.gov/ecp/species/9679	Wintering
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Wintering
Loggerhead Shrike Lanius ludovicianus https://ecos.fws.gov/ecp/species/8833	Year-round
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Wintering
Marbled Godwit Limosa fedoa https://ecos.fws.gov/ecp/species/9481	Wintering
Mountain Plover Charadrius montanus https://ecos.fws.gov/ecp/species/3638	Wintering
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Year-round
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Wintering
Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Migrating
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Wintering

Swainson's Hawk Buteo swainsoni https://ecos.fws.gov/ecp/species/1098	Breeding
Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910	Year-round
Western Grebe aechmophorus occidentalis https://ecos.fws.gov/ecp/species/6743	Wintering
Williamson's Sapsucker Sphyrapicus thyroideus https://ecos.fws.gov/ecp/species/8832	Year-round
Yellow-billed Magpie Pica nuttalli https://ecos.fws.gov/ecp/species/9726	Year-round

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Salida (3712161) OR Riverbank (3712068) OR Brush Lake (3712151) OR Ceres (3712058) OR Manteca (3712172) OR Avena (3712171) OR Escalon (3712078) OR Oakdale (3712077) OR Waterford (3712067) OR Denair (3712057) OR Turlock (3712047) OR Hatch (3712048) OR Crows Landing (3712141) OR Patterson (3712142) OR Westley (3712152) OR Ripon (3712162))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Anniella pulchra northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Atriplex persistens vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
Atriplex subtilis subtle orache	PDCHE042T0	None	None	G1	S1	1B.2
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G2	S2	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
California macrophylla round-leaved filaree	PDGER01070	None	None	G3?	S3?	1B.2
Caulanthus lemmonii Lemmon's jewelflower	PDBRA0M0E0	None	None	G3	S3	1B.2
Ceratochrysis menkei Menke's cuckoo wasp	IIHYM71050	None	None	G1	S1	
Clarkia rostrata beaked clarkia	PDONA050Y0	None	None	G2G3	S2S3	1B.3
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Dipodomys heermanni dixoni Merced kangaroo rat	AMAFD03062	None	None	G3G4T2T3	S2S3	
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Elderberry Savanna Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Eschscholzia rhombipetala diamond-petaled California poppy	PDPAP0A0D0	None	None	G1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus blossevillii western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Masticophis flagellum ruddocki San Joaquin coachwhip	ARADB21021	None	None	G5T2T3	S2?	SSC
Melospiza melodia song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
Monardella leucocephala Merced monardella	PDLAM180C0	None	None	GH	SH	1A
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Neostapfia colusana Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Neotoma fuscipes riparia riparian (=San Joaquin Valley) woodrat	AMAFF08081	Endangered	None	G5T1Q	S1	SSC
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Oncorhynchus mykiss irideus steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
Spea hammondii western spadefoot	AAABF02020	None	None	G3	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sphenopholis obtusata prairie wedge grass	PMPOA5T030	None	None	G5	S2	2B.2
Sylvilagus bachmani riparius riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tuctoria greenei Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 66

CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

21 matches found. Click on scientific name for details

Search Criteria

Found in Quads 3712161, 3712068, 3712058, 3712151, 3712172, 3712171, 3712078, 3712077, 3712067, 3712057, 3712047, 3712048, 3712141, 3712142 3712152 and 3712162;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S2	G2T2
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex coronata var. coronata	crownscale	Chenopodiaceae	annual herb	Mar-Oct	4.2	S3	G4T3
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	1B.1	S2	G2
Atriplex persistens	vernal pool smallscale	Chenopodiaceae	annual herb	Jun,Aug,Sep,Oct	1B.2	S2	G2
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	Jun,Aug,Sep(Oct)	1B.2	S1	G1
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb	Jul-Oct	1B.1	S2	G2
California macrophylla	round-leaved filaree	Geraniaceae	annual herb	Mar-May	1B.2	S3?	G3?
Caulanthus lemmonii	Lemmon's jewelflower	Brassicaceae	annual herb	Feb-May	1B.2	S3	G3
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2	S3	G3T3
Clarkia breweri	Brewer's clarkia	Onagraceae	annual herb	Apr-Jun	4.2	S4	G4
Clarkia rostrata	beaked clarkia	Onagraceae	annual herb	Apr-May	1B.3	S2S3	G2G3
Eryngium racemosum	Delta button-celery	Apiaceae	annual / perennial herb	Jun-Oct	1B.1	S1	G1
Eschscholzia rhombipetala	diamond-petaled California poppy	Papaveraceae	annual herb	Mar-Apr	1B.1	S1	G1
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
Monardella leucocephala	Merced monardella	Lamiaceae	annual herb	May-Aug	1A	SH	GH
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	S1	G1
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	1B.1	S1	G1
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	Apr-Jul	2B.2	S2	G5
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	1B.1	S1	G1

Suggested Citation

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224 Species | 247 Checklists

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Last Seen First Seen High Counts Bar Charts Printable Checklist

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	SPECIES NAME	COUNT	DATE	BY
1	Cackling Goose	2	25 Jun 2017	Harold Reeve
2	Canada Goose	790	25 Jun 2017	Harold Reeve
3	Wood Duck	12	25 Jun 2017	Harold Reeve
4	Gadwall	85	25 Jun 2017	Harold Reeve
5	American Wigeon	2	25 Jun 2017	Harold Reeve
6	Mallard	220	25 Jun 2017	Harold Reeve
7	Cinnamon Teal	8	25 Jun 2017	Harold Reeve
8	Northern Shoveler	17	25 Jun 2017	Harold Reeve
9	Green-winged Teal	5	25 Jun 2017	Harold Reeve
10	Ring-necked Duck	8	25 Jun 2017	Harold Reeve
11	Lesser Scaup	22	25 Jun 2017	Harold Reeve
12	Bufflehead	1	25 Jun 2017	Harold Reeve

Recent Visits

Checklists submitted within the last hour are not shown.

OBSERVER	DATE	SPECIES
Harold Reeve	25 Jun 2017	62
Sal Salerno	25 Jun 2017	62
Harold Reeve	28 May 2017	58
Sal Salerno	28 May 2017	58
Emilie Strauss	15 May 2017	2
Harold Reeve	14 May 2017	61
Ralph Baker	14 May 2017	61
Juli Chamberlin	13 May 2017	44
Bob Toleno	13 May 2017	44
Emilie Strauss	26 Apr 2017	55

More Recent Visits...

Top eBirders

BY SPECIES | BY CHECKLISTS

Updated 9 sec ago.

1	Harold Reeve	205

	SPECIES NAME	COUNT	DATE	BY
13	Common Goldeneye	1	25 Jun 2017	Harold Reeve
14	Ruddy Duck	370	25 Jun 2017	Harold Reeve
15	California Quail	7	25 Jun 2017	Harold Reeve
16	Pied-billed Grebe	1	25 Jun 2017	Harold Reeve
17	Eared Grebe	45	25 Jun 2017	Harold Reeve
18	Clark's Grebe	1	25 Jun 2017	Harold Reeve
	Western/Clark's Grebe	1	25 Jun 2017	Harold Reeve
19	Double-crested Cormorant	1	25 Jun 2017	Harold Reeve
20	Great Blue Heron	7	25 Jun 2017	Harold Reeve
21	Great Egret	1	25 Jun 2017	Harold Reeve
22	Snowy Egret	1	25 Jun 2017	Harold Reeve
23	Swainson's Hawk	3	25 Jun 2017	Harold Reeve
24	Red-tailed Hawk	7	25 Jun 2017	Harold Reeve
25	Common Gallinule	1	25 Jun 2017	Harold Reeve
26	American Coot	48	25 Jun 2017	Harold Reeve
27	Black-necked Stilt	8	25 Jun 2017	Harold Reeve
28	American Avocet	52	25 Jun 2017	Harold Reeve
29	Killdeer	25	25 Jun 2017	Harold Reeve
30	Least Sandpiper	2	25 Jun 2017	Harold Reeve
31	Wilson's Phalarope	22	25 Jun 2017	Harold Reeve

2	Jim Gain	191
3	John Harris	146
4	Ralph Baker	141
5	Frances Oliver	126
6	Chris Conard	79
7	Sal Salerno	76
8	Justin Bosler	74
9	Steve Glover	70
9	Jim Rowoth	70

	SPECIES NAME	COUNT	DATE	BY
32	Eurasian Collared-Dove	2	25 Jun 2017	Harold Reeve
33	Mourning Dove	6	25 Jun 2017	Harold Reeve
	hummingbird sp.	1	25 Jun 2017	Harold Reeve
34	Nuttall's Woodpecker	2	25 Jun 2017	Harold Reeve
35	Northern Flicker	1	25 Jun 2017	Harold Reeve
36	Peregrine Falcon	1	25 Jun 2017	Harold Reeve
37	Western Wood-Pewee	2	25 Jun 2017	Harold Reeve
38	Black Phoebe	2	25 Jun 2017	Harold Reeve
39	Ash-throated Flycatcher	3	25 Jun 2017	Harold Reeve
40	Western Kingbird	1	25 Jun 2017	Harold Reeve
41	California Scrub-Jay	3	25 Jun 2017	Harold Reeve
42	Northern Rough-winged Swallow	5	25 Jun 2017	Harold Reeve
43	Tree Swallow	300	25 Jun 2017	Harold Reeve
44	Barn Swallow	2	25 Jun 2017	Harold Reeve
45	Cliff Swallow	470	25 Jun 2017	Harold Reeve
46	Oak Titmouse	2	25 Jun 2017	Harold Reeve
47	White-breasted Nuthatch	1	25 Jun 2017	Harold Reeve
48	House Wren	6	25 Jun 2017	Harold Reeve
49	Marsh Wren	3	25 Jun 2017	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
50	Bewick's Wren	2	25 Jun 2017	Harold Reeve
51	Northern Mockingbird	1	25 Jun 2017	Harold Reeve
52	European Starling	10	25 Jun 2017	Harold Reeve
53	Common Yellowthroat	1	25 Jun 2017	Harold Reeve
54	Song Sparrow	4	25 Jun 2017	Harold Reeve
55	Spotted Towhee	2	25 Jun 2017	Harold Reeve
56	Black-headed Grosbeak	1	25 Jun 2017	Harold Reeve
57	Red-winged Blackbird	10	25 Jun 2017	Harold Reeve
58	Brewer's Blackbird	4	25 Jun 2017	Harold Reeve
59	Brown-headed Cowbird	2	25 Jun 2017	Harold Reeve
60	House Finch	4	25 Jun 2017	Harold Reeve
61	American Goldfinch	2	25 Jun 2017	Harold Reeve
62	House Sparrow	2	25 Jun 2017	Harold Reeve
63	Northern Pintail	1	28 May 2017	Harold Reeve
64	Western Grebe	9	28 May 2017	Harold Reeve
65	White-faced Ibis	19	28 May 2017	Harold Reeve
66	Turkey Vulture	2	28 May 2017	Harold Reeve
67	Spotted Sandpiper	1	28 May 2017	Harold Reeve
68	California Gull	75	28 May 2017	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
69	Black Tern	4	28 May 2017	Harold Reeve
70	American Crow	1	28 May 2017	Harold Reeve
71	Violet-green Swallow	6	28 May 2017	Harold Reeve
72	Bushtit	2	28 May 2017	Harold Reeve
73	California Towhee	1	28 May 2017	Harold Reeve
74	Western Tanager	3	28 May 2017	Harold Reeve
75	Great-tailed Grackle	2	28 May 2017	Harold Reeve
76	Bullock's Oriole	3	28 May 2017	Harold Reeve
77	Say's Phoebe	1	15 May 2017	Emilie Strauss
78	Redhead	2	14 May 2017	Harold Reeve
79	Black-bellied Plover	35	14 May 2017	Harold Reeve
80	Western Sandpiper	2	14 May 2017	Harold Reeve
81	Downy Woodpecker	1	14 May 2017	Harold Reeve
82	California Thrasher	1	14 May 2017	Harold Reeve
83	Cedar Waxwing	7	14 May 2017	Harold Reeve
84	Yellow Warbler	2	14 May 2017	Harold Reeve
85	Wilson's Warbler	1	14 May 2017	Harold Reeve
86	Lesser Goldfinch	2	14 May 2017	Harold Reeve
87	Lawrence's Goldfinch	3	14 May 2017	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
88	Greater Scaup	2	13 May 2017	Juli Chamberlin
89	Golden Eagle	1	13 May 2017	Juli Chamberlin
90	Canvasback	3	23 Apr 2017	Harold Reeve
91	Common Loon	1	23 Apr 2017	Harold Reeve
92	Red-shouldered Hawk	1	23 Apr 2017	Harold Reeve
93	Sanderling	1	23 Apr 2017	Harold Reeve
94	Dunlin	46	23 Apr 2017	Harold Reeve
95	Long-billed Dowitcher	5	23 Apr 2017	Harold Reeve
96	Greater Yellowlegs	5	23 Apr 2017	Harold Reeve
97	Bonaparte's Gull	4	23 Apr 2017	Harold Reeve
98	Caspian Tern	1	23 Apr 2017	Harold Reeve
99	Belted Kingfisher	1	23 Apr 2017	Harold Reeve
100	American Robin	2	23 Apr 2017	Harold Reeve
101	American Pipit	1	23 Apr 2017	Harold Reeve
102	White-crowned Sparrow	2	23 Apr 2017	Harold Reeve
103	White-throated Sparrow	1	23 Apr 2017	Harold Reeve
104	Savannah Sparrow	2	23 Apr 2017	Harold Reeve
105	Lincoln's Sparrow	2	23 Apr 2017	Harold Reeve
106	Blue Grosbeak	2	23 Apr 2017	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
107	Northern Harrier	1	17 Apr 2017	Emilie Strauss
108	Rock Pigeon	10	17 Apr 2017	Emilie Strauss
109	Barn Owl	1	17 Apr 2017	Emilie Strauss
110	Great Horned Owl	1	17 Apr 2017	Emilie Strauss
111	American Kestrel	4	17 Apr 2017	Emilie Strauss
112	Common Raven	1	17 Apr 2017	Emilie Strauss
113	Snow Goose	900	26 Mar 2017	Harold Reeve
	Common/Red-breasted Merganser	1	26 Mar 2017	Harold Reeve
114	Cattle Egret	33	26 Mar 2017	Harold Reeve
115	Green Heron	1	26 Mar 2017	Harold Reeve
116	Cooper's Hawk	2	26 Mar 2017	Ralph Baker
117	Sora	1	26 Mar 2017	Harold Reeve
118	Long-billed Curlew	6	26 Mar 2017	Harold Reeve
119	Ring-billed Gull	1	26 Mar 2017	Harold Reeve
120	Merlin	1	26 Mar 2017	Harold Reeve
121	Ruby-crowned Kinglet	3	26 Mar 2017	Harold Reeve
122	Western Bluebird	2	26 Mar 2017	Ralph Baker
123	Orange-crowned Warbler	1	26 Mar 2017	Harold Reeve
124	Yellow-rumped Warbler	5	26 Mar 2017	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
125	Fox Sparrow	3	26 Mar 2017	Harold Reeve
126	Golden-crowned Sparrow	4	26 Mar 2017	Harold Reeve
127	Ross's Goose	1	12 Mar 2017	Harold Reeve
	Snow/Ross's Goose	400	12 Mar 2017	Harold Reeve
128	Herring Gull	7	12 Mar 2017	Harold Reeve
	gull sp.	40	12 Mar 2017	Harold Reeve
129	Greater White-fronted Goose	3	12 Feb 2017	Harold Reeve
130	Virginia Rail	1	12 Feb 2017	Harold Reeve
131	Sandhill Crane	15	12 Feb 2017	Harold Reeve
132	Thayer's Gull	2	12 Feb 2017	Harold Reeve
133	Glaucous-winged Gull	2	12 Feb 2017	Harold Reeve
134	Glaucous Gull	1	12 Feb 2017	Harold Reeve
135	Loggerhead Shrike	1	12 Feb 2017	Harold Reeve
136	Barrow's Goldeneye	1	11 Feb 2017	Jim Gain
137	Wilson's Snipe	1	11 Feb 2017	Jim Gain
138	Yellow-billed Magpie	12	11 Feb 2017	Jim Gain
139	Western Meadowlark	1	28 Jan 2017	Christian Walker
140	Dark-eyed Junco	20	8 Jan 2017	Harold Reeve
141	Bald Eagle	1	2 Jan 2017	Jim Gain
142	Pacific Golden-Plover	1	2 Jan 2017	Jim Gain

	SPECIES NAME	COUNT	DATE	BY
143	Phainopepla	2	2 Jan 2017	Jim Gain
144	Purple Finch	1	11 Dec 2016	Harold Reeve
145	Surf Scoter	1	13 Nov 2016	Harold Reeve
146	Hooded Merganser	2	13 Nov 2016	Harold Reeve
147	American White Pelican	26	13 Nov 2016	Harold Reeve
148	Sharp-shinned Hawk	1	13 Nov 2016	Harold Reeve
	Accipiter sp.	1	13 Nov 2016	Harold Reeve
149	Pectoral Sandpiper	1	13 Nov 2016	Harold Reeve
150	Anna's Hummingbird	1	13 Nov 2016	Harold Reeve
151	Hermit Thrush	1	13 Nov 2016	Harold Reeve
152	Tricolored Blackbird	25	13 Nov 2016	Harold Reeve
153	Blue-winged Teal	1	23 Oct 2016	Harold Reeve
	teal sp.	3	23 Oct 2016	Harold Reeve
154	Black-crowned Night-Heron	1	23 Oct 2016	Harold Reeve
155	Black-throated Gray Warbler	1	23 Oct 2016	Harold Reeve
	Blue-winged/Cinnamon Teal	5	11 Sep 2016	Harold Reeve
156	Semipalmated Plover	3	11 Sep 2016	Harold Reeve
157	Red-necked Phalarope	8	11 Sep 2016	Harold Reeve
158	Lesser Yellowlegs	1	11 Sep 2016	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
159	Bank Swallow	2	11 Sep 2016	Harold Reeve
	swallow sp.	2	11 Sep 2016	Harold Reeve
160	Whimbrel	1	10 Jul 2016	Harold Reeve
161	Marbled Godwit	1	10 Jul 2016	Harold Reeve
	Short-billed/Long-billed Dowitcher	1	10 Jul 2016	Harold Reeve
	peep sp.	40	9 Jul 2016	Jim Gain
162	Forster's Tern	1	26 Jun 2016	Jim Gain
163	Warbling Vireo	2	14 May 2016	Jim Gain
164	Common Merganser	1	8 May 2016	Harold Reeve
165	Snowy Plover	3	8 May 2016	Harold Reeve
166	Townsend's Warbler	1	8 May 2016	Harold Reeve
167	Chipping Sparrow	1	24 Apr 2016	Harold Reeve
168	Horned Lark	1	13 Feb 2016	Frances Oliver
169	Tundra Swan	3	13 Feb 2016	John Harris
	Western x Glaucous-winged Gull (hybrid)	1	24 Jan 2016	Harold Reeve
170	White-throated Swift	10	24 Jan 2016	Harold Reeve
171	Horned Grebe	1	10 Jan 2016	Harold Reeve
172	Lark Sparrow	1	10 Jan 2016	Harold Reeve
	Herring x Glaucous-winged Gull (hybrid)	2	3 Jan 2016	Jim Gain
173	Acorn Woodpecker	1	3 Jan 2016	Jim Gain

	SPECIES NAME	COUNT	DATE	BY
174	Mew Gull	1	27 Dec 2015	Harold Reeve
175	Black-headed Gull	1	13 Dec 2015	Jim Gain
176	Franklin's Gull	1	11 Oct 2015	Harold Reeve
177	Osprey	1	13 Sep 2015	Harold Reeve
178	Willow Flycatcher	1	13 Sep 2015	Harold Reeve
179	Baird's Sandpiper	1	12 Sep 2015	Jim Gain
	duck sp.	500	23 Aug 2015	Harold Reeve
180	Wrentit	1	23 Aug 2015	Harold Reeve
181	Semipalmated Sandpiper	1	9 Aug 2015	Harold Reeve
182	Willet	1	9 Aug 2015	Harold Reeve
183	Black-chinned Hummingbird	1	9 Aug 2015	Harold Reeve
184	Yellow-headed Blackbird	1	9 Aug 2015	Harold Reeve
185	Western Screech-Owl	2	8 Aug 2015	Jim Gain
186	Pacific-slope Flycatcher	2	8 Aug 2015	Jim Gain
187	Lazuli Bunting	1	13 Jun 2015	Jim Gain
188	Rufous Hummingbird	1	10 May 2015	Harold Reeve
189	Swainson's Thrush	1	10 May 2015	Harold Reeve
	Cinnamon Teal x Northern Shoveler (hybrid)	1	8 Mar 2015	Harold Reeve
190	Varied Thrush	1	8 Mar 2015	Harold Reeve

	SPECIES NAME	COUNT	DATE	BY
191	Eurasian Wigeon	1	11 Jan 2015	Harold Reeve
192	Tufted Duck	1	4 Jan 2015	Jim Gain
193	Ring-necked Pheasant	1	4 Jan 2015	Jim Gain
194	Blue-gray Gnatcatcher	1	4 Jan 2015	Jim Gain
	dabbling duck sp.	60	10 Aug 2014	Harold Reeve
195	White-tailed Kite	1	8 Jun 2014	Harold Reeve
196	Western Gull	1	23 Mar 2014	Harold Reeve
197	Prairie Falcon	1	23 Feb 2014	Harold Reeve
198	American Bittern	1	9 Feb 2014	Harold Reeve
199	Little Gull	1	9 Feb 2014	Jim Gain
200	Ferruginous Hawk	1	5 Jan 2014	Jim Gain
201	Red-breasted Merganser	2	27 Oct 2013	Harold Reeve
202	Northern Waterthrush	1	27 Oct 2013	Harold Reeve
203	Sabine's Gull	1	22 Sep 2013	Harold Reeve
204	Wild Turkey	1	13 Jul 2013	Jim Gain
	blackbird sp.	150	9 Jun 2013	Harold Reeve
205	Rough-legged Hawk	1	13 Jan 2013	Harold Reeve
206	Red-breasted Nuthatch	1	14 Oct 2012	Harold Reeve
	American/Pacific Golden-Plover (Lesser Golden-Plover)	1	23 Sep 2012	Ralph Baker

	SPECIES NAME	COUNT	DATE	BY
207	Red-breasted Sapsucker	1	8 Sep 2012	Jim Gain
208	Short-billed Dowitcher	1	26 Aug 2012	Harold Reeve
209	Yellow-breasted Chat	1	13 Jun 2012	Cory Gregory
210	Ruddy Turnstone	1	10 Jun 2012	Harold Reeve
	Greater/Lesser Scaup	1	12 May 2012	Justin Bosler
211	Rock Wren	1	22 Jan 2012	Harold Reeve
212	American Golden-Plover	1	9 Oct 2011	Harold Reeve
213	Common Tern	1	11 Sep 2011	John Harris
214	Parasitic Jaeger	1	26 Sep 2010	Jim Gain
215	Red Knot	1	26 Sep 2009	Jim Gain
216	Solitary Sandpiper	1	23 Aug 2009	Harold Reeve
217	Arctic Tern	1	17 Sep 2006	Jim Gain
218	Black Turnstone	1	15 Sep 2005	Jim Gain
219	Long-tailed Duck	2	17 Dec 2000	Jim Gain
220	Red Phalarope	2	29 Nov 1997	Jim Gain
221	Brant	X	12 Jan 1991	Jim Gain
222	Swamp Sparrow	X	1 Dec 1988	Jim Gain
223	Long-tailed Jaeger	X	1 Aug 1987	Jim Gain
224	Wandering Tattler	1	8 Sep 1986	Jim Gain

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Appendix D

Cultural Resources Technical Information

Technical Report—Draft

CULTURAL RESOURCES ASSESSMENT REPORT

City of Modesto River Trunk Realignment Project Stanislaus County, California

September 2017

Prepared for:

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Prepared by:

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Limitations

This report contains confidential cultural resources location information; report distribution should be restricted to those with a need to know. Cultural resources are non-renewable, and their scientific, cultural, and aesthetic values can be significantly impaired by disturbance. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the locations of cultural resources should be kept confidential. The legal authority to restrict cultural resources information is in California Government Code 6254.1 and the National Historic Preservation Act of 1966, as amended, Section 304.

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List of Acronyms

APE	area of potential effects
CCIC	Central California Information Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CEQA	California Environmental Quality Act
City	City of Modesto
CRHR	California Register of Historical Resources
CFR	Code of Federal Regulations
Horizon	Horizon Water and Environment, LLC
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	Public Resources Code
Program	Wastewater Master Plan
project	River Trunk Realignment Project
TCR	Tribal Cultural Resource
USC	United States Code
USGS	United State Geological Survey

Executive Summary

The City of Modesto (City) is proposing a revised Wastewater Master Plan (Program) that contains a number of project-level and program-level components. This cultural resources assessment report addressed the project-level aspects of this Program called the *River Trunk Realignment Project* (project) as they pertained to the potential to impact or adversely affect archaeological resources. The City retained Horizon Water and Environment, LLC (Horizon) to complete the cultural resources assessment in support of the project.

This report documents cultural resources inventory methods and results as required for compliance with federal and California regulations. The study consisted of a literature review to identify previously recorded cultural resources that could be affected by the proposed project and a field survey to locate archaeological sites that may exist but have not yet been recorded.

No archaeological resources were identified during the course of the field survey, nor will any previously identified cultural resources be impacted by the proposed project. As a result, the project will not have an impact on significant cultural resources.

This report has been prepared based on certain key assumptions made by Horizon that substantially affect its conclusions and recommendations. These assumptions are that the information gathered during the records search is up to date and accurate, and that the field survey results accurately identified the presence or absence of archaeological resources visible on the ground surface. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. Horizon's conclusions and recommendations are conditioned upon these assumptions.

The archaeological inventory was performed based upon information obtained at the Central California Information Center (CCIC) of the California Historical Resources Information System and direct observation of site conditions and other information that is generally applicable as of August 2017. The conclusions and recommendations herein are therefore based on information available up to that point in time. Further information may come to light in the future that could substantially change the conclusions found herein.

Information obtained from these sources in this timeframe is assumed to be correct and complete. Horizon does not assume any liability for findings or lack of findings based upon misrepresentation of information presented to Horizon or for items that are not visible, made visible, accessible, or present at the time of the project area inventory.

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1 Introduction

1.1 Location and Setting

The Modesto is located in Stanislaus County, California, in the central San Joaquin Valley. The city is centrally located within California, approximately 70 miles southeast of Sacramento, 85 miles east of San Francisco, 90 miles northwest of Fresno, and 35 miles west of the foothills of the Sierra Nevada range (**Figure 1**). The Tuolumne River flows westerly through the southern portion of the city. Dry Creek, a tributary to the Tuolumne River, runs through the central portion of the city before draining into the Tuolumne River near South 9th Street and River Road. The proposed project is located in the south-central portion of the city, which is depicted on the Salida, Riverbank, Brush Land, and Ceres 7.5' USGS topographic quadrangles, in Sections 5 6, 32, and 33, Township 3-4 South, Range 9 East (**Figure 2**).

1.2 Project Description and Area of Potential Effects

The River Trunk Realignment Project, includes the following component elements:

- **Dry Creek Crossing and Pipeline to River Trunk Pump Station**

  A new 48-inch siphon would be installed to replace the existing Dry Creek crossing. This pipeline would begin at the parking lot located at the Gallo property, cross beneath Dry Creek, traverse vacant land between the creek and 9th Street, and terminate at the proposed River Trunk Pump Station. Trenchless pipeline construction methods would be employed, whereby insertion pits would be established at the Gallo property, to the west of Dry Creek, on either side of 9th Street, and at the River Trunk Pump Station site.

- **River Trunk Pump Station**

  The River Trunk Pump Station would be constructed at the corner of B Street and Beard Street. The facility would have five centrifugal submersible pumps (four on duty and one standby pump).

- **River Trunk Force Main**

  Two force mains would be constructed to convey flows from the River Trunk Pump Station to a discharge structure in Tuolumne Boulevard. One force main would be 30 inches in diameter and the second would be 42 inches in diameter.

- **Gravity Pipelines along Tuolumne Boulevard, Colorado Avenue, Neece Drive, and Pelton Avenue**

  This pipeline would be 42 inches in diameter along Tuolumne Boulevard. Along Colorado Avenue, the pipeline would range in size between 48 inches, 54 inches, and 60 inches diameter down to the Sutter Plant.

- **Shackelford Pump Station and Force Main**

  The pump station would consist of a rectangular wet well (approximately 24 feet deep) and would operate with two duty pumps and one standby pump.

Area of Potential Effects

The area of potential effects (APE) is limited to the area of proposed ground disturbance and any property, or any portion thereof, that would be physically altered or destroyed by the proposed project (undertaking) (see Figure 2). For example, construction activities associated with the linear pipeline alignments—described above—that would include both trenching and jack-and-bore methods. The depth and width of the trenches would vary depending upon the size of the pipe and take into consideration the presence of other existing utility lines. For the new effluent outfall pipeline, the width of the trench would be approximately 8 feet wide and approximately 11 feet deep. Where new or replacement sewer pipelines and outfall pipelines would cross creeks (e.g., Dry Creek and Tuolumne River), or where open trench methods would be problematic due to the presence of underground utilities, railroad crossings, or other right-of-way issues, the City would use trenchless methods. In these instances, only the bore pits would be included in the APE (as shown in **Figure 3**).

In the case of the proposed pump stations, the footprint of the pump station is included in the APE, as well as any surrounding staging areas or grounds associated with the pump station. An access road between Crows Landing Road and Shackelford Pump Station is also in the APE.

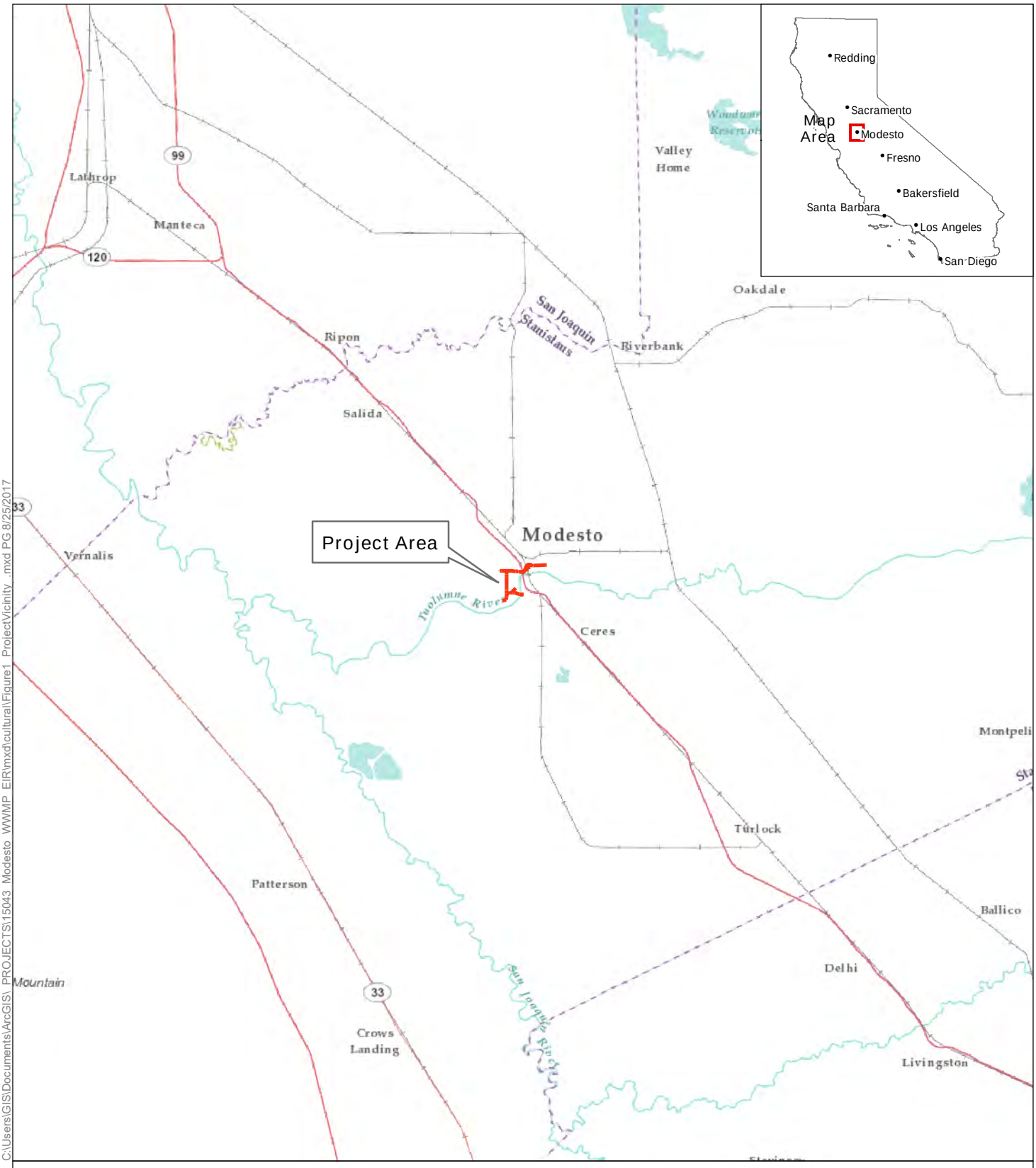

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Figure 1
Project Vicinity

City of Modesto
Wastewater Master Plan
River Trunk Realignment Project

Horizon WATER and ENVIRONMENT

County: Stanislaus
7.5' Quad Map: Salida, Riverbank, Brush Lake, and Ceres
Township: 3.0 S and 4.0 S
Range: 9.0 E
Section: 5, 6, 32, 33

UTM Coordinates (Zone 10N, NAD83)

Easting	Northing
675850	4166390

River Trunk Pump Station

Shackelford Pump Station

Access Road

Sutter Plant

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N

0 0.125 0.25
Miles

Area of Potential Effects

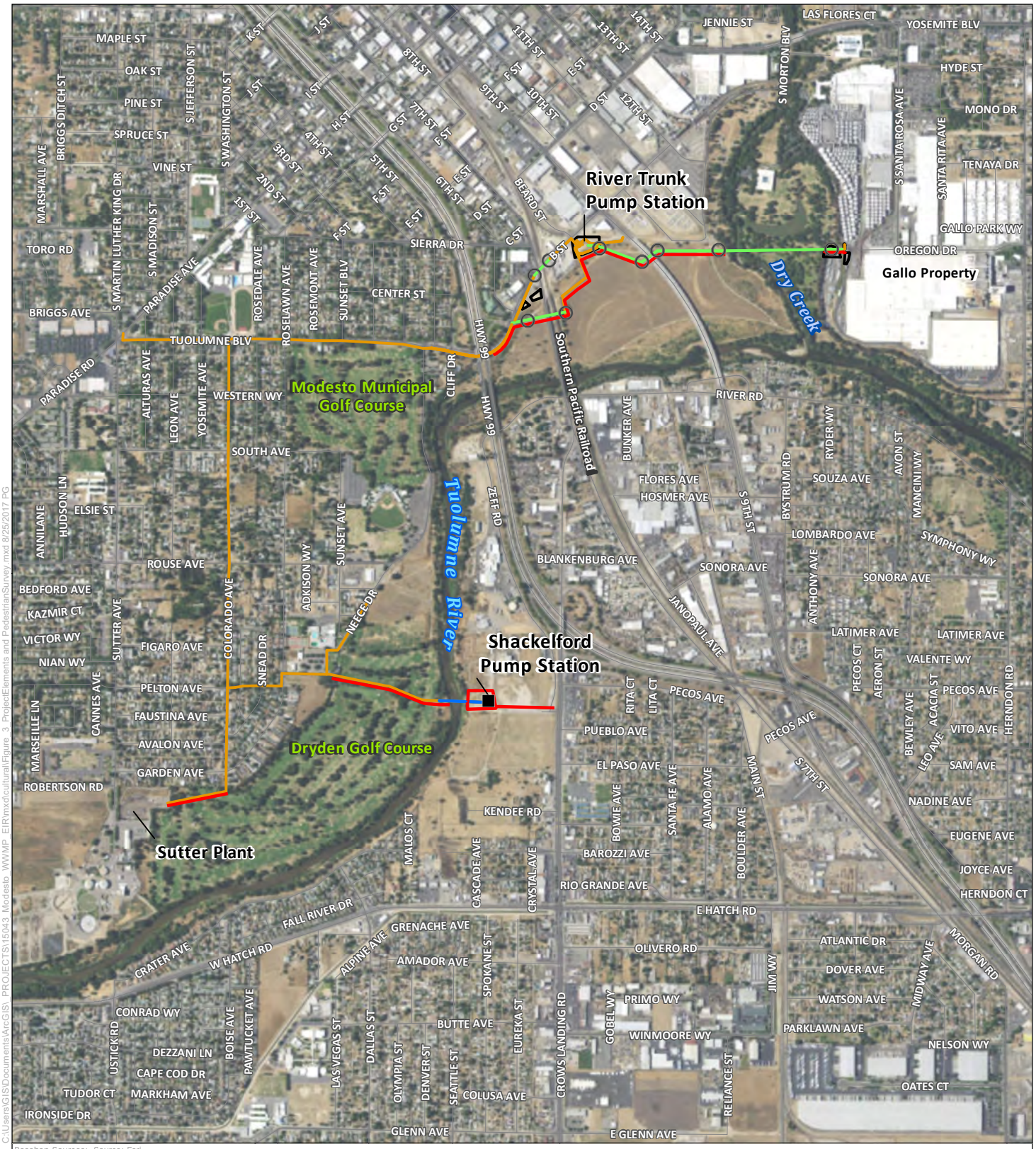
Work Areas

Project Alignments

Horizon WATER and ENVIRONMENT

Figure 2
Project Location and Area of Potential Effects

City of Modesto
Wastewater Master Plan
River Trunk Realignment Project



Basebap Sources: Source: Esri, DigitalGlobe, GeoEye, Earthstar

N

0 0.25 0.5
Miles

Pipeline Construction Type

- Open Cut
- Trenchless
- Existing Pipe

- Pedestrian Survey
- Trenchless Pits
- Work Areas

Figure 3
Project Elements and Pedestrian Survey

City of Modesto
Wastewater Master Plan
River Trunk Realignment Project

Horizon WATER and ENVIRONMENT

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1.3 Regulatory Setting and Need for Study

1.3.1 State of California Regulations

CEQA and State CEQA Guidelines

The proposed project must comply with California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq. and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3), which determine, in part, whether the project has a significant effect on a unique archaeological resource (per PRC 21083.2) or a historical resource (per PRC 21084.1).

CEQA Guidelines CCR 15064.5 notes that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." Lead agencies are required to identify potentially feasible measures or alternatives to avoid or mitigate significant adverse changes in the significance of a historical resource before they approve such projects. According to the CEQA guidelines, historical resources are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (per PRC 5024.1(e));
- Included in a local register of historical resources (per PRC 5020.1(k)) or identified as significant in a historical resource survey meeting the requirements of PRC 5024.1(g);
- Determined by a lead state agency to be historically significant; or

Unique archaeological resources as defined in PRC 21084.1.

Assembly Bill 52, which went into effect on July 1, 2015, requires, per PRC 21080.3.1, that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe, and the agency intends to release a negative declaration, mitigated negative declaration, or environmental impact report for a project. The bill also specifies, under PRC 21084.2, that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is a project that may have a significant effect on the environment. This latter language was added to the CEQA checklist in 2016. The City, as the project's CEQA lead agency, will consult with Native American tribes pursuant to PRC 21080.3.1.

Defined in Section 21074(a) of the PRC, TCRs are:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   a. Included or determined to be eligible for inclusion in the CRHR; or

   b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

In addition to Section 21074(a), above, TCRs are further defined under Section 21074(b) and (c) as follows:

(b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to the newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

California Register of Historical Resources

PRC Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act (NHPA). The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1) Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Are associated with the lives of persons important in our past;

3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

4) Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

1.3.2 Federal Regulations

Construction of the proposed project by the City will require a Clean Water Act Section 402 permit from the Central Valley Regional Water Quality Control Board. As a result, the project constitutes a federal undertaking as defined by Title 54 United States Code (USC) Section 300101 of the NHPA and mandates compliance with 54 USC Section 306108, commonly known as Section 106 of the NHPA

and its implementing regulations found under Title 36 of the Code of Federal Regulations (CFR) Section 800, as amended in 2001. To comply with Section 106 of the NHPA, the project proponent must "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register."

The implementing regulations of the NHPA require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking (proposed project). To determine site significance through application of NRHP criteria, several levels of potential significance that reflect different (although not necessarily mutually exclusive) values must be considered. As provided in Title 36 CFR Section 60.4, "the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association" must be considered within its historic context. Resources must also be at least 50 years old, except in rare cases, and, to meet eligibility criteria of the NRHP, must:

(A) Be associated with events that have made a significant contribution to the broad patterns of our history; or

(B) Be associated with the lives of persons significant in our past; or

(C) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(D) Have yielded, or may be likely to yield, information important in prehistory or history.

For archaeological sites evaluated under Criterion D, integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Cultural resources also may be considered separately under the National Environmental Protection Act per Title 42 USC Sections 4321 through 4327. These sections require federal agencies to consider potential environmental impacts and appropriate mitigation measures for projects with federal involvement.

1.4 Personnel

Field work, analysis, and reporting were carried out by the below-listed professionals who meet the U.S. Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Per Title 48 of the CFR, Section 44716, as amended in 1983). Procedures complied with NHPA Section 106 as set forth in Title 36 of the CFR, Section 800.

- Dean Martorana, RPA (Horizon), holds a master's degree in anthropology from California State University, Long Beach. He served as the lead archaeologist on the project. Mr. Martorana has 15 years of experience in both historic and prehistoric archaeology, including 10 years of experience in cultural resources management in northern California.

- Eric Durksen received a B.A. in 2017 from California State University, Sacramento in Anthropology with a specialization in Archaeology. He has 7 years of experience as a field

technician and field crew member on a number of archaeological projects throughout California and Oregon.

2 Project Context

2.1 Environmental Setting

The proposed project is located near the east side of the northern San Joaquin Valley. The area is generally flat and has an elevation of approximately 100 feet above mean sea level. Stanislaus County, as well as the larger San Joaquin Valley, was formerly dominated by riparian woodland, oak savannah, wetlands, saltbush, and perennial grassland communities that harbored an abundance of wildlife and plant species. The project area would have reflected this type of ecological setting prehistorically, especially given the proximity to the Tuolumne River. Presently, the area is dominated by urban and agricultural development; some remnant habitats exist along the Tuolumne River in protected flood plains.

Buried Deposits Forecast

Because archaeological sites may be buried with no surface manifestation, precluding their observation during pedestrian survey, the potential for buried archaeological resources within a given project area requires assessment. The probability that a buried archaeological resource exists in a project area is governed by several factors: (1) the presence of a buried, "stable land surface" called a paleosol; (2) the age of this paleosol; (3) the relative availability of a subsistence base required for human sustenance near the buried paleosol; and (4) the presence or absence of known archaeological resources in the area. Assessments that evaluate the potential for buried resources are commonly referred to as "geoarchaeological studies."

Soils information and geoarchaeological data (Natural Resources Conservation Service 2016; Rosenthal et al. 2004) indicate that the soils within the Program area represent a variety of alluvial soils (e.g., Dinuba loamy sand, Hanford sandy loam, Madera sandy loam, Modesto clay loam, San Joaquin sandy loam, and Tujunga loamy sand) that date from the late Pleistocene through the Holocene Epoch and have depths of up to 80 inches. These soils are largely considered to have low sensitivity ratings for buried archaeological remains, although the Hanford series is considered to be moderately sensitive and the Tujunga is rated as highly sensitive for buried archaeological remains (Rosenthal et al. 2004). Proximity to the Tuolumne River increases the potential for buried resources within the Program area and project study area.

2.2 Prehistoric Context

Very little archaeological work has been conducted in the Modesto area, or in the San Joaquin Valley in general; therefore, the archaeology of the project area is understood within the prehistoric context developed for the Central Valley. Since the early 1930s a number of schemes have been set forth by researchers to organize the archaeological data of California into a chronological framework. The Central Valley sequence established by Lillard, Heizer and Fenenga in 1939 is particularly notable. Based on archaeological investigations in the lower Sacramento Valley, Lillard et al. divided human prehistory into three broad cultural horizons: Early, Middle, and Late. This chronology was first known as the Delta sequence and later became the basis of Richard Beardsley's Central California Taxonomic System (CCTS) (Moratto 2004:181). The system relies on the identification of certain characteristics such as burial patterns, shell bead types, stone tools, and even where the sites tend to occur. These traits and characteristics are used to place an archaeological resource in a specific time period. The CCTS has continued to undergo significant refinement but remains the framework within

which California archaeologists explain cultural change. The general system is still widely used by archaeologists, but it has been expanded and revised to include economic and technological strategies, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods. The current chronology (Rosenthal et al. 2010:150) for Central California archaeology includes:

- Paleo-Indian: 11,550 to 8550 B.C.
- Lower Archaic: 8550 to 5550 B.C.
- Middle Archaic: 5550 to 550 B.C.
- Upper Archaic: 550 B.C to 1100 A.D.
- Emergent: 1100 A.D. to Historic

The Paleo-Indian Period (11,550 to 8,550 B.C.) is generally characterized by big-game hunters occupying broad geographic areas. However, archaeological deposits from the Paleo-Indian period are rarely found in the Central Valley and those that have been identified have largely been discovered at the south end of the San Joaquin Valley near Tulare Lake. Post-depositional processes, mainly glacial outwash occurring at the end of the Pleistocene either destroyed or deeply buried much of the existing evidence of human activity in the region from this time period. As result, little is known about Paleo-Indian lifeways in the region. (Moratto 2004:214).

Similar to the preceding period, the Lower Archaic Period (8550 to 5550 B.C.) is presumed to reflect a mobile population who continued to hunt big game. There are few localities in the Central Valley associated with this period, and those that have been found are largely isolated artifacts consisting of large wide-stemmed and leaf-shaped projectile points, along with flaked stone crescents. Only two sites with associated deposits of faunal and shell remains have been identified for the Lower Archaic; one at Buena Vista Lake in the southern San Joaquin Valley (Rosenthal, et al. 2010: 151-152) and one in Sacramento (Tremaine 2008). Some sites in the Sierra Nevada foothills from this period, however, indicate the use of milling equipment (hand stones and milling stones) to process seeds and nuts.

The Middle Archaic Period (5550 to 550 B.C.) indicates a shift to a more settled way of life that is reflected by substantial, though often deeply buried, archaeological sites with artifacts that are more elaborate in design, infer a more diverse subsistence regime, and indicate interregional trade. Sites are often situated along the major rivers and streams within the Central Valley, emphasizing a focus on riverine and marsh habitats. The Windmiller Tradition or Pattern, which was first identified in sites around the Sacramento-San Joaquin River Delta, is often considered representative of this period. Characteristic artifacts from this period include a variety of fish hooks and spears; large stemmed and leaf-shaped projectile points of obsidian and chert; shaped charmstones of alabaster, steatite, or marble; and a variety of *Haliotis* and *Olivella* shell ornaments and beads, respectively. Mortars and pestles, associated with acorn preparation, become commonplace by the middle of the period. The presence of ventrally and dorsally extended burials with a western orientation is particularly indicative of the Windmiller Pattern.

Increased sedentism and technological specialization are evidenced during the Upper Archaic Period (550 B.C to 1100 A.D.) as populations exploited more diverse resources and established trade relationships. Mortars and pestles became the primary ground stone implements, suggesting that acorns had become a more important dietary staple. Regional diversity in artifact styles, such as

Haliotis shell ornaments, bone tools, and ground charmstones or plummets become more pronounced; burial postures are also varied.

Archaeological sites from the Emergent Period (A.D. 1100 to the historic-period) indicate increased social complexity and the development of large, central villages with resident political leaders and specialized activity sites. Enhanced regional diversity in terms of artifact styles, housing, and interment methods is evident in the archeological record. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a variety of shell and stone beads and ornaments.

2.3 Ethnohistoric Context

The Modesto area lies within the ancestral territory of the Northern Valley Yokuts. "Yokuts" is a term applied to a large and diverse number of people inhabiting the San Joaquin Valley and Sierra Nevada foothills of central California. The Northern Valley Yokuts inhabited a 40- to 60-mile-wide area straddling the San Joaquin River, south of the Mokelumne River, east of the Diablo Range, and north of the sharp bend that the San Joaquin River takes to the east-northeast near Mendota in Fresno County. The Southern Valley Yokuts occupied the San Joaquin Valley south of the bend in the river. Although they were divided geographically and ecologically, the two Yokuts divisions have a common linguistic heritage (Wallace 1978:462).

The Northern Valley tribes closely resembled the Yokuts groups to the south, although there were some cultural differences. The northerners had greater access to salmon and acorns, two important dietary resources, than the Southern Yokuts, and some of their religious practices reflected the influences of groups to their north, such as the Miwok. While inhumation was the usual practice in the southern valley, the Northern Valley Yokuts either cremated their dead or buried them in a flexed position (Wallace 1978:464, 468). A chief headed the tribal villages, which averaged around 300 people. Family houses were round or oval in shape, sunken, with a conically shaped pole frame, and covered with tule mats. Each village also had a lodge for dances and other community functions, as well as a sweathouse (Wallace 1978:462-464).

The Northern Valley Yokuts built their riverside villages on elevated areas along the water's edge to avoid the spring floods, which were a result of heavy Sierra Nevada snow melts. Living beside rivers and streams provided plentiful river perch, Sacramento pike, salmon, and sturgeon. Hunting provided waterfowl such as geese and ducks as well as terrestrial animals such as antelope, elk, and brown bear, although by all indications, fish constituted a majority of the diet. The surrounding woodland, grasslands, and marshes provided acorns, tule root, and seeds.

The Northern Valley Yokuts used bone harpoon tips for fishing, stone sinkers for nets, chert projectile points for hunting, mortars and pestles, scrapers, knives, and bone awl tools to procure and process food. Marine shells, procured from coastal tribes, were used for necklaces and other adornments, and marine shell beads sometimes accompanied the deceased. They used tule reed rafts to navigate the waterways for fishing and fowling. The Yokuts also manufactured a range of intricate baskets for a variety of purposes, including storing, cooking, eating, winnowing, hopper mortars, the transport of food materials, and ritual. Very little is known of the Northern Valley Yokuts' clothing, but drawings of their tattoos show that they served not only as a decoration but also as a form of identity (Wallace 1978:464).

Initially, the Diablo Range served as a natural barrier against heavy recruitment of Native Californians by the Spanish, who established missions along the coast. However, by the early nineteenth century, Spanish and, later, Mexican missionaries began to explore the inner valleys in search of potential neophytes. The Yokuts resisted recruitment, and California Indians from a variety of tribes sought refuge among the Yokuts after fleeing the missions. Introduced diseases, destruction of traditional resources from cattle grazing, and forced relocation took a heavy toll on the Northern Yokuts. Despite decades of hardship, many individuals who can trace their ancestry to the Northern Valley Yokuts continue to live and thrive in the Central Valley and throughout California and the United States.

2.4 Historic-Era Context

The historic era began in Stanislaus County when the first Spanish expedition entered the San Joaquin Valley in 1806 under the leadership of Gabriel Moraga. Traveling north and northwest through the region in search of possible mission sites, Moraga's party explored up what came to be known as the Stanislaus River. Moraga visited the area again in 1808 and 1810 (Kyle et al 2002:516-517).

After Mexico gained its independence from Spain in 1822, two additional expedition forces entered the area; however, the purposes of their campaigns were no longer exploratory. Soldiers were sent into the Central Valley to recover stolen animals and punish rebellious Indians in order to reduce the attacks upon coastal towns, missions, and ranchos.

Americans also began to enter the region during the Mexican period. In both 1827 and 1828, Jedediah Smith entered the San Joaquin Valley via the Tejon Pass and trapped beavers along the San Joaquin, Kings, and other rivers and streams that flowed from the Sierra. Smith was followed by fellow trappers such as Peter Ogden, Ewing Young, Kit Carson, and Joseph Walker.

The first permanent European settlement in Stanislaus County may have occurred when two land grants were issued by the Mexican government in 1843. The first was the Rancho El Pescadero on the west side of the San Joaquin River near the border of what would eventually become San Joaquin County. The second was the Rancheria del Rio de Estanislao located north of the Stanislaus River bordering Tuolumne County. Two additional land grants were issued the following year. These were the Ranchos del Puerto and Orestimba, both of which were on the west side of the County near Rancho Pescadero (Tinkham 1921).

The City of Modesto came into being in 1870 when the Central Pacific Railroad announced the location would be the end point of the next extension of the rail line as it progressed south through the Central Valley (Kyle et al 2002:521). By the time the tracks were completed in November of that year, a viable town had already been established by entrepreneurs (City of Modesto 2016). Modesto residents were among California's first irrigation advocates, and by 1904 a system of canals had been constructed in order to allow more productive agriculture. During the nineteenth century grain-growing was Stanislaus County's dominant agricultural activity. Stock-raising, dairying, fruit and nut orchards, and vegetable farms all became more important over time. When Prohibition ended in 1933, the Gallo brothers came to Modesto, bringing the wine business to the area on an industrial scale. In the twenty-first century, almonds and walnuts are the most lucrative local crops, although fruit, vegetables, livestock, and other agricultural products remain important. Modesto is still the most important town in the region, and is the Stanislaus County seat.

3 Native American Consultation and Archival Research

In accordance with the U.S. Secretary of the Interior's Standards and the Guidelines for Archaeology and Historic Preservation (Title 48 CFR Section 44716 [amended 1983]), the goals of this archaeological inventory were to identify and completely document the location, qualities, and condition of any potential historic properties in the project's APE. Methods employed to achieve these goals follow.

3.1 Native American Consultation

Native American consultation was conducted pursuant to PRC Section 21080.3.1 by the City of Modesto. A request to the Native American Heritage Commission (NAHC) for a list of tribes with a traditional and cultural association with the proposed Program resulted in the identification of two tribes: the Northern Valley Yokuts and the Southern Sierra Miwok Nation. The City notified these tribes about the Program pursuant to PRC Section 21080.3.1 in a letter dated June 8, 2016. A letter was also sent to the Tule River Indian Tribe, as there had been consultation with that tribe in the past. The City did not receive requests for formal consultation under PRC Section 21080.3.1(b)(2) from any of those contacted. Follow-up phone calls were made to the Tule River Indian Tribe but did not receive a response. All correspondence with tribes related to PRC Section 21080.3.1 is provided in **Attachment 1**.

Table 1. Native American Consultation

Name of Contact	Tribe	Letter Date	Comments
Ms. Katherine Erolinda Perez, Chairperson	North Valley Yokuts Tribe	06/08/2016	N/A
Ms. Lois Martin, Chairperson	Southern Sierra Miwok Nation	06/08/2016	N/A
Mr. Neil Peyron, Chairperson	Tule River Indian Tribe	06/08/2016	City left message in fall 2016 but did not receive a response.

3.2 Archival Research

A records search for the River Trunk Realignment Project study area was conducted by the CCIC of the California Historical Resources Information System at California State University, Stanislaus, before initiating the field study. The purpose of the records search was to determine if the River Trunk Project study area had previously been surveyed for cultural resources, and to identify any previously recorded cultural resources in, or within one-quarter mile of, the study area. The CCIC archival research (Records Search File No. 10317N) included review of the California Inventory of Historic Resources, local historical inventories, historical literature, and historical maps including USGS topographic maps, General Land Office maps, and Rancho Plat Maps. The records search results are presented in **Attachment 2**.

The records search indicated that 11 previous studies had included portions of the River Trunk Project study area; one overview also included the study area. These studies are listed in **Table 2**; another 21 studies had been conducted within the one-quarter mile search area. All of the studies listed were conducted in the study area east of 7th Street.

Table 2: Previously Conducted Cultural Studies within the Proposed Project Study Area

CCIC Report No. (ST-)	Author	Date	Title
035	L.K. Napton	1981	Seven California Counties: An Archaeological Overview, Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne Counties, California, Parts 1 & 2.
1435	W. Hill	1992	Historic Architecture Survey Report: Track Consolidation and Realignment, Modesto, California
1836	Harmon, R. M., J. C. Bard, D. M. Garaventa, S. J. Rossa, and J. Yelding-Sloan	1992	Negative Archaeological Survey Report; Modesto Track Consolidation Corridor Lathrop, San Joaquin County and Modesto, Stanislaus County, California.
2759	Hatoff, B., B. Voss, S. Waechter, S. Wee, and V. Bente	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project.
2801	Marvin, J., and S. Davis-King	1996	Historic Property Survey Report (Positive) for the Seventh Street Bridge Project, City of Modesto, Stanislaus County, California.
3995	Nelson, W. J.	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.
4592	Gatlin, J. P., General Attorney	2000	Before the Surface Transportation Board: Docket No. AB-33 (Sub-No. 145X), Union Pacific Railroad Co.-- Abandonment Exemption--in Stanislaus Co., CA (Tidewater Subdivision Near Modesto, California), Combined Environmental and Historic Report.
4816	William Self Associates	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County,
6345	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California.
6352	EDAW, Inc.	2005	TRRP Gateway Precise Plan, Modesto, Ceres, Stanislaus County, California, Initial Study
7537	Kuzak, C.	2011	Historic Property Survey Report, 10-STA-99, P.M. 0.0/24.7, 2576 E-FIS1000020344, Stanislaus County, California.

CCIC Report No. (ST-)	Author	Date	Title
7775	Helton, C. and Cardenas, G.	2011	Cultural Resources Monitoring and Mitigation Plan, Almond 2 Power Plant, Turlock Irrigation District.

Data source: CCIC of the California Historical Resources Information System at California State University, Stanislaus.

The records search identified five previously recorded cultural resources within the River Trunk Project study area (**Table 3**). Two of these resources, the Tidewater-Southern Railroad wooden trestle bridge over the Tuolumne River (P-50-1811) and the Tidewater-Southern Railroad line, no longer exist. One of the resources, the Seventh Street Bridge (P-50-514), has been determined eligible for listing in the NRHP. The remaining resources have been determined not eligible for listing in the NRHP.

Table 3. Previously Recorded Cultural Resources within Proposed Project Study Area

Resource No. (P-50-X)	Resource Trinomial (CA-STA-X)	Recorded by	Date Recorded	Resource Information
0001	350H	various	1999–2007	Southern Pacific Railroad line; multiple sections recorded. Determined not eligible for the NRHP.
0083	425H	various	1992	Tidewater-Southern Railroad line; multiple sections recorded. Section in project area removed.
0514	—	J. Snyder W. Hill	1991 1992	Southern Pacific Railroad Tuolumne River Bridge; Bridge #113.75. Originally constructed 1897; significantly rebuilt 1944-45. Determined not eligible for the NRHP.
0617	—	Office of Historic Preservation L. Martin	1986 2000	Seventh Street Bridge; Lion Bridge; Bridge #38C-23; City of Modesto Designated Landmark Preservation Site #14. Constructed 1916. Determined eligible for listing in the NRHP.
1811	—	J. Snyder	1991	Tidewater-Southern Railroad Bridge; constructed 1914. Burnt down 2001.

Data source: CCIC of the California Historical Resources Information System at California State University, Stanislaus.

Another six previously recorded resources within one-quarter mile of the River Trunk Project alignment were identified. All of the resources are from the historic era, and include office and industrial buildings, features (e.g., a pump station and a water tower), and one scatter of historic artifacts.

The list of City of Modesto Designated Landmarks provided by the CCIC includes 59 resources, many of which are residences and buildings, but cemeteries and heritage trees, among other features, are also included. A vast majority are in the Modesto downtown core area. The Seventh Street Bridge is listed as Designated Landmark Preservation Site #14, and the Dryden Golf Course is listed as #52.

The Directory of Historic Places in the Historic Property Data File for Stanislaus County, compiled by the Office of Historic Preservation, lists a large number of resources in the Program area. While most of these are in Modesto, some are also situated in Ceres. These range from residences and buildings to water and transportation infrastructure, along with other features. A vast majority are assigned the California Historical Resources Code of 52D (identified as a contributor to a district that is eligible for local listing or designation) or 6Y (determined ineligible for listing on the NRHP).

Historic USGS topographic maps and historic aerials were examined in addition to the records search materials. USGS maps from 1915/1916 indicate that the area around the railroad yards between 7th and 9th streets were already well developed by that era, and that much of the town west of present-day State Highway 99 and south of Tuolumne Avenue to South Avenue was laid out, but not developed. South of South Avenue to the Tuolumne River, acreage within the River Trunk Project study area contained just a scattering of homes. By the 1940s (USGS 1939, 1941), much of the area within the River Trunk Realignment Project vicinity was well developed. The most significant modification was the construction of Highway 99 as a freeway through town by the early 1970s. In the area of the proposed Shackelford Pump Station, USGS topographic maps indicate that a number of buildings were in the vicinity (but not at the location) as early as 1939. These had disappeared by 1953 and were replaced by two building south of the proposed pump site. By 1969 (USGS 1969) the full contingent of buildings visible in the earliest aerial photograph (1967) were present, along with several railroad spurs to individual buildings. This is corroborated by aerial photographs (NetrOnline 2017) that indicate a variety of businesses (trucking, perhaps a feed lot) once occupied the site from at least 1967 until around 2002. After that time, the businesses are slowly dismantled and the immediate project area for the proposed Shackelford Pump Station is cleared of buildings by 2012.

4 Inventory Methods and Results

4.1 Pedestrian Survey

A field review of the River Trunk Realignment Project footprint was conducted by qualified archaeologists from Horizon on June 15 and August 17, 2017. The field investigation consisted of two approaches. A pedestrian survey was conducted in areas where open trenching or bore pit excavation is proposed and the ground surface is undeveloped or where native ground surface is visible. A cursory inspection was conducted in areas where the ground surface is developed or paved and no native ground surface is visible. Figure 3 shows both the areas subject to pedestrian survey and those areas subject to cursory survey. The pedestrian component consisted of walking the proposed alignment or areas of proposed excavation using 10-meter transects. Any exposures of subsurface were more closely inspected and trowel exposures were also applied to the surface in areas that were heavily vegetated or grassy. The cursory inspection was conducted by car and any areas that were undeveloped were more closely inspected.

Approximately 6,850 linear feet (1.3 miles) and 1.5 acres at the Shakelford Pump Station were subject to intensive pedestrian survey. These areas included the east end of the pipeline from the Gallo property west to the River Trunk Pump Station and to Highway 99; from Neece Drive, two segments across the Dryden Golf Course to the Tuolumne River; and the proposed footprint of the Shackelford Pump Station and access road. The proposed location of the River Trunk Pump Station is currently a fully developed oil and gas storage facility and, therefore, was not subject to pedestrian survey. Other areas subject to cursory survey were paved streets in the City of Modesto, including Tuolumne Boulevard, Colorado Avenue, Neece Drive, and Pelton Avenue. The Sutter Plant is also fully developed and was not surveyed.

4.2 Survey Results

Dry Creek Crossing and Pipeline to River Trunk Pump Station

This section of the pipeline was surveyed using pedestrian techniques. The exception was the proposed bore under Dry Creek, which was not accessible and no ground disturbance is proposed for this section of the pipeline. The bore pit, which is located on the Gallo Winery property, was surveyed; however, the entire area is under landscaped grasses and has been heavily graded. The survey of the pipeline west of Dry Creek was resumed in the open flood plain. Despite the heavy grass cover, the majority of the surface was highly visible in this section. The section from the River Trunk Pump station to B Street was also heavily vegetated and has been previously graded. The proposed pipeline would extend under a Union Pacific Railroad bridge and vehicle bridge for South 7th Street. In addition, the section closest to B Street has had some recent grading and construction of an access road that proceeds west toward the Tuolumne River and Route 99. The area for the proposed River Trunk Pump Station is currently an oil and gas storage facility that was developed and, therefore, not subject to pedestrian survey. No evidence of cultural resources was identified.

Shackelford Pump Station and Force Main

A new gravity pipeline is proposed near the northwestern side of the Dryden Golf Course that would extend from Neece Drive to the Dryden Golf Course parking lot and cross the golf course toward the Tuolumne River. This section was subject to pedestrian survey. The surface was mostly covered by

grasses for the golf course or were otherwise developed. However, the riverbank of the Tuolumne River was open and was surveyed more closely. On the eastern side of the river is an area proposed for the Shackelford Pump Station and an access road from Crows Landing Road to the pump. This area was also subject to pedestrian survey. The surface was previously graded and consisted of loose gravel. The area closest to the river was covered in tall grasses (e.g., Arundo). No evidence of cultural resources was identified, although archival research indicated that industrial buildings were once at that location.

Gravity Pipelines along Tuolumne Boulevard, Colorado Avenue, Neece Drive and Pelton Avenue City

The remaining proposed gravity pipelines are planned in city streets of Modesto listed in the header above. These alignments were subjected to cursory inspection because they are under city streets and no visible ground surface is available to survey. The exception was the location of the alignment from the south end of Colorado Avenue, across Dryden Golf Course to the Sutter Plant, which was subject to pedestrian survey. No evidence of cultural resources was identified.

No archaeological resources were identified within the proposed project study area as the result of the archaeological field survey.

5 Summary and Recommendations

The City of Modesto is proposing a revised Waste Water Master Plan that contains a number of project-level and program-level components. This document addressed the project-level aspects of this Program called the River Trunk Realignment Project as it pertains to the potential to impact or adversely affect archaeological resources. Archival research and a pedestrian survey did not identify any archaeological resources within the APE. One previously recorded historic resource, the Seventh Street Bridge (P-50-514), which has been determined eligible for listing in the NRHP, will not be impacted; the proposed alignment will be bored under this bridge.

Given the rate of landscape change in the San Joaquin Valley and the proximity of the proposed alignments and proposed facilities to areas of urban, railroad, and commercial activities, the existence of substantial and intact surface manifestations of cultural activity is not expected. Although no archaeological sites were identified by the archaeological inventory, archaeological sites may be buried with no surface manifestation. Furthermore, the soils that underlie the Project location have a moderate to very high sensitivity for the presence of buried archaeological remains. If prehistoric or historic-era materials are encountered, all work in the vicinity should halt until a qualified archaeologist can evaluate the discovery and make recommendations pursuant to 36 CFR Section 800.13(b). Prehistoric materials will most likely include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), tool-making debris, or milling equipment, such as mortars and pestles. Historic materials might include remains of agricultural implements, stone or concrete footings and walls, and deposits of metal, glass, and/or ceramic refuse.

The possibility of encountering human remains cannot be discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human remains are encountered, work must halt in the vicinity of the remains and, as required by law, the Stanislaus County coroner should be notified immediately. An archaeologist should also be contacted to evaluate the find. If human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of that determination. Pursuant to California PRC Section 5097.98, the NAHC, in turn, will immediately contact an individual who is most likely descended from the remains (i.e., the Most Likely Descendant). The Most Likely Descendant has 48 hours to inspect the site and recommend treatment of the remains. The landowner is obligated to work with the Most Likely Descendant in good faith to find a respectful resolution to the situation and entertain all reasonable options regarding the Most Likely Descendant's preferences for treatment.

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Attachment 1
Native American Correspondence

MODESTO
CALIFORNIA
Utilities Department

June 8, 2016

Lois Martin, Chairperson
Southern Sierra Miwuk Nation
P.O. Box 186
Mariposa, CA 95338

Subject: City of Modesto Utilities Department Wastewater Master Plan Update Environmental Impact Report

Dear Chairperson Martin,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan (WWMP) Update (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its wastewater service system through development of a wastewater master plan, which reviews existing and planned sanitary sewer infrastructure relative to the projected urban growth of the City. The City has made a number of improvements that were identified in the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

The Program would consist of numerous Capital Improvement Projects (CIPs) collectively intended for system-wide implementation needed to ensure adequate wastewater infrastructure and services are available to meet wastewater demand requirements under both existing and future developed conditions. The Program all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, and unincorporated "islands" in Stanislaus County that are served by agreement with the City (Figure 1). The Sutter Avenue Primary Treatment Plant (Primary Plant or Sutter Plant) is in the southwestern portion of Modesto adjacent to the north bank of the Tuolumne River. The Jennings Road Secondary Treatment Plant (Secondary Plant or Jennings Plant) is approximately 6.5 miles southwest of the Modesto urban area and located on City-owned land on the eastern side of the San Joaquin River. These areas are shown in Figure 2.

The Program involves several improvements to the City's collection system, such as replacement or construction of new trunk sewers or pump stations, construction of new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include, but are not limited to, upgrading the influent pump station to increase its hydraulic capacity to convey peak wet weather flows, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes outfall pipeline improvements, such as replacement of

existing pipe crossings under the Tuolumne River and construction of a new third outfall pipeline from the Sutter Plant to the Jennings Plant. At the Jennings Plant, the Program includes upgrades to the secondary and Cannery Segregation treatment facilities, and construction of new primary treatment and solids handling facilities.

Most of the proposed CIPs would be implemented within the City's sewer service area, the Sutter Plant, and the Jennings Plant. The Program also proposes a third outfall pipeline connecting the Sutter and Jennings Plants (Figure 3). The exact locations of some of the proposed new facilities (e.g., collection system improvements and outfall pipeline) have yet to be finalized; where tentative sites have been identified, these locations will be identified in the Draft EIR.

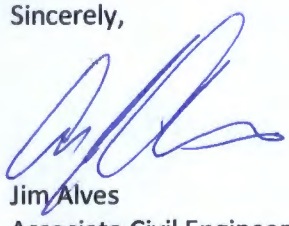
Pursuant to Public Resources Code Section 21080.3.1 *et seq.*, the City of Modesto Utilities Department is notifying you of our intent to consider the Proposed Project. To initiate formal consultation with the City regarding any potential impacts of this Proposed Project on tribal cultural resources, Public Resources Code Section 21080.3.1(e) requires that you contact us within 30 days from your receipt of this letter. If you wish to request the consultation, or if you have any questions, please contact:

Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95353
Phone: (209) 571-5557
Email: jalves@modestogov.com

If you do not contact us within 30 days following receipt of this letter, the City of Modesto Utilities Department will proceed with processing the above referenced application with the assumption that the project will not have a potential effect on tribal cultural resources. If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The City will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request.

More detailed information about this project is available, at your request. Thank you for giving this matter your prompt attention.

Sincerely,



Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
2647248.1

Attachments

2667716.1

MODESTO
CALIFORNIA
Utilities Department

June 8, 2016

Neil Peyron, Chairperson
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

Subject: City of Modesto Utilities Department Wastewater Master Plan Update Environmental Impact Report

Dear Chairperson Peyron,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan (WWMP) Update (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its wastewater service system through development of a wastewater master plan, which reviews existing and planned sanitary sewer infrastructure relative to the projected urban growth of the City. The City has made a number of improvements that were identified in the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

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Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95353
Phone: (209) 571-5557
Email: jalves@modestogov.com

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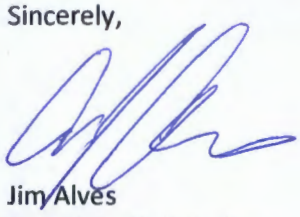

Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
2647248.1

Attachments

2667716.1

MODESTO
CALIFORNIA
Utilities Department

June 8, 2016

Katherine Erolinda Perez, MLD
North Valley Yokuts Tribe
990 North Fine Road
Linden, CA 95236

Subject: City of Modesto Utilities Department Wastewater Master Plan Update Environmental Impact Report

Dear Ms. Perez,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan (WWMP) Update (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its wastewater service system through development of a wastewater master plan, which reviews existing and planned sanitary sewer infrastructure relative to the projected urban growth of the City. The City has made a number of improvements that were identified in the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

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Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95353
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Email: jalves@modestogov.com

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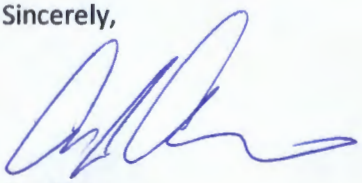
More detailed information about this project is available, at your request. Thank you for giving this matter your prompt attention.

Sincerely,



Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
2647248.1

Attachments

2667716.1

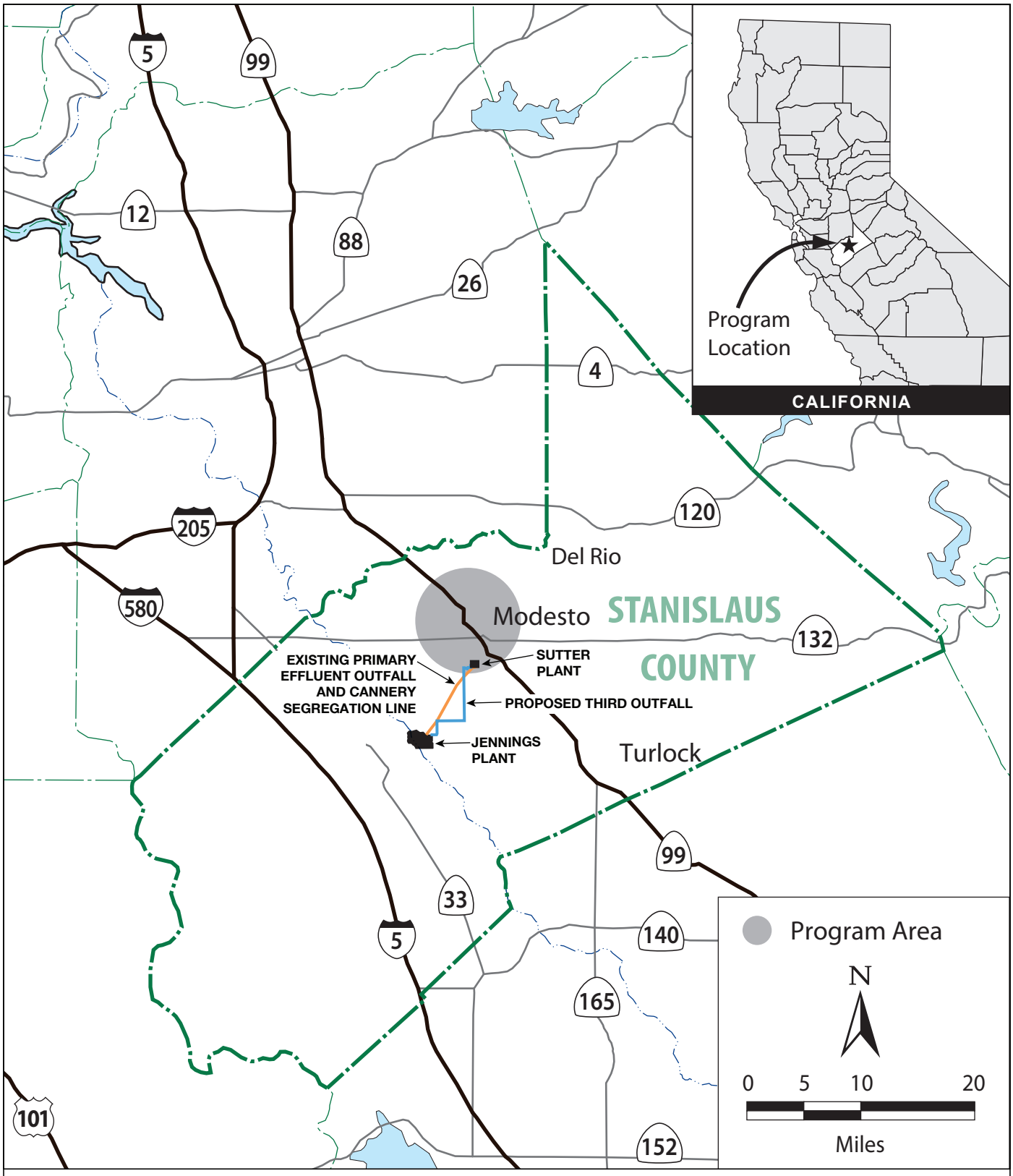


Figure 1
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

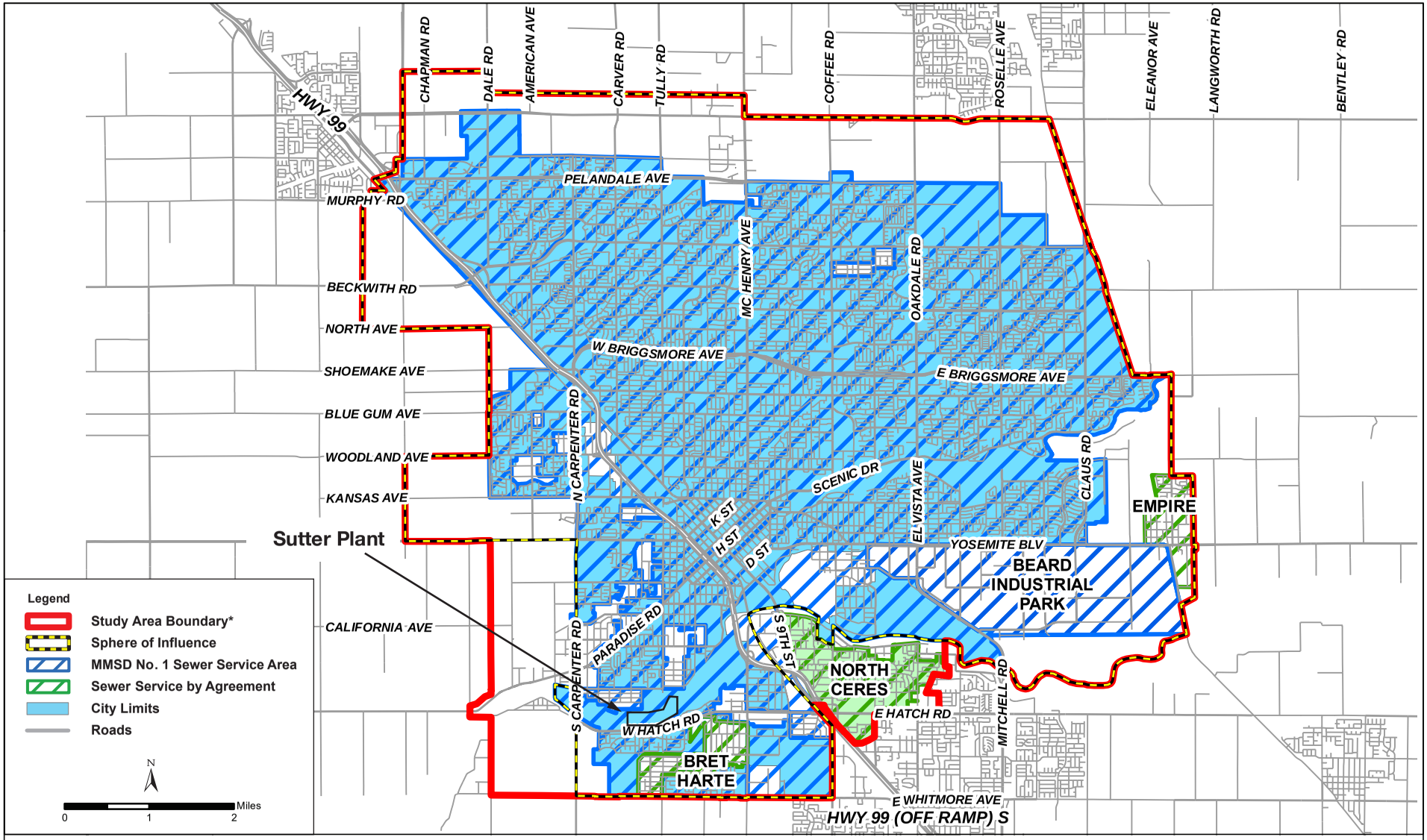


Figure 2
Wastewater Master Plan Sewer Service Study Area

Source: City of Modesto, 2016

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

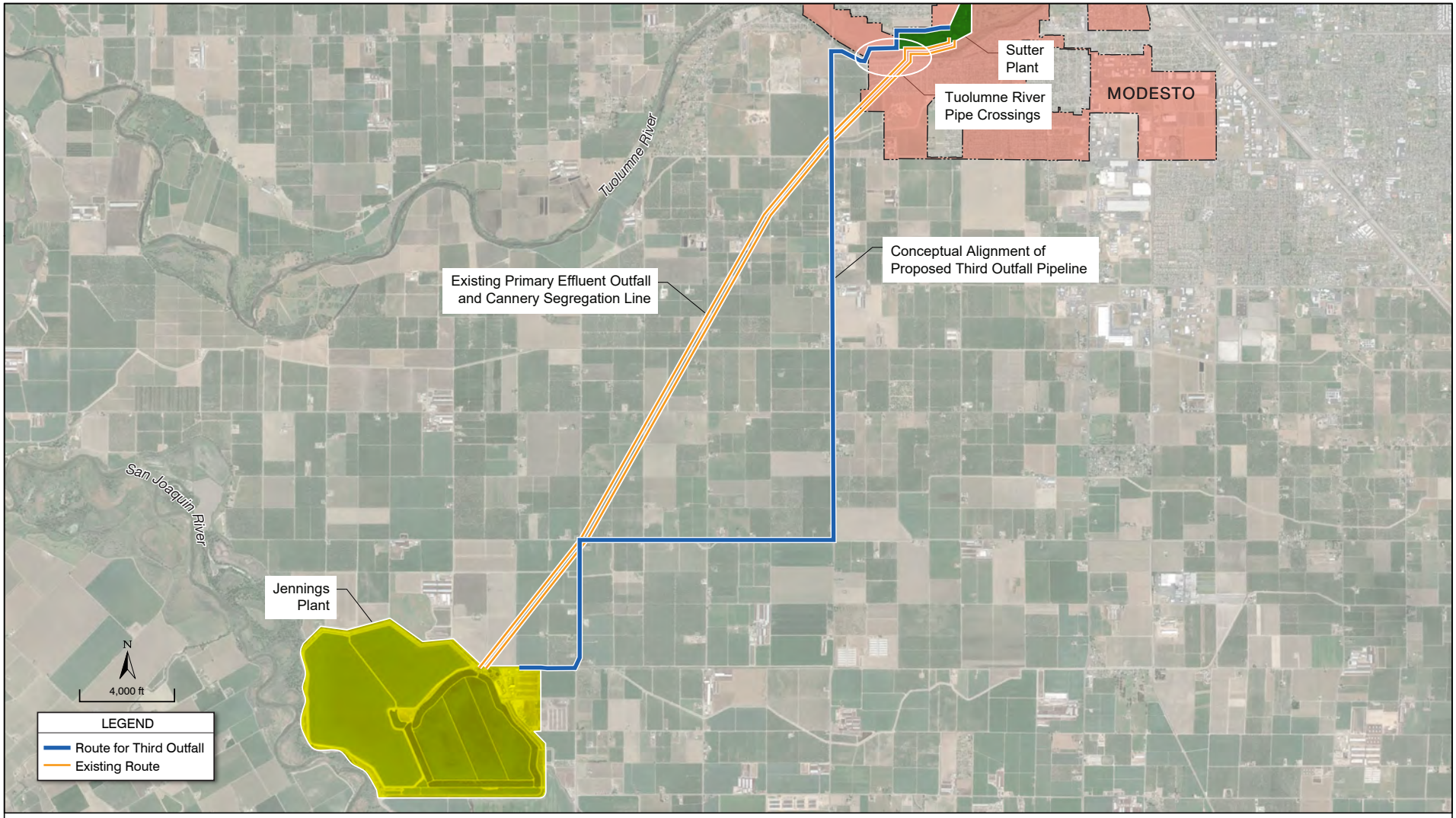


Figure 3
Location of Wastewater Treatment Plants

Source: Carollo, 2016

Prepared by:

Horizon
WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

Attachment 2
CHRIS Northwest Information Center Results

CENTRAL CALIFORNIA INFORMATION CENTER
California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 5/30/2017

Records Search File No.: 10317N
Access Agreement: #412
Project: Modesto Waste Water Management Program

Janis Offermann
Horizon Water and Environment
555 Capitol Mall, Suite 800
Sacramento, CA 95814

Janis@horizon2o.com

Dear Ms. Offermann:

The Central California Information Center received your record search request for the project area referenced above, located on the Brush Lake, Ceres, Riverbank and Salida USGS 7.5' quadrangles in Stanislaus County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	5: unrecorded portions of P-50-000001 (Southern Pacific RR), P-50-000083, 514, 617, and 1811 **Note:** See the attached Directory of Properties in the Historic Property Data File for Ceres & Modesto; these resources are not mapped, there may be additional historic properties within the project area/radius.
Resources within 1/4 mi radius:	6: P-50-000084, 438, 439, 524, 1999, 2018 (see Note as referenced above).
Reports within project area:	12: ST-0000035 (overview); ST-01435, 1836, 2759, 2801, 3995, 4592, 4816, 6345, 6352, 7537, 7775
Reports within 1/4 mi radius:	21: ST-02222, 2848, 2930, 3747, 3878, 3882, 4296, 4760, 4849, 5007, 5358, 5574, 6775, 6777, 6915, 7076, 7388, 7589, 7828, 7946, 8208

Resource Database Printout (list): ☐ enclosed ☒ not requested ☐ nothing listed

Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records: ☐ enclosed ☒ not requested ☐ nothing listed

Report Database Printout (list): ☐ enclosed ☒ not requested ☐ nothing listed

Report Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Report Digital Database Records: ☐ enclosed ☒ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

City of Ceres and Modesto; see also listing for P-50-83, 524, 617, and 1811

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☒ enclosed ☐ not requested ☐ nothing listed

Historic Spots in California (Kyle ed. 1990:491-492, Modesto

Historical Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Official Map of Stanislaus County (1906)
Modesto West 1:62500-scal (1941)
Brush Lake 7.5' (1953)
Ceres 7.5' (969)
Riverbank 7.5' (`1969)
Salida 7.5' (1953)

Local Inventories: ☒ enclosed ☐ not requested ☐ nothing listed

City of Modesto Designated Landmark Preservation Sites (2011)

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3S R9E Sheet 44-186 (1853-1854)
T4S R9E Sheet 44-244 (8153-1854)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Resources known to have value to local cultural groups: None have been formally reported to the CCIC.

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

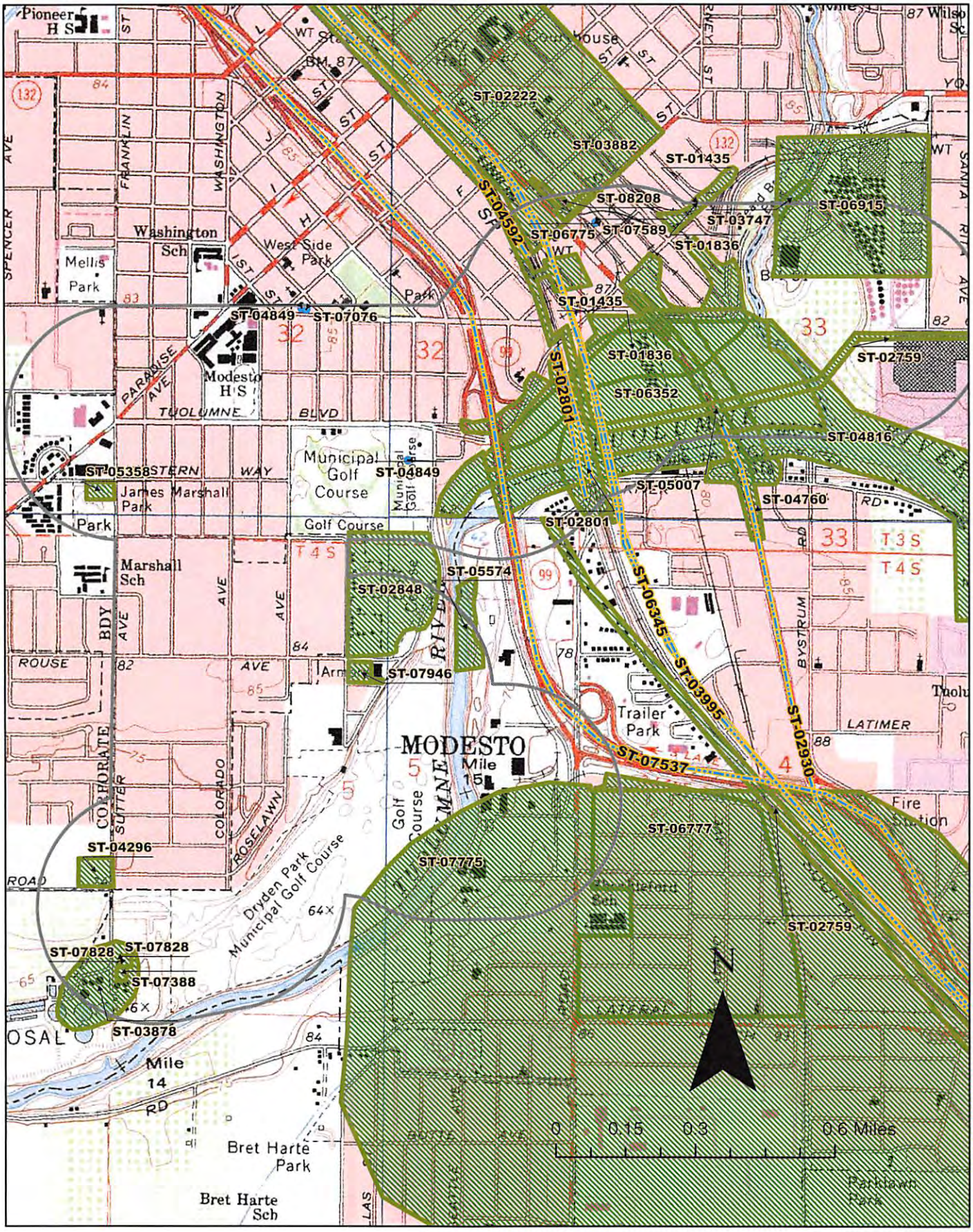
Note: Billing will be transmitted separately via email by our Financial Services office *($926.55), payable within 60 days of receipt of the invoice.

Sincerely,

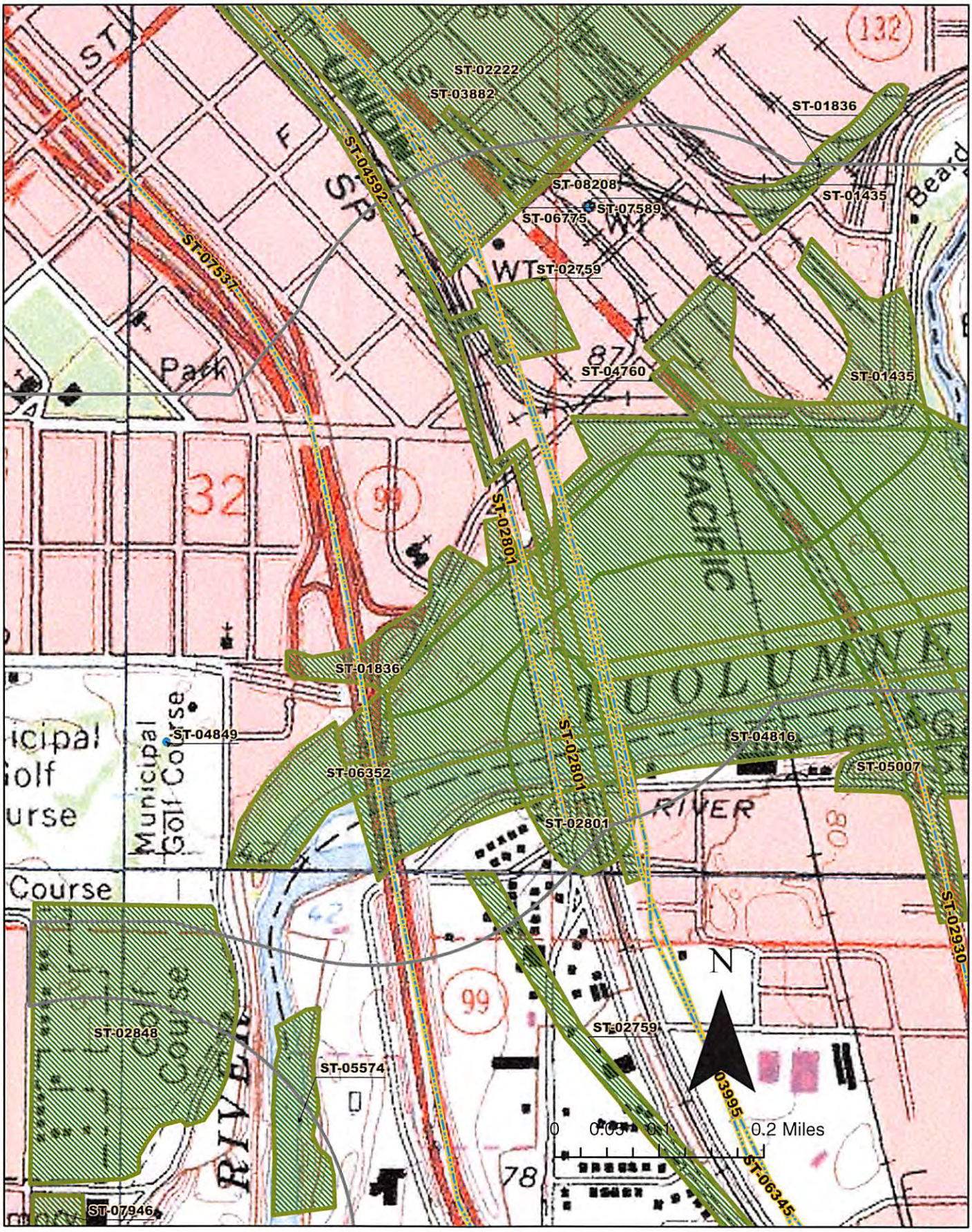
E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

CCaIC 10317N Overview Map of Reports



CCaIC 10317N Detail Map of Reports



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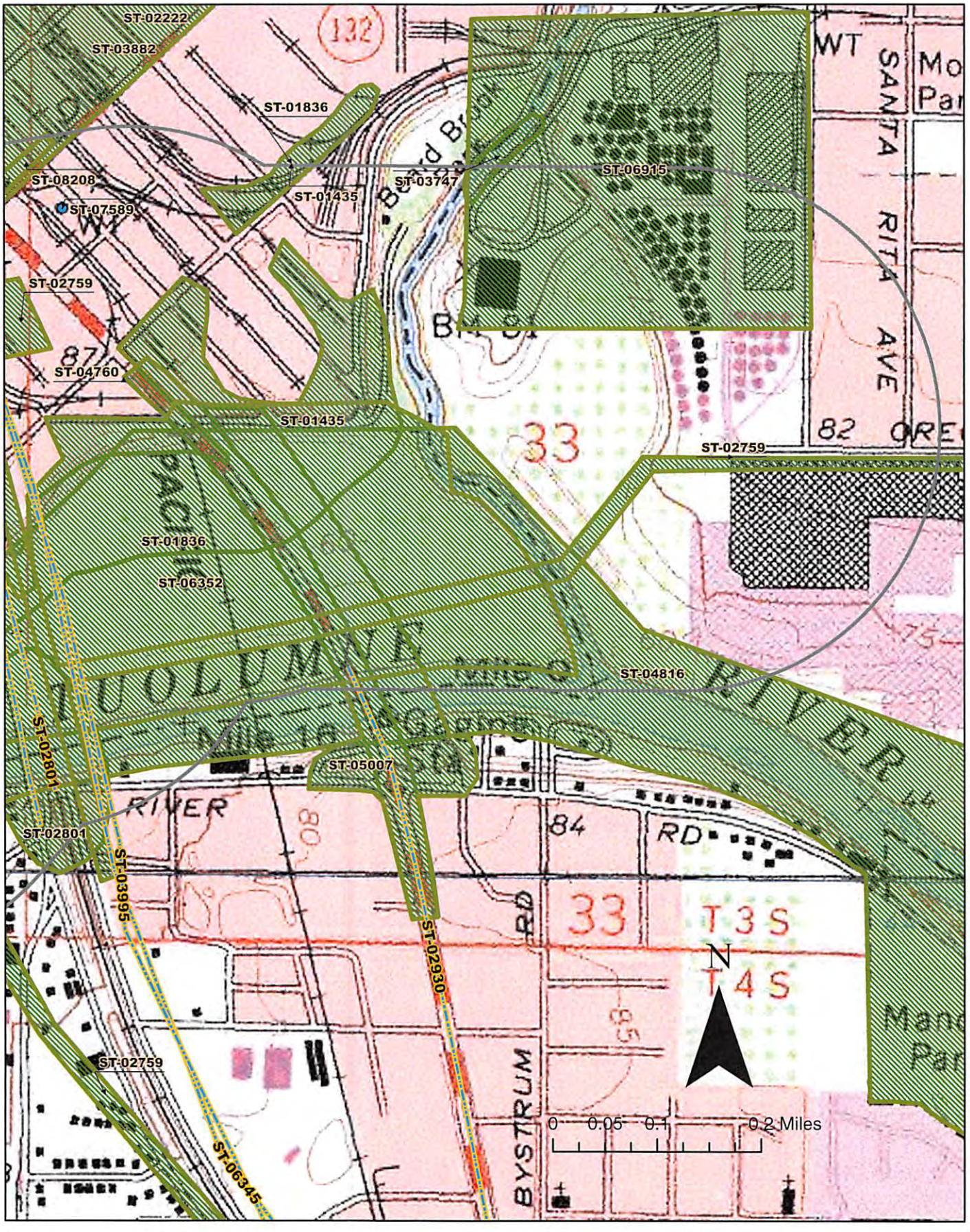

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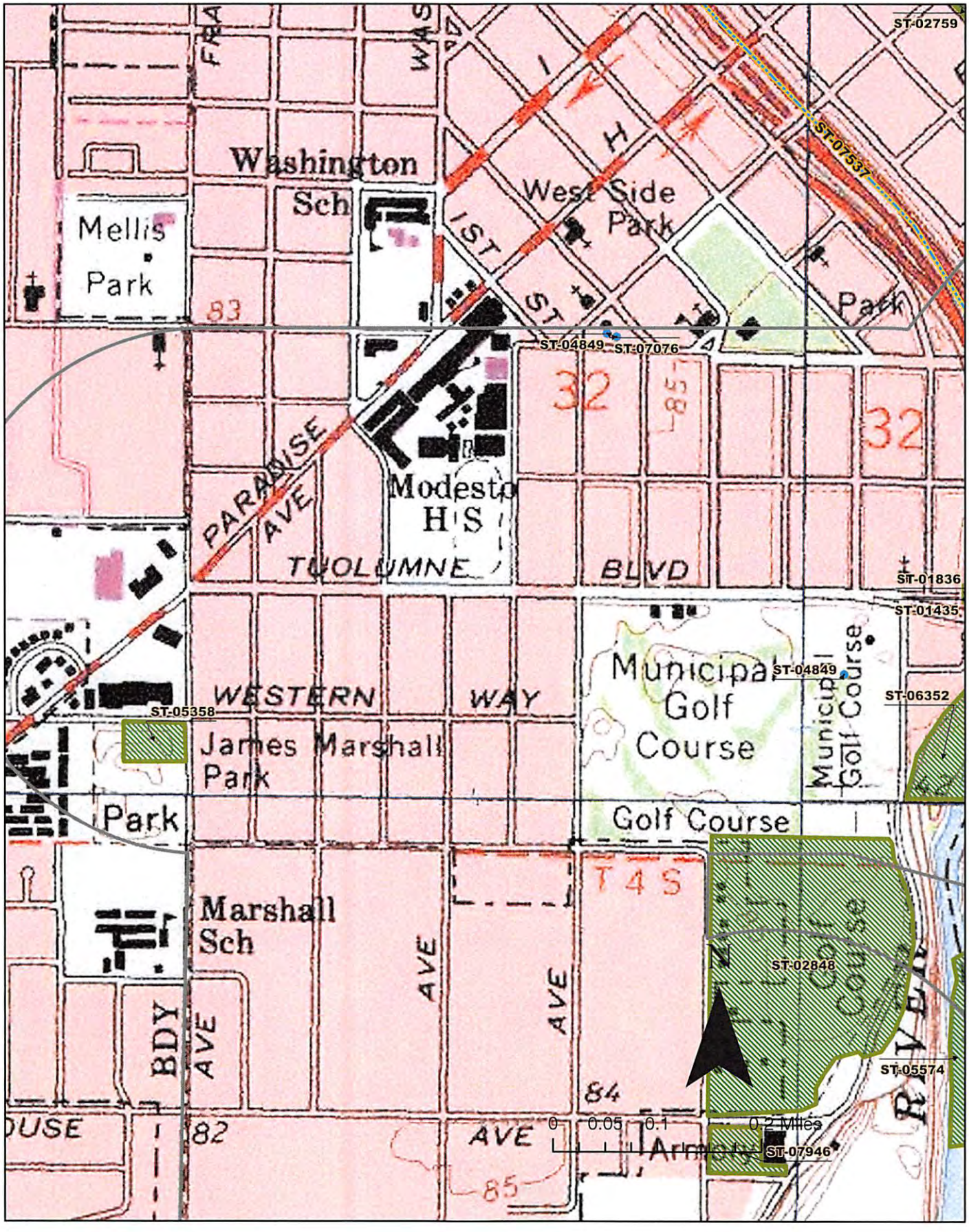

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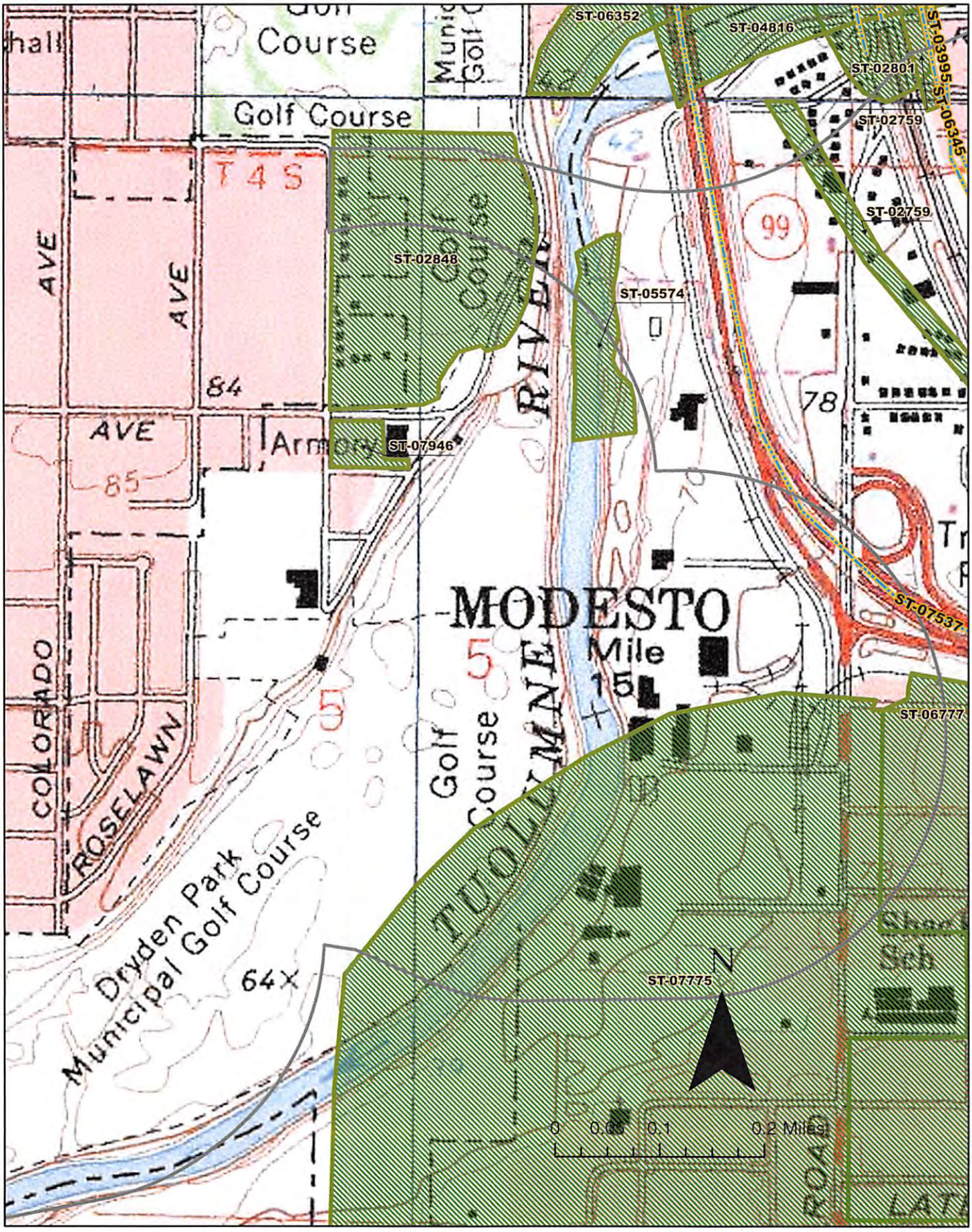

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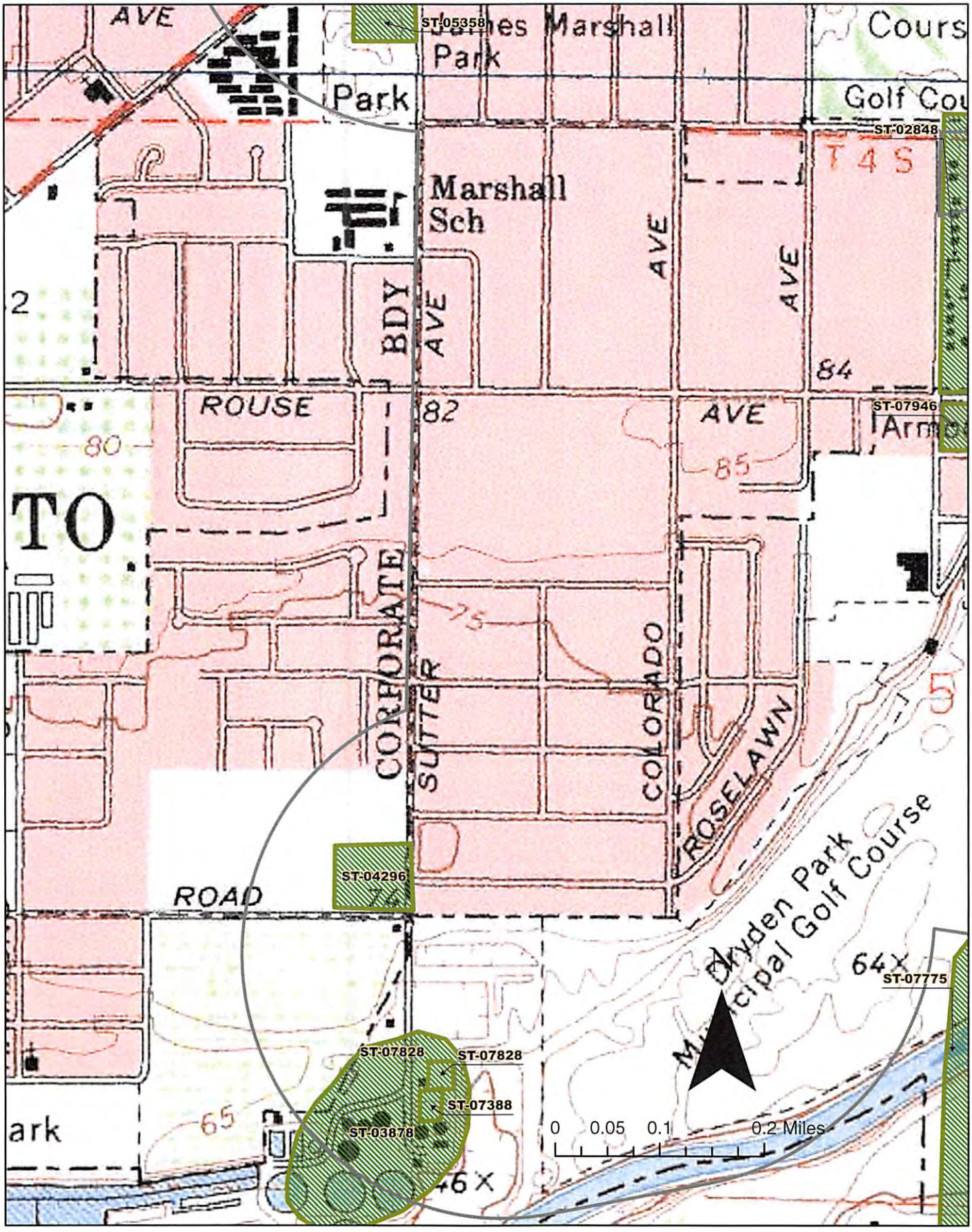
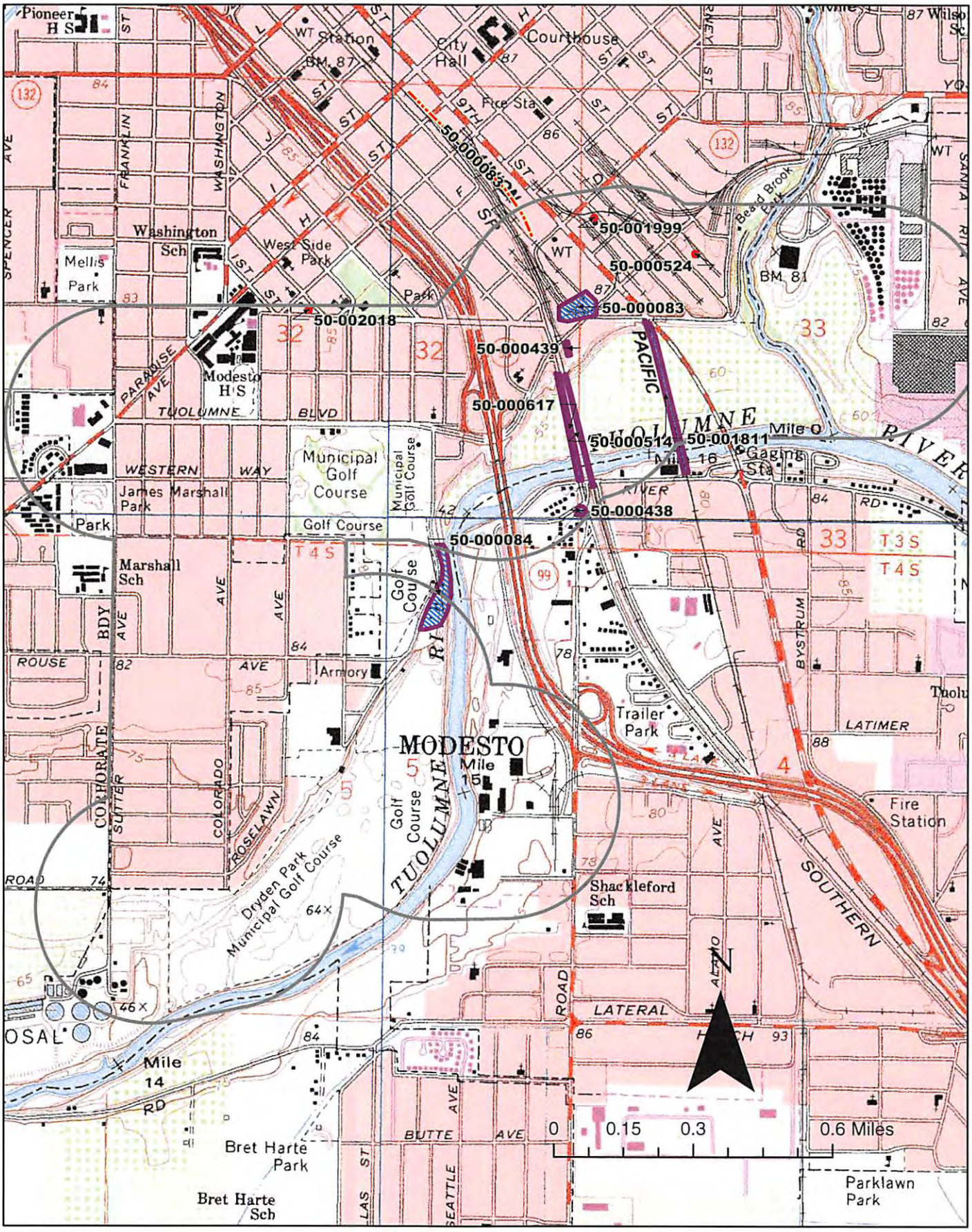


CCalC 10317N Overview Map of Resources



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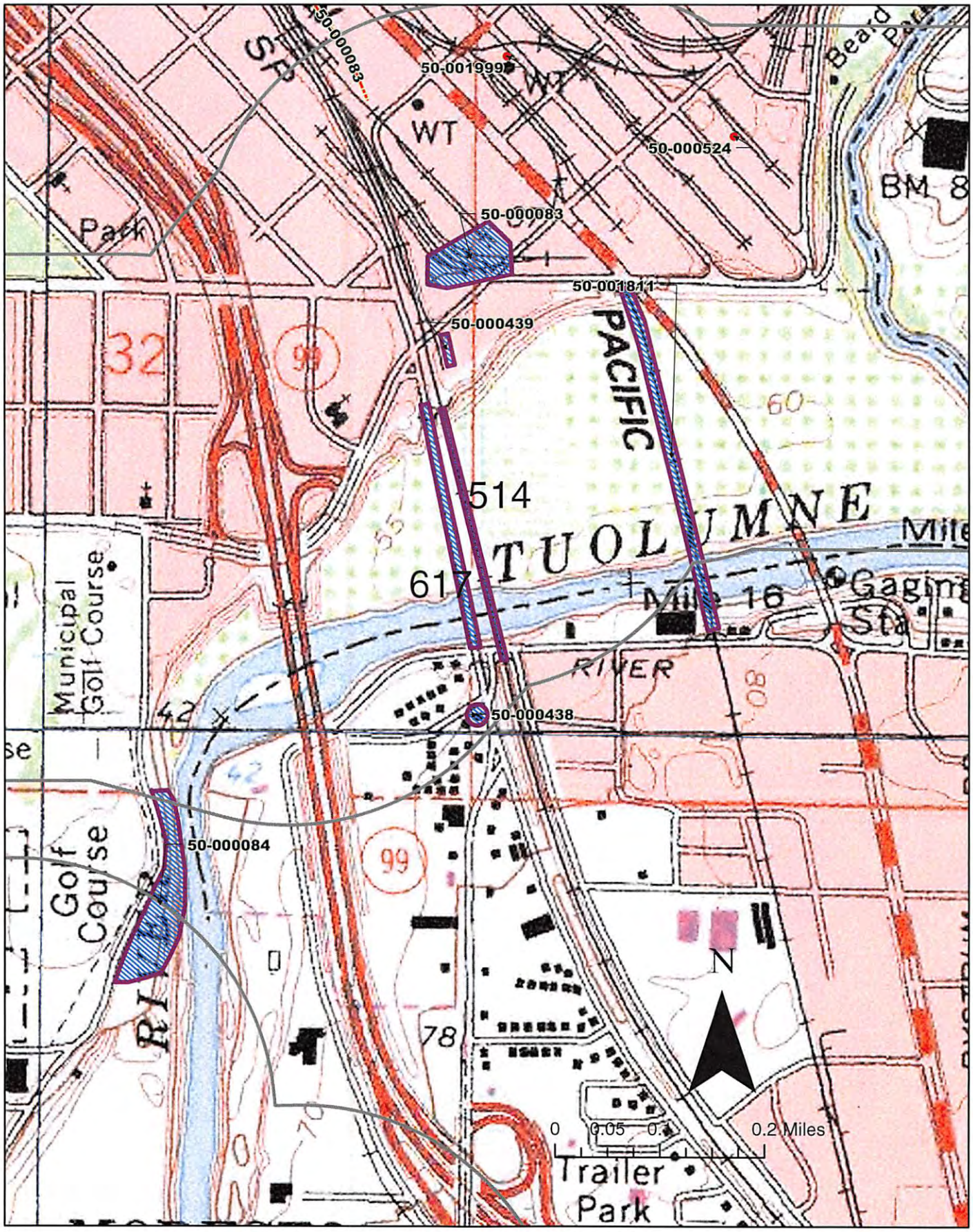

Report Detail: ST-00035

Identifiers

Report No.: ST-00035

Other IDs:	*Type*	*Name*
	NADB-R	1366000

Cross-refs: Extends into another county as AP-00035
Extends into another county as CA-00035
Extends into another county as MP-00035
Extends into another county as ME-00035
Extends into another county as SJ-00035
Extends into another county as TO-00035

Citation information

Author(s): Napton, L. K.
Year: 1981 (May)
Title: Seven California Counties: An Archaeological Overview, Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne Counties, California, Parts 1 & 2.
Affliliation: Institute for Archaeological Research, CSC Stanislaus (prepared for California State Office of Historic Preservation)
No. pages: 451
No. maps:
Attributes: Archaeological, Other research
Inventory size: NA
Disclosure: Not for publication
Collections: No

General notes

7-county overview

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s):
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/26/2016	EGreathouse

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/26/2016	EGreathou	eg

Record status:

Report Detail: ST-01435

Identifiers

Report No.: ST-01435

Other IDs:	*Type*	*Name*
	NADB-R	1361696

Cross-refs:

Citation information

Author(s): Hill, W.
Year: 1992 (Mar)
Title: Historic Architecture Survey Report; Track Consolidation and Realignment, Modesto, California
Affliliation: Ward Hill
No. pages: 29
No. maps:
Attributes: Architectural/Historical, Field study, Other research
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

No records provided

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-000513		9th & Needham Street Commerc
P-50-000514		Tuolumne River Bridge (S.P. RR
P-50-000515		415 Kansas; Kansas/Beech Stre
P-50-000516		Chemical-Steam Cleaner, 315 K
P-50-000517		Color Masters Auto Painting, 30
P-50-000518		Hiebert & Vander Plaats Petrole
P-50-000519		Fred L. Hill Plumbing, 1137 Nee
P-50-000520		Old Mill Café, 1602 9th Street (d
P-50-000521		Quik Serve Market, 1122 Needh
P-50-000522		Modesto Veterinary Hospital, 15
P-50-000523		Rainbo Bakery, 1517 10th Street
P-50-000524		Booth's Packing Company, 110-

No. resources: 12
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Ceres, Lathrop, Riverbank, Salida
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/26/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/26/2017	Anthro	JS

Record status:

Report Detail: ST-01836

Identifiers

Report No.: ST-01836

Other IDs:	*Type*	*Name*
	NADB-R	1366055

Cross-refs:

Citation information

Author(s): Harmon, R. M., J. C. Bard, D. M. Garaventa, S. J. Rossa, and J. Yelding-Sloan

Year: 1992 (Jul)

Title: Negative Archaeological Survey Report; Modesto Track Consolidation Corridor Lathrop, San Joaquin County and Modesto, Stanislaus County, California.

Affliliation: DeLeuw, Cather & Company

No. pages: 26

No. maps:

Attributes: Archaeological, Field study

Inventory size: 236 Acres

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Ceres, Lathrop, Riverbank, Salida

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/26/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/26/2017	Anthro	JS

Record status:

Report Detail: ST-02222

Identifiers

Report No.: ST-02222

Other IDs:

Type	*Name*
NADB-R	1362039

Cross-refs:

Citation information

Author(s): Boer, D. and S. Melgard

Year: 1984

Title: Final Report: City of Modesto Historic Resources Inventory.

Affliliation: City of Modesto

No. pages:

No. maps:

Attributes: Architectural/Historical, Field study, Other research

Inventory size:

Disclosure: Unrestricted

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-000591		Old Telephone Building; 1012 11
P-50-000592		Davis Home; 909 14th St.; Hatto
P-50-000593		Shalom Counseling Center (190
P-50-000594		Martin Ruddy Offices; 1015 14th
P-50-000595		Family Service Agency; The Ho
P-50-000596		The Black House (1917)
P-50-000597		Dino's Hair Stylists; Turner Hom
P-50-000598		Flesoras Home; Falk Residence
P-50-000599		Morgan Home; Lafayette Maddu
P-50-000602		James Apartment; The Boone H
P-50-000603		Office of Dr. Eastin; Moore Hom
P-50-000605		First United Methodist Church; 8
P-50-000606		Baird's Photographic Studio; Bro
P-50-000607		Law Offices of La Force and Du
P-50-000608		Stevens Home (1914)
P-50-000609		823 17th Street, Modesto (1917)
P-50-000610		Husband House; Cressey Home;
P-50-000614		Clinton Chapel African Methodist
P-50-000625		117 Achor Street, Modesto (192
P-50-000626		119 Achor Street, Modesto (192
P-50-000627		203 Achor Street, Modesto (192
P-50-000628		522 Adam Ave. Modesto (1922)
P-50-000629		529 Adam Ave., Modesto (1924)
P-50-000630		815 Alice St. (1940)
P-50-000631		816 Alice St. (1914)
P-50-000632		823 Alice St. (1918)
P-50-000633		915 Alice St. (1941)
P-50-000634		North Addition Wisecarver Tract
P-50-000635		616-618 Alice Street (1920)
P-50-000636		717 Alice Street (1920)
P-50-000638		112 Almond Ave., Modesto (192
P-50-000639		114 Almond Ave., Modesto (192
P-50-000640		117 Almonnd Ave., Modesto (19
P-50-000641		124 Almond Ave., Modesto (191
P-50-000642		125 Almond Ave., Modesto (191
P-50-000643		131 Almond Ave. (1924)

P-50-000644	139 Almond Ave. (1924)
P-50-000645	140 Almond Ave. (1914)
P-50-000655	1104 Arc Ave. (1923)
P-50-000656	1112 Arc Ave. (1940)
P-50-000657	1116 Arc Ave. (1940)
P-50-000658	1120 Arc Ave. (1940)
P-50-000659	1130 Arc Ave. (1940)
P-50-000705	133 Downy AVE
P-50-000706	137 Downy AVE
P-50-000709	129 E Morris AVE
P-50-000710	136 Morris AVE
P-50-000711	140 E Morris AVE
P-50-000722	115 Elmwood AVE
P-50-000731	201 Elmwood AVE
P-50-000735	207 Elmwood
P-50-000737	Dr. Donald Robertson Home; 21
P-50-000740	The Robertson Home, 215 Elmw
P-50-000743	218 Elmwood Avenue
P-50-000748	Ferlin House
P-50-000755	402 Elmwood AVE
P-50-000756	405 Elmwood AVE
P-50-000757	406 Elmwood AVE
P-50-000760	415 Elmwood AVE
P-50-000771	Bessie Eubanks Home
P-50-000783	115 Grant st
P-50-000784	117 Grant ST
P-50-000785	119 Grant ST
P-50-000786	131 Grant ST
P-50-000787	132 Grant ST
P-50-000788	138 Grant ST
P-50-000826	McHenry Museum; old McHenry
P-50-000827	121 Jones St.
P-50-000828	Whitehurst-Shannon Funeral Ho
P-50-000829	Law Offices of Louis and Martine
P-50-000831	The Martin Building; Masonic Te
P-50-000832	Lacondeguy's Restaurant
P-50-000833	
P-50-000834	
P-50-000835	
P-50-000836	
P-50-000837	129 Jones Street
P-50-000838	Herron House
P-50-000839	134 JONES STREET
P-50-000840	138 JONES STREET
P-50-000841	The Schmitz Home
P-50-000849	Priester Home
P-50-000850	117 Lee ST
P-50-000851	
P-50-000852	
P-50-000853	126 LEE STREET
P-50-000854	
P-50-000855	
P-50-000856	
P-50-000857	130 Lee ST
P-50-000858	144 Lee ST
P-50-000892	The Grange Company
P-50-000897	Hawke Castle; 115 Magnolia
P-50-000922	409 Magnolia Ave.
P-50-000925	417 Magnolia Ave.

Report Detail: ST-02222

P-50-000935	The Image Maker
P-50-000936	Culton's Refrigeration
P-50-000937	Café Decadence
P-50-000945	114 Modesto AVE
P-50-000958	611 Needham AVE
P-50-001026	131 Park Ave
P-50-001034	317 Park Ave
P-50-001062	303 Poplar Ave
P-50-001125	Norman S. West Home; 215 Sto
P-50-001126	The Stanley Home; 225 Stoddar
P-50-001145	Smith Home
P-50-001147	Surryhne House
P-50-001148	Dr. Cooper's House; J.M. Walth
P-50-001149	Tillson House; 124 Sycamore
P-50-001199	204 Virginia AVE
P-50-001204	224 Virginia AVE
P-50-001214	117 W Morris AVE

No. resources: 112

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Riverbank, Salida

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	11/12/201	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-02759

Identifiers

Report No.: ST-02759

Other IDs:

Type	*Name*
NADB-R	1366256

Cross-refs: Extends into another county as ME-02759
Extends into another county as SJ-02759

Citation information

Author(s): Hatoff, B., B. Voss, S. Waechter, S. Wee, and V. Bente
Year: 1995 (Jul)
Title: Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project.
Affliliation: Woodward-Clyde Consultants; for Mojave Pipeline Company
No. pages: 49
No. maps:
Attributes: Archaeological, Field study, Literature search, Other research
Inventory size: 5558 Acres
Disclosure: Not for publication
Collections: No

General notes

Report excerpts only

Associated resources

Primary No.	*Trinomial*	*Name*
P-24-000085	CA-MER-000448H	Koff Lateral
P-24-000086	CA-MER-000454H	Hartley Lateral
P-24-000087		LG-17
P-24-000088		Main Ashe Lateral/Inverted Siph
P-24-000089		Unnamed Canal LG-19
P-24-000090		Canal Creek
P-24-000091		Buhach Lateral
P-24-000092		Atwater Canal
P-24-000093		Arena Canal
P-24-000094		Highline Canal (TID)
P-24-000095		Lateral 6 TID
P-24-000096		Farmdale Lateral
P-24-000097		Southern Pacific Railroad line
P-24-000110	CA-MER-000009	
P-39-000064	CA-SJO-000260	MNM-5
P-39-000065	CA-SJO-000261H	MNM-7H
P-39-000074	CA-SJO-000102/H	
P-39-000075	CA-SJO-000100	
P-39-000076	CA-SJO-000027	Schenck-Dawson #27
P-39-000077	CA-SJO-000122	
P-39-000078		DG-43
P-39-000079		DG-44
P-39-000080		DG-48
P-39-000081		SW-42
P-39-000082		SW-43
P-39-000083		SW-51
P-39-000084		SW-52
P-39-000085		SW-53
P-39-000086		Lateral 3 West, Banta-Carbona I
P-39-000087		Banta-Carbona Canal; JJ-5
P-39-000088		Lateral 5 West, Banta Carbona I
P-39-000089		Delta Mendota Canal
P-39-000090		California Aqueduct
P-39-000091		SW-47

Report Detail: ST-02759

P-39-000092		SW-46
P-39-000093		SW-45
P-39-000094		Canal V, South San Joaquin Irrig
P-39-000095		Canal T, South San Joaquin Irrig
P-39-000096		Canal R, South San Joaquin Irrig
P-39-000097		Temple Creek
P-39-000098	CA-SJO-000292H	Western Pacific Railroad / Union
P-39-000099		Canal T and Drainage Canal, So
P-39-000100		Bellota Branch Line of the Stockt
P-39-000101		SW-41
P-39-000102		Canal R, South San Joaquin Irrig
P-39-000103		Drainage Ditch, South San Joaq
P-39-000104		Upper Main Canal, West Side Irr
P-39-000105		LG-57
P-39-000106	CA-SJO-000284H	Tracy Depot Site
P-39-000107		Tracy Station Site
P-39-000108		(Unnamed) Storm Drainage Can
P-39-000109		Reclamation District 2075
P-39-000112	CA-SJO-000293H	Atchison, Topeka & Santa Fe Ra
P-50-000063	CA-STA-000388H	Passalaqua House (remains)
P-50-000070		Concrete Foundation; "LG-27"
P-50-000071		TID Lateral # 2 1/2 (upper and lo
P-50-000072		TID Laterals No. 3, Upper Latera
P-50-000073	CA-STA-000426H	TID Ceres Main Canal; TID Low
P-50-000074		San Joaquin Pipelines #1 and #2
P-50-000075		M.I.D. Lateral No. 6
P-50-000076		SW-49
P-50-000077		Lateral 8, Modesto Irrigation Distr
P-50-000078		Lateral 4, Modesto Irrigation Distr
P-50-000079		Unnamed underground canal, M
P-50-000080	CA-STA-000427H	M.I.D. Lateral No. 3
P-50-000083	CA-STA-000425H	Tidewater-Southern Railroad line

No. resources: 66

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Arena, Atwater, Ceres, El Nido, Lathrop, Lockeford, Manteca, Merced, Ripon, Riverbank, Salida, Stockton East, Stockton West, Tracy , Turlock, Vernalis, Waterloo, Westley

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/22/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-02801

Identifiers

Report No.: ST-02801

Other IDs:	*Type*	*Name*
	NADB-R	1362322

Cross-refs:

Citation information

Author(s): Marvin, Judith and Shelly Davis-King
Year: 1996 (Mar)
Title: Historic Property Survey Report (Positive) for the Seventh Street Bridge Project, City of Modesto, Stanislaus County, California.
Affliliation: Judith Marvin and Shelly Davis-King
No. pages: 56
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 12 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Ceres, Riverbank
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/13/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/13/2017	Anthro	JS

Record status:

Report Detail: ST-02848

Identifiers

Report No.: ST-02848

Other IDs:	*Type*	*Name*
	NADB-R	1362239

Cross-refs:

Citation information

Author(s): Fernandez, T.
Year: 1996 (Aug)
Title: Cultural Resources Inventory Report for the City of Modesto John Thurman Field Expansion Project
Affliliation: Jones & Stokes Associates, Inc.
No. pages: 18
No. maps:
Attributes: Archaeological, Field study
Inventory size: 35 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

	Primary No.	*Trinomial*	*Name*
	P-50-000084	CA-STA-000393H	Thurman Field Scatter

No. resources: 1
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Brush Lake, Ceres
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/26/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/26/2017	Anthro	JS

Record status:

Report Detail: ST-02930

Identifiers

Report No.: ST-02930

Other IDs:

Type	*Name*
NADB-R	1366249

Cross-refs: Extends into another county as ME-02930
Extends into another county as SJ-02930

Citation information

Author(s): Jensen, Peter

Year: 1996 (Dec)

Title: Archaeological Inventory Survey; Tracy to Fresno Longhaul Fiberoptics Data Transmission Line, Portions of Fresno, Madera, Merced, Stanislaus, and San Joaquin Counties, California.

Affliliation: Jensen & Associates; prepared for North State Resources, Inc.

No. pages: 39

No. maps:

Attributes: Archaeological, Field study, Literature search

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-39-000088		Lateral 5 West, Banta Carbona I
P-39-000098	CA-SJO-000292H	Western Pacific Railroad / Union
P-39-000104		Upper Main Canal, West Side Irr

No. resources: 3

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Atwater, Brush Lake, Ceres, Cressey, Denair, Le Grand, Merced, Midway, Plainsburg, Planada, Ripon, Riverbank, Salida, Tracy , Turlock, Vernalis, Westley, Winton

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	7/19/2016	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database
12/10/201	EGreathou	eg

Record status:

Report Detail: ST-03747

Identifiers

Report No.: ST-03747

Other IDs:	*Type*	*Name*
	NADB-R	1364055

Cross-refs:

Citation information

Author(s): Werner, Roger
Year: 1999 (Dec)
Title: Letter Report: Cultural Resources Survey, Proposed Bank Erosion Protection in Dry Creek, Modesto, California.
Affliliation: ASI Archaeology and Cultural Resources Management
No. pages: 14
No. maps:
Attributes: Archaeological, Field study
Inventory size: ca. 0.12 Miles
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Riverbank
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/13/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/13/2017	Anthro	JS

Record status:

Report Detail: ST-03878

Identifiers

Report No.: ST-03878

Other IDs:	*Type*	*Name*
	NADB-R	1364060
	Other	82711

Cross-refs:

Citation information

Author(s): Wilson, Kenneth L.
Year: 1977
Title: Archaeological Reconnaissance Report of the City of Modesto's Primary Treatment Plant Improvements.
Affliliation: Archaeology Study Center, CSU Sacramento
No. pages:
No. maps:
Attributes:
Inventory size: 20 Acres
Disclosure:
Collections:

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Brush Lake
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:		

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-03882

Identifiers

Report No.: ST-03882

Other IDs:	*Type*	*Name*
	NADB-R	1363740

Cross-refs:

Citation information

Author(s): Anonymous
Year:
Title: Modesto Auto Dealers History; Background of the Griswald and Wight Ford Dealership (9th and L Streets)(1122 10th Street)
Affliliation:
No. pages: 89
No. maps:
Attributes: Other research
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Riverbank
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/27/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/27/2017	Anthro	JS

Record status:

Report Detail: ST-03995

Identifiers

Report No.: ST-03995

Other IDs:

Type	*Name*
NADB-R	1363956

Cross-refs: Extends into another county as ME-03995
Extends into another county as SJ-03995

Citation information

Author(s): Nelson, W. J.

Year: 2000 (Jun)

Title: Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.

Affliliation: Far Western Anthropological Research Group, Inc.; for Parsons, Brinckerhoff Network Services

No. pages: 128

No. maps:

Attributes: Archaeological, Architectural/Historical, Field study

Inventory size: 280.2 Miles

Disclosure: Not for publication

Collections: No

General notes

The original copies of the Tables pages are poor as over the years clients have replaced them with copies.

Associated resources

Primary No.	*Trinomial*	*Name*
P-39-000002	CA-SJO-000250H	Southern Pacific Railroad in San
P-39-000354	CA-SJO-000241H	Permanente Metals Corp. Magn
P-50-000001	CA-STA-000350H	Southern Pacific Railroad line
P-50-000439		W. H. Breshears, Inc., Chevron
P-50-000619		Modesto Southern Pacific Railw
P-50-001923	CA-STA-000420H	1930s Domestic Trash Dump

No. resources: 6

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Arena, Atwater, Ceres, Cressey, Denair, Galt, Lathrop, Le Grand, Lodi North, Lodi South, Manteca, Merced, Plainsburg, Planada, Ripon, Riverbank, Salida, Stockton West, Turlock

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	7/19/2016	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-04296

Identifiers

Report No.: ST-04296

Other IDs:	*Type*	*Name*
	NADB-R	1364208

Cross-refs:

Citation information

Author(s): Amaglio, S.
Year: 2001
Title: Letter Report: City of Modesto, Wastewater Treatment Plant Project, FEMA-1155-DR-CA, DSR #39261
Affliliation: Federal Emergency Management Agency
No. pages:
No. maps:
Attributes:
Inventory size: 0.25 Acres
Disclosure:
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Brush Lake
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	8/18/2014	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-04592

Identifiers

Report No.: ST-04592

Other IDs:

Type	*Name*
NADB-R	1364504

Cross-refs:

Citation information

Author(s): Gatlin, J. P., General Attorney

Year: 2000 (Feb)

Title: Before the Surface Transportation Board: Docket No. AB-33 (Sub-No. 145X), Union Pacific Railroad Co.--Abandonment Exemption--in Stanislaus Co., CA (Tidewater Subdivision Near Modesto, California), Combined Environmental and Historic Report.

Affliliation: Union Pacific Railroad Company

No. pages: 59

No. maps:

Attributes: Management/planning, Other research

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-000083	CA-STA-000425H	Tidewater-Southern Railroad line

No. resources: 1

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Salida

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
	Modesto, Ca		

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/20/2017	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-04760

Identifiers

Report No.: ST-04760

Other IDs:

Type	*Name*
NADB-R	1364670

Cross-refs:

Citation information

Author(s): LSA Associates. Inc.

Year: 2002 (Oct)

Title: Draft Mitigated Negative Declaration: Ninth Street Bridge Replacement, City of Modesto.

Affliliation: LSA Associates, Inc.; for City of Modesto

No. pages: 49

No. maps:

Attributes: Archaeological, Architectural/Historical, Management/planning, Other research

Inventory size:

Disclosure: Unrestricted

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
9th St. where it crosses Tuolumne River, from B St. to 100 meters south of River Rd.			

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/15/2017	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database
2/15/2017	Anthro	JS

Record status:

Report Detail: ST-04816

Identifiers

Report No.: ST-04816

Other IDs:	*Type*	*Name*
	NADB-R	1364730

Cross-refs:

Citation information

Author(s): William Self Associates
Year: 2001 (Jan)
Title: Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County,
Affliliation: William Self Associates
No. pages: 61
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study, Literature search
Inventory size: ca. 115 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-000083	CA-STA-000425H	Tidewater-Southern Railroad line
P-50-000084	CA-STA-000393H	Thurman Field Scatter
P-50-000438		Lion's Market; Sander's Bros. M
P-50-000439		W. H. Breshears, Inc., Chevron
P-50-000617		Bridge #38C-23; Lion Bridge; Se
P-50-001811		Tuolumne River Bridge (BURNE

No. resources: 6
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Ceres, Riverbank
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/15/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/15/2017	Anthro	JS

Record status:

Report Detail: ST-04849

Identifiers

Report No.: ST-04849

Other IDs:	*Type*	*Name*
	NADB-R	1364773

Cross-refs: See also ME-04849

Citation information

Author(s): Creighton, W.

Year: 2002

Title: Clamper: Documentation of Monuments and Plaques Representing Estanislao Chapter No. 58 E Clampus Vitus.

Affliliation: W. Creighton, student, CSU Stanislaus

No. pages: 51

No. maps:

Attributes: Architectural/Historical, Other research

Inventory size: NA

Disclosure: Unrestricted

Collections: No

General notes

CSUS student project, inventory of monuments erected by Chapter 58 of E Clampus Vitus. Several have no associated Primary records or associated Primary numbers.

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-000219	CA-STA-000134	Indian Rock #1
P-50-000436		Riverbank Branch Library (River
P-50-000528		Tuolumne Gold Dredging Comp
P-50-000531		Architectural Resources of La Gr
P-50-000539		Louie's Place (1897)
P-50-000543		United States Post Office, 12th
P-50-000547		Empire City; CHL No. 418
P-50-000548		Adamsville
P-50-000575		Knights Ferry Mill; Stanislaus Flo
P-50-000577		Knights Ferry General Store
P-50-000578		Knights Ferry Hotel
P-50-000583		La Grange City Jail
P-50-001805		Gold Dredging Camp (Ghost To
P-50-002178		Modesto Cemeteries on Scenic

No. resources: 14

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Brush Lake, Cooperstown, Copper Mountain, Escalon, Hornitos, Knights Ferry, La Grange, Newman, Oakdale, Patterson, Riverbank, Salida, Waterford, Westley, Winton

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	12/18/201	rhards

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	6/19/2014	anthro	Note added by RH

Record status:

Report Detail: ST-05007

Identifiers

Report No.: ST-05007

Other IDs:	*Type*	*Name*
	NADB-R	1364893

Cross-refs:

Citation information

Author(s): McClean, D.

Year: 1999 (Dec)

Title: California Department of Transportation Negative Historic Property Report and Negative Archaeological Survey Report for Ninth Street Bridge, in the City of Modesto, County of Stanislaus, California.

Affliliation: LSA Associates, Incorporated; for Caltrans District 10

No. pages: 14

No. maps:

Attributes: Archaeological, Architectural/Historical, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Ceres, Riverbank

Address:	*Address*	*City*	*Assessor's parcel no.*	*Zip code*
	9th St. at Tuolumne River	:Modesto		

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/15/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/15/2017	Anthro	JS

Record status:

Report Detail: ST-05358

Identifiers

Report No.: ST-05358

Other IDs:	*Type*	*Name*
	NADB-R	1365238

Cross-refs:

Citation information

Author(s): Windmiller, R. and D. S. Napoli
Year: 2003 (Jun)
Title: Archaeological Resources Inventory, Westside Service Center Project, Modesto, Stanislaus County, California.
Affliliation: Ric Windmiller, Consulting Archaeologist
No. pages: 44
No. maps:
Attributes: Archaeological, Evaluation, Field study
Inventory size: 1 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Salida
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/22/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/22/2017	Anthro	JS

Record status:

Report Detail: ST-05574

Identifiers

Report No.: ST-05574

Other IDs:	*Type*	*Name*
	NADB-R	1365458

Cross-refs:

Citation information

Author(s): Peak and Associates
Year: 2004 (Sep)
Title: Cultural Resources Assessment for the Outdoor Sports Adventure Project, City of Modesto, Stanislaus County, California.
Affliliation: Peak and Associates
No. pages: 21
No. maps:
Attributes: Archaeological, Field study
Inventory size: <10 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Ceres
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/27/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/27/2017	Anthro	JS

Record status:

Report Detail: ST-06345

Identifiers

Report No.: ST-06345

Other IDs:	*Type*	*Name*
	NADB-R	1355577

Cross-refs: Extends into another county as ME-06345
Extends into another county as SJ-06345

Citation information

Author(s): SWCA Environmental Consultants
Year: 2006 (Dec)
Title: Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California. SWCA Project No. 10715-180.
Affliliation: SWCA Environmental Consultants; for Qwest Communications
No. pages: 345
No. maps:
Attributes: Archaeological, Architectural/Historical, Monitoring
Inventory size: 280.2 miles
Disclosure: Not for publication
Collections:

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Arena, Atwater, Ceres, Cressey, Denair, El Nido, Galt, Lathrop, Lodi North, Lodi South, Manteca, Merced, Plainsburg, Riverbank, Salida, Stockton West, Turlock
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	8/23/2016	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-06352

Identifiers

Report No.: ST-06352

Other IDs:

Type	*Name*
NADB-R	1366580

Cross-refs:

Citation information

Author(s): EDAW, Inc.

Year: 2005 (Sep)

Title: TRRP Gateway Precise Plan, Modesto, Ceres, Stanislaus County, California, Initial Study.

Affliliation: EDAW, Inc.; for Tuolumne River Regional Park Commision and the City of Modesto

No. pages: 76

No. maps:

Attributes: Literature search, Management/planning, Other research

Inventory size: 500 Acres

Disclosure: Unrestricted

Collections: No

General notes

Environmnental Review Document

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Ceres, Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
	Modesto		

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	12/9/2016	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-06775

Identifiers

Report No.: ST-06775

Other IDs:

Type	*Name*
NADB-R	1367005

Cross-refs:

Citation information

Author(s): Supernowicz, D. E.

Year: 2008 (Sep)

Title: Collocation ("CO") Submission Packet FCC Form 621, Project Name: "Downtown Modesto", Project Number: CA-9799; Cultural Resources Study of the Downtown Modesto Project AT & T Mobility Site No. CA-9799 Intersection of 10th & D Streets, Modesto, Stanislaus County, Ca 95354.

Affliliation: Historic Resource Associates; for Earth Touch, Inc.

No. pages: 59

No. maps:

Attributes: Archaeological, Architectural/Historical, Field study

Inventory size: 0.6 Acres

Disclosure: Not for publication

Collections: No

General notes

Notes a ca. 1930's garage/warehouse/industrial bldg. adjacent to the water tower (used by Modesto Public Works Dept. as of 11/2016)

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-001999		City of Modesto Elevated Water

No. resources: 1

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
Intersection of 10th and D Streets	Modesto	106-046-001	

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/17/2017	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database
2/17/2017	Anthro	JS

Record status:

Report Detail: ST-06777

Identifiers

Report No.: ST-06777

Other IDs:	*Type*	*Name*
	NADB-R	1367010

Cross-refs:

Citation information

Author(s): Farnon, A.
Year: 2006
Title: Shackelford Neighborhood Infrastructure Improvements Project Modesto, California.
Affliliation: Stanislaus County
No. pages: 20
No. maps:
Attributes: Literature search, Other research
Inventory size: 0.41 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Ceres
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/27/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/27/2017	Anthro	JS

Record status:

Report Detail: ST-06915

Identifiers

Report No.: ST-06915

Other IDs:	*Type*	*Name*
	NADB-R	1367207

Cross-refs:

Citation information

Author(s): Gallo Winery
Year: 2009
Title: Historic Modesto: Gallo Winery- How it Began in 1933
Affliliation: historicmodesto.com Gallo Winery
No. pages: 17
No. maps:
Attributes: Other research
Inventory size: NA
Disclosure: Unrestricted
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Riverbank
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	8/30/2016	EGreathouse

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	8/30/2016	EGreathou	eg

Record status:

Report Detail: ST-07076

Identifiers

Report No.: ST-07076

Other IDs:	*Type*	*Name*
	NADB-R	1367390

Cross-refs:

Citation information

Author(s): Peak, M. A. and N. J. Neuenschwander
Year: 2009 (Oct)
Title: An Evaluation of Pump Station Number 5, City of Modesto, California
Affliliation: Peak & Associates, Inc.
No. pages: 17
No. maps:
Attributes: Architectural/Historical, Evaluation
Inventory size: 1 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

	Primary No.	*Trinomial*	*Name*
	P-50-002018		Modesto Pump Station Number

No. resources: 1
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Salida
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/24/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	2/24/2017	Anthro	JS

Record status:

Report Detail: ST-07388

Identifiers

Report No.: ST-07388

Other IDs:	*Type*	*Name*
	NADB-R	1367737

Cross-refs:

Citation information

Author(s): Higgins, J. E.

Year: 2010 (Nov)

Title: Submission Packet, FCC Form 621, for Proposal Collocation Project 1221 Sutter Avenue Modesto, Stanislaus County, CA. W. Hatch-Utistick/CN 1930 EBI Project Number: 61105429

Affliliation: EBI Consulting

No. pages: 96

No. maps:

Attributes: Management/planning, Other research

Inventory size: 1 Acres

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Brush Lake

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	1/26/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/26/2017	Anthro	JS

Record status:

Report Detail: ST-07537

Identifiers

Report No.: ST-07537

Other IDs:	*Type*	*Name*
	NADB-R	1367890

Cross-refs:

Citation information

Author(s): Kuzak, C.
Year: 2011 (Apr)
Title: Historic Property Survey Report, 10-STA-99, P.M. 0.0/24.7, 2576 E-FIS1000020344, Stanislaus County, California.
Affliliation: Caltrans District 10
No. pages: 81
No. maps:
Attributes: Archaeological, Architectural/historical, Field study, Management/planning
Inventory size: 24.8 Miles x 100 Feet
Disclosure: Not for publication
Collections: No

General notes

CCIC copy is missing page 1 !!

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-002036		Street Property
P-50-002046		Dal Bianco Property
P-50-002047		Segars Property
P-50-002048		Interwest Industries Inc. Propert
P-50-002049		Garcia Property
P-50-002050		Brown Property
P-50-002051		Almarez Property, 2217 Strivens
P-50-002052		Soares Property, 2521 Strivens,
P-50-002053		Cabral Property, 2525 Strivens,
P-50-002054		Allen Property, 2529 Strivens, M
P-50-002055		Berry Property, 2533 Strivens, M
P-50-002056		Lopez Property, 2601 Strivens,

No. resources: 12
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Ceres, Denair, Riverbank, Salida, Turlock
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/24/2016	rhards

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: ST-07589

Identifiers

Report No.: ST-07589

Other IDs:

Type	*Name*
NADB-R	1367951

Cross-refs:

Citation information

Author(s): Wlodarski, R. J.

Year: 2012 (Jul)

Title: Collocation Submission Packet FCC Form 621, CVL01322, Downtown Modesto, 920 D Street, Stanislaus County, CA; Proposed AT & T Wireless Telecommunications Site CVL01322 (Downtown Modesto), 920 D. St..

Affliliation: CARE Cellular Archaeological Resource Evaluations; for ATC Associates

No. pages: 37

No. maps:

Attributes: Archaeological, Architectural/Historical, Field study

Inventory size: 1 Acres

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-001999		City of Modesto Elevated Water

No. resources: 1

Has informals: No

Location information

County(ies): Stanislaus

USGS quad(s): Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
920 D St.	Modesto	106-046-001	

PLSS: T3S R9E Sec. 33 MDBM

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	2/20/2017	Anthro

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database
2/20/2017	Anthro	JS

Record status:

Report Detail: ST-07775

Identifiers

Report No.: ST-07775
Other IDs:
Cross-refs:

Citation information

Author(s): Helton, C. and Cardenas, G.
Year: 2011 (Feb)
Title: Cultural Resources Monitoring and Mitigation Plan, Almond 2 Power Plant, Turlock Irrigation District.
Affliliation: CH2MHILL
No. pages: 378
No. maps:
Attributes: Archaeological, Architectural/historical, Excavation, Field study
Inventory size: 25 Miles x 200 Feet
Disclosure: Not for publication
Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-50-000071		TID Lateral # 2 1/2 (upper and lo
P-50-000072		TID Laterals No. 3, Upper Latera
P-50-000073	CA-STA-000426H	TID Ceres Main Canal; TID Low
P-50-000083	CA-STA-000425H	Tidewater-Southern Railroad line
P-50-001927		TID Lateral #5/Lower Lateral #5
P-50-002114		IF-1
P-50-002115		IF-2
P-50-002116		IF-3
P-50-002117		TID Westport Drain
P-50-002118		TID Lateral No. 5 1/2
P-50-002119		TID Lower Lateral No. 4
P-50-002120		5242 Avenue A
P-50-002121		5336 Avenue D
P-50-002122		125 Cowan Street
P-50-002123		4019 Crows Landing Road
P-50-002124		4307 Crows Landing Road
P-50-002125		4443 Crows Landing Road
P-50-002126		4607 Crows Landing Road
P-50-002127		4619 Crows Landing Road
P-50-002128		4742 Crows Landing Road
P-50-002129		4886 Crows Landing Road
P-50-002130		5019 Crows Landing Road
P-50-002131		5237 Crows Landing Road
P-50-002132		5336 Crows Landing Road
P-50-002133		348 E. Grayson Road
P-50-002134		624 E. Service Road
P-50-002135		943 E. Grayson Road
P-50-002136		530 W. Grayson Road
P-50-002137		301 Lathrop Road
P-50-002138		401 Lathrop Road
P-50-002139		600 San Joaquin Ave.
P-50-002140		142 W. Service Road

No. resources: 32
Has informals: No

Location information

County(ies): Stanislaus

Report Detail: ST-07775

USGS quad(s): Brush Lake, Ceres, Crows Landing, Hatch
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/23/201	anthro
Last modified:	12/8/2015	EGreathouse

IC actions:	*Date*	*User*	*Action taken*
	12/8/2015	EGreathou	eg

Record status:

Report Detail: ST-07828

Identifiers

Report No.: ST-07828
Other IDs:
Cross-refs:

Citation information

Author(s): Billat, L.
Year: 2013 (Apr)
Title: Collocation Submission Packet, FCC Form 621, W Hatch-Utistick CNU1930, 1221 Sutter Avenue, Modesto, Stanislaus County, CA
Affliliation: EarthTouch, Inc.
No. pages: 52
No. maps:
Attributes: Management/planning, Other research
Inventory size: 1 Acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Brush Lake

Address:	*Address*	*City*	*Assessor's parcel no.*	*Zip code*
	1221 Sutter Ave.	Modesto		

PLSS:

Database record metadata

	Date	*User*
Entered:	12/20/201	anthro
Last modified:	1/26/2017	Anthro

IC actions:	*Date*	*User*	*Action taken*
	1/26/2017	Anthro	JS

Record status:

Report Detail: ST-07946

Identifiers

Report No.: ST-07946
Other IDs:
Cross-refs:

Citation information

Author(s): Roland-Nawi, C.
Year: 2013 (Oct)
Title: Letter from SHPO to HQ California Army National Guard, RE: Modesto Field Maintenance Shop Renovation, 630 Rourse Avenue, Modesto, CA
Affliliation: CA State Office of Historic Preservation
No. pages: 10
No. maps:
Attributes: Architectural/Historical
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

Letter states National Guard Armory was determined ineligible for NRHP in 2003. No documentation on file at IC for this determination. Single story workshop building at Armory constructed in 1949. Not listed in HPDF.

Associated resources

No. resources: 0
Has informals: Yes

Location information

County(ies): Stanislaus
USGS quad(s): Brush Lake

Address: Address	City	Assessor's parcel no.	Zip code
630 Rouse Avenue	Modesto		

PLSS:

Database record metadata

	Date	User
Entered:	7/21/2014	anthro
Last modified:	1/26/2017	Anthro

IC actions: Date	User	Action taken
7/21/2014	anthro	eag
1/26/2017	Anthro	JS

Record status:

Report Detail: ST-08208

Identifiers

Report No.: ST-08208
Other IDs:
Cross-refs:

Citation information

Author(s): Hoffman, R.
Year: 2015 (Feb)
Title: Historic Property Survey Report, CML 5059 (198) Westbound D Street to Northbound 9th Street (SR 132) Project, Modesto, Stanislaus County, California. Caltrans District 10, Stanislaus County, CR 111, PM 15.6-15.0, Federal Projecr # CML 5059 (198)
Affliliation: Caltrans
No. pages: 63
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 5 acres
Disclosure: Not for publication
Collections: No

Sub-desig.:
Author(s): Hoffman, R.
Year: 2015 (Feb)
Title: Archaeological Survey Report for the CML 5059 (198) Westbound D Street to Northbound 9th Street (SR 132) Project, Modesto, Stanislaus County, California. Caltrans District 10, Stanislaus County, CR 111, PM 15.6-15.0, Federal Projecr # CML 5059 (198)
Affiliation: Caltrans
Report type(s): Archaeological, Field study
Inventory size: ca 5 acres
No. pages: 52
Disclosure: Not for publication
Collections: No
PDF Pages: 12-63

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Stanislaus
USGS quad(s): Riverbank

Address:	*Address*	*City*	*Assessor's parcel no.*	*Zip code*
	D Street, 9th Street	Modesto		

PLSS:

Database record metadata

	Date	*User*
Entered:	12/9/2015	EGreathouse
Last modified:	12/9/2015	EGreathouse

IC actions:	*Date*	*User*	*Action taken*
	12/9/2015	EGreathou	eg

Record status:

Resource Detail: P-50-000001

Identifying information

Primary No.: P-50-000001

Trinomial: CA-STA-000350H

Name: Southern Pacific Railroad line

Other IDs:

Type	*Name*
Other	Southern Pacific Railroad San Joaquin Valley Mainline
Other	Stockton & Visalia Railroad
Other	Stockton & Tulare Railroad
Other	Southern Pacific Railroad West Side Line
Other	Southern Pacific Railroad, Tracy Branch
Other	San Joaquin Valley Railroad
Resource Name	Southern Pacific Railroad line

Cross-refs: Extends into another county as 24-000097
Extends into another county as 39-000002
See also 39-005011

Attributes

Resource type: Structure

Age: Historic

Information base: Survey, Analysis

Attribute codes: AH07 (Roads/trails/railroad grades) - Railroad grade; HP39 (Other) - Rail Line

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

This file includes various branches of the SP Railroad line in Stanislaus County. HPDF 6Y

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
8/13/2007	Carey & Co.	Carey & Co.	
1/17/2008	N. Hosseinion	Dokken Engineering	
3/22/2009	P. Daly	Cultural Research Associates	S.P. RR San Joaquin Valley Mainline
11/26/2006	K. Haley	Jones & Stokes	S.P. RR San Joaquin Valley Mainline, south of Ceres, no UTMs; on HPDF
5/26/1993	J. Costello and J. Marvin	Foothill Resources, Ltd.	
2/26/2003	B. Larson and E. Johnson	JRP Historical Consulting Services	
7/7/1999	C. M. Francis	Francis Heritage Services	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
AP-05501	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.	Far Western Anthropological Research Group, Inc., et al.; for Caltrans District 10
CA-05498	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.	Far Western Anthropological Research Group, Inc. (and) JRP Historical Consulting; prepared for Caltrans District 10
ME-03995	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.	Far Western Anthropological Research Group, Inc., for Parsons Brinckerhoff Network Services
SJ-03995	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to	Far Western Anthropological Research Group, Inc.; for Parsons, Brinckerhoff Network Services

		Bakersfield	
SJ-06625	1998	Cultural Resources Survey, South County Surface Water Project, San Joaquin County, California, South San Joaquin Irrigation District	ASI Archaeology and Cultural Resource Management (prepared for Environmental Science Associates, Inc.)
SJ-06878	2008	San Joaquin Pipeline System Project, Draft EIR, San Francisco Planning Department Case No. 2007.0118E, State Clearinghouse No. 2007032138	San Francisco Planning Department
SJ-07527	2009	San Joaquin Pipeline System Project, Historic Resources Inventory and Evaluation Report.	Carey & Co., Inc.
ST-03382	1995	Historic Property Survey Report, Oakdale Bypass Project, State Route 120, Stanislaus County, California, 10-STA-120, P.M. 3.0/12.9, 10-345400.	Parsons Brinckerhoff Quade and Douglas, Inc. and Caltrans District 10
ST-03390	1995	Historical Study Report for the Oakdale Bypass Project, Stanislaus County, California: 10-STA-120, PM 3.0/R12.9, EA 10-345400.	Caltrans Environmental Program- Sacramento
ST-03393	1994	Final Report; Archaeological Survey Report for the SR-120 Oakdale Bypass Interchange Improvement Project Alternatives 1, 2A, 2B, 2C, and 2D; Near Oakdale, Stanislaus County, California, 10-STA-120-3.0/R12.9, EA 10-345400.	Biosystems Analysis, Inc.; for Parsons Brinckerhoff Quade and Douglas (and) Caltrans District 10
ST-03639	1999	Archaeological and Historical Survey Report for a Proposed Road Widening Project of Albers Road, Stanislaus County, California.	Francis Heritage Services
ST-03995	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.	Far Western Anthropological Research Group, Inc.; for Parsons, Brinckerhoff Network Services
ST-05498	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.	Far Western Anthropological Research Group, Inc.; for Caltrans District 10
ST-05501	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study	Far Western Anthropological Research Group, Inc.; for Caltrans District 10
ST-05502	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II G: Stanislaus County.	Far Western Anthropological Group, Inc. et al.; for Caltrans District 10
ST-06446	2006	Cultural Resources Assessment for the Turlock Irrigation District's Regional Water Supply Project, County of Stanislaus, California.	Peak & Associates, Inc.; for EIP Associates
ST-06477	2006	State Route 99/Mitchell Road/Service Road Interchange Reconstruction, Historic Property Survey Report (Includes Historical Resources Evaluation Report and Archaeological Survey Report), Ceres, CA, 10-STA-99 KP15.6-17.5 (PM 9.7-10.9)	Jones & Stokes; for Caltrans District 10
ST-06625	1998	Cultural Resources Survey, South County Surface Water Project, San Joaquin County, California, South San Joaquin Irrigation District.	ASI Archaeology and Cultural Resource Management
ST-06878	2008	San Joaquin Pipeline System Project, Draft EIR, San Francisco Planning Department Case No. 2007.0118E, State Clearinghouse No. 2007032138.	San Francisco Planning Department for the Public Utilities Commission
ST-06977	2009	Cultural Resources Inventory for the Hughson-Grayson 115kV Transmission Line and Substation Project in Stanislaus County, California.	Cultural Research Associates; for Parus Consulting
ST-07244	2007	North County Corridor Environmental Constraints Analysis: Cultural Resources.	Far Western A.R.G, Inc.& JRP Historical Consulting; for Circle Point and Stanislaus Council of Governments
ST-07387	2010	Patterson General Plan Update: Archaeological	Far Western and Foothill Resources

		Resources Sensitivity	
ST-07527	2009	San Joaquin Pipeline System Project, Historic Resources Inventory and Evaluation Report.	Carey & Co., Inc.
ST-07586	2009	Historic Property Survey Report, 10-STA-99, P.M. 21.0/22.4, EA 10-472100 (State Route 99/Pelandale Avenue Interchange Reconstruction Project). [Also includes ASR (M. Campbell, 12/08) and HRER (N. Hosseinion, 4/09)].	Dokken Engineering, for Caltrans District 10
ST-08341	2014	Historic Property Survey Report North Valley Regional Recycled Water Program (NVRRWP) Vicinity of Patterson, Stanislaus County	Basin Research Associates for U.S. Department of the Interior Bureau Reclamation and RMC Water and Environment
TO-06878	2008	San Joaquin Pipeline System Project, Draft EIR, San Francisco Planning Department Case No. 2007.0118E, State Clearinghouse No. 2007032138	San Francisco Planning Department
TO-07527	2009	San Joaquin Pipeline System Project, Historic Resources Inventory and Evaluation Report	Carey & Co., Inc.

Location information

County: Stanislaus

USGS quad(s): Ceres, Escalon, Farmington, Oakdale, Patterson, Peters, Salida, Solyo, Stockton West, Westley

Address:

PLSS: T4S R9E SE¼ of SW¼ of Sec. 24 MDBM
T4S R9E SE¼ of SW¼ of Sec. 25 MDBM
T2S R10E SE¼ of NE¼ of Sec. 10 MDBM
T1N R6E Sec. MDBM
T3S R8E NE¼ of Sec. 14 MDBM
T3S R8E SE¼ of Sec. 3 MDBM
T3S R8E NE¼ of NE¼ of Sec. 10 MDBM

UTMs: Zone 10 682740mE 4159923mN NAD27 (San Joaquin Valley Mainline)
Zone 10 683029mE 4159611mN NAD27
Zone 10 689180mE 4183060mN NAD27
Zone 10 651780mE 4202230mN NAD27
Zone 10 671810mE 4172105mN NAD27
Zone 10 669862mE 4174648mN NAD27
Zone 10 689180mE 4183060mN NAD83
Zone 10 651780mE 4202230mN NAD83

Management status

Database record metadata

	Date	*User*	
Entered:	7/16/2010	ccic-admin	
Last modified:	3/3/2015	anthro	
IC actions:	*Date*	*User*	*Action taken*
	11/19/201	Anthro	I.R

Record status:

Resource Detail: P-50-000083

Identifying information

Primary No.: P-50-000083

Trinomial: CA-STA-000425H

Name: Tidewater-Southern Railroad line

Other IDs:

Type	*Name*
Resource Name	Tidewater-Southern Railroad line
Other	Union Pacific Railroad (1987 to present)
Other	Segment of the Tidewater Southern Railroad
Other	UP-1, UP-2

Cross-refs: Extends into another county as 39-000015

Attributes

Resource type: Structure

Age: Historic

Information base: Survey

Attribute codes: AH07 (Roads/trails/railroad grades) - Tidewater-Southern Railroad line; HP39 (Other) - Railroad line

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
8/13/2007	Carey & Co.	Carey & Co.	
3/16/2009	Lawson	CH2M HILL	
3/20/2009	Pamela Daly	Cultural Research Assoc.	
9/20/2002	James J. Sharpe	CH2M HILL	
1/1/1994	JRP	JRP	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
AP-05501	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.	Far Western Anthropological Research Group, Inc., et al.; for Caltrans District 10
CA-05498	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.	Far Western Anthropological Research Group, Inc. (and) JRP Historical Consulting; prepared for Caltrans District 10
ME-02759	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project; Final Report, Volume 1, excerpts only	Woodward Clyde Associates; for Mojave Pipeline Company
SJ-02759	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project, Final.	Woodward Clyde Consultants (prepared for Mojave Pipeline Company)
SJ-07171	2009	Proposed Abandonment of the McHenry Industrial Lead from Milepost 21.25 near Escalon to Milepost 26.43 near McHenry, a total distance of 5.18 miles in San Joaquin and Stanislaus Counties, California; STB Docket No. AB-33 (Sub-No.278X).	Union Pacific Railroad Law Department; for Califonia State Historic Preservation Office
SJ-07527	2009	San Joaquin Pipeline System Project, Historic Resources Inventory and Evaluation Report.	Carey & Co., Inc.
ST-02759	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project.	Woodward-Clyde Consultants; for Mojave Pipeline Company
ST-04592	2000	Before the Surface Transportation Board: Docket No. AB-33 (Sub-No. 145X), Union Pacific Railroad Co.--Abandonment	Union Pacific Railroad Company

		Exemption--in Stanislaus Co., CA (Tidewater Subdivision Near Modesto, California), Combined Environmental and Historic Report.	
ST-04816	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County, California.	William Self Associates
ST-05498	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.	Far Western Anthropological Research Group, Inc.; for Caltrans District 10
ST-05501	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study	Far Western Anthropological Research Group, Inc.; for Caltrans District 10
ST-05502	2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II G: Stanislaus County.	Far Western Anthropological Group, Inc. et al.; for Caltrans District 10
ST-06101	2004	Cultural Resources Assessment for the Meritage Project, City of Modesto, Stanislaus County, California	Peak & Associates, Inc.
ST-06269	2003	Cultural Resource Management Report, Walnut Energy Center, Stanislaus County, California	CH2M HILL
ST-06977	2009	Cultural Resources Inventory for the Hughson-Grayson 115kV Transmission Line and Substation Project in Stanislaus County, California.	Cultural Research Associates; for Parus Consulting
ST-07171	2009	Proposed Abandonment of the McHenry Industrial Lead from Milepost 21.25 near Escalon to Milepost 26.43 near McHenry, a total distance of 5.18 miles in San Joaquin and Stanislaus Counties, California; STB Docket No. AB-33 (Sub-No. 278X)	Union Pacific Railroad
ST-07527	2009	San Joaquin Pipeline System Project, Historic Resources Inventory and Evaluation Report.	Carey & Co., Inc.
ST-07775	2011	Cultural Resources Monitoring and Mitigation Plan, Almond 2 Power Plant, Turlock Irrigation District.	CH2MHILL
TO-07527	2009	San Joaquin Pipeline System Project, Historic Resources Inventory and Evaluation Report	Carey & Co., Inc.

Location information

County: Stanislaus

USGS quad(s): Ceres, Hatch, Riverbank, Salida, Turlock

Address: *Address*	*City*	*Assessor's parcel no.*	*Zip code*
	Turlock		
	Modesto		
	Ceres		

PLSS: T3S R9E N½ of Sec. 8 MDBM
T4S R9E Sec. 4 MDBM
T4S R9E Sec. 9 MDBM
T4S R9E Sec. 16 MDBM
T4S R9E NE¼ of NW¼ of Sec. 21 MDBM

UTMs: Zone 10 685444mE 4150979mN NAD27
Zone 10 676023mE 4173758mN NAD27
Zone 10 677991mE 4160357mN NAD83 (A)
Zone 10 677982mE 4160561mN NAD83 (B)
Zone 10 685444mE 4150979mN NAD83

Management status

Resource Detail: P-50-000083

Database record metadata

	Date	User	
Entered:	8/26/2010	ccic-admin	
Last modified:	3/3/2015	anthro	
IC actions:	*Date*	*User*	*Action taken*
	10/22/201	Anthro	I.R
Record status:			

Resource Detail: P-50-000084

Identifying information

Primary No.: P-50-000084
Trinomial: CA-STA-000393H
Name: Thurman Field Scatter
Other IDs:

Type	*Name*
Resource Name	Thurman Field Scatter

Cross-refs:

Attributes

Resource type: Site
Age: Historic
Information base: Survey
Attribute codes: AH16 (Other)
Disclosure: Not for publication
Collections:
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
8/1/1996	T. Fernandez	Jones & Stroke Associates, Inc	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-02848	1996	Cultural Resources Inventory Report for the City of Modesto John Thurman Field Expansion Project	Jones & Stokes Associates, Inc.
ST-04816	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County, California.	William Self Associates

Location information

County: Stanislaus
USGS quad(s): Ceres
Address:
PLSS: T4S R9E NW of NE of Sec. 5 MDBM
UTMs: Zone 10 676690mE 4165520mN NAD27
Zone 10 676660mE 4165800mN NAD83 (NW)
Zone 10 676710mE 4165800mN NAD83 (NE)
Zone 10 676690mE 4165520mN NAD83 (SE)
Zone 10 676610mE 4165480mN NAD83 (SW)

Management status

Database record metadata

	Date	*User*	
Entered:	5/9/2011	jay	
Last modified:	10/22/201	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	5/9/2011	jay	Appended records from old OHP database.
	10/22/201	Anthro	I.R

Record status:

Resource Detail: P-50-000438

Identifying information

Primary No.: P-50-000438

Trinomial:

Name: Lion's Market; Sander's Bros. Market; 439 7th St. Modesto

Other IDs:

Type	*Name*
Resource Name	Lion's Market; Sander's Bros. Market; 439 7th St. Modesto

Cross-refs:

Attributes

Resource type: Building

Age: Historic

Information base: Survey

Attribute codes: HP06 (1-3 story commercial building) - 1947 Grocery Store Building

Disclosure: Unrestricted

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
3/30/1996	Judith Marvin	Foothill Resources, Ltd.	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-04816	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County, California.	William Self Associates

Location information

County: Stanislaus

USGS quad(s): Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
439 Seventh Street	Modesto	38-03-11	95351

PLSS:

UTMs:

Management status

Database record metadata

	Date	*User*
Entered:	9/7/2012	ccic-admin
Last modified:	12/1/2015	Anthro

IC actions:

Date	*User*	*Action taken*
11/21/201	Anthro	I.R

Record status:

Resource Detail: P-50-000439

Identifying information

Primary No.: P-50-000439
Trinomial:
Name: W. H. Breshears, Inc., Chevron Products, 720 B St.; Standard Oil of California Products
Other IDs:

Type	*Name*
Resource Name	W. H. Breshears, Inc., Chevron Products, 720 B St.
Resource Name	Standard Oil of California Products

Cross-refs:

Attributes

Resource type: Structure, Site
Age: Historic
Information base: Survey
Attribute codes: HP04 (Ancillary building) - Storage tanks; HP06 (1-3 story commercial building) - an office & storage buildings
Disclosure: Not for publication
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
3/1/1996	Judith Marvin	Foothill Resources, Ltd.	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ME-03995	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.	Far Western Anthropological Research Group, Inc., for Parsons Brinckerhoff Network Services
SJ-03995	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield	Far Western Anthropological Research Group, Inc.; for Parsons, Brinckerhoff Network Services
ST-03995	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield.	Far Western Anthropological Research Group, Inc.; for Parsons, Brinckerhoff Network Services
ST-04816	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County, California.	William Self Associates

Location information

County: Stanislaus
USGS quad(s): Riverbank
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
720 B Street	Modesto	102-17-01	95351

PLSS:
UTMs:

Management status

Resource Detail: P-50-000439

Database record metadata

	Date	User	
Entered:	9/7/2012	ccic-admin	
Last modified:	7/5/2016	EGreathouse	
IC actions:	*Date*	*User*	*Action taken*
	11/21/201	Anthro	I.R
Record status:			

Resource Detail: P-50-000514

Identifying information

Primary No.: P-50-000514
Trinomial:
Name: Tuolumne River Bridge (S.P. RR at Tuolumne River)
Other IDs:

Type	*Name*
Resource Name	Tuolumne River Bridge (S.P. RR at Tuolumne River)
Other	Bridge #113.75

Cross-refs:

Attributes

Resource type: Structure
Age: Historic
Information base: Survey
Attribute codes: HP19 (Bridge) - bridge
Disclosure: Unrestricted
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
7/22/1991	J. W. Snyder	Architectural & Historic Studies, Caltrans	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-01435	1992	Historic Architecture Survey Report; Track Consolidation and Realignment, Modesto, California	Ward Hill

Location information

County: Stanislaus
USGS quad(s): Riverbank
Address:
PLSS: T3S R9E Sec. 32 MDBM
UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	3/15/2010	ccic-admin	
Last modified:	5/11/2017	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	11/21/201	Anthro	I.R

Record status:

Resource Detail: P-50-000524

Identifying information

Primary No.: P-50-000524
Trinomial:
Name: Booth's Packing Company, 110-114 11th Street (1960)
Other IDs:

Type	*Name*
Other	DOE 50-92-0011-0000
Resource Name	Booth's Packing Company, 110-114 11th Street (1960)

Cross-refs:

Attributes

Resource type: Building
Age: Historic
Information base: Survey, Other
Attribute codes: HP08 (Industrial building) - industrial building/warehouse
Disclosure: Not for publication
Collections: No
Accession no(s):
Facility:

General notes

NRS 6Y1

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
12/3/1991	W. Hill	Corbett & Hill	
11/13/1992	OHP		FHWA920923B 6Y1

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-01435	1992	Historic Architecture Survey Report; Track Consolidation and Realignment, Modesto, California	Ward Hill

Location information

County: Stanislaus
USGS quad(s): Riverbank
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
110-114 11th Street	Modesto		95350

PLSS: T3S R9E Sec. 33 MDBM
UTMs:

Management status

Database record metadata

	Date	*User*
Entered:	3/29/2010	ccic-admin
Last modified:	2/16/2017	egreathouse

IC actions:

Date	*User*	*Action taken*
11/21/201	Anthro	I.R
2/16/2017	egreathous	eg

Record status:

Resource Detail: P-50-000617

Identifying information

Primary No.: P-50-000617
Trinomial:
Name: Bridge #38C-23; Lion Bridge; Seventh St. Bridge (1916)
Other IDs:

Type	*Name*
Other	City of Modesto Designated Landmark Preservation Site #14
Resource Name	Bridge #38C-23; Lion Bridge; Seventh St. Bridge (1916)
Other	DOE-50-86-0001-0000
OHP PRN	Prop #114971 (determined eligible for the NRHP)

Cross-refs:

Attributes

Resource type: Structure
Age: Historic
Information base: Survey
Attribute codes: HP19 (Bridge) - Bridge
Disclosure: Unrestricted
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
10/19/1986	Hans Kreutzberg	OHP	DOE-50-86-0001-0000 2S2
10/19/1986	OHP		Proj. Rev. FHWA860919Z
11/1/2000	Leigh Martin	William Self Associates	2S2

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-04816	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County, California.	William Self Associates

Location information

County: Stanislaus
USGS quad(s): Riverbank
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
Seventh Street	Modesto		95353

PLSS: T3S R9E SW¼ of SW¼ of Sec. 33 MDBM
T3S R9E SE¼ of SE¼ of Sec. 32 MDBM
UTMs: Zone 10 677230mE 4166086mN NAD83
Zone 10 677066mE 4166390mN NAD83 (Northen end)
Zone 10 677160mE 4166000mN NAD83 (Southern end)

Management status

Database record metadata

	Date	*User*
Entered:	9/30/2013	
Last modified:	5/12/2017	Anthro

IC actions:

Date	*User*	*Action taken*
9/30/2013	jay	Added placeholder records to fill in primary number sequence.
11/21/201	Anthro	I.R

12/1/2015 Anthro edits by RH

Record status:

Resource Detail: P-50-001811

Identifying information

Primary No.: P-50-001811

Trinomial:

Name: Tuolumne River Bridge (BURNED DOWN-Tidewater-Southern Rwy wooden RR trestle)

Other IDs:

Type	*Name*
Resource Name	Tuolumne River Bridge (BURNED DOWN-Tidewater-Southern Rwy wooden RR trestle)

Cross-refs:

Attributes

Resource type: Structure

Age: Historic

Information base: Survey

Attribute codes: HP19 (Bridge) - A railroad trestle bridge

Disclosure: Unrestricted

Collections: No

Accession no(s):

Facility:

General notes

No longer exists; burned down.

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
11/7/1991	John W. Snyder	Architectural & Historic Studies Caltrans	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-04816	2001	Cultural Resources Assessment Report, Tuolumne River Regional Park Master Plan EIR, Stanislaus County, California.	William Self Associates

Location information

County: Stanislaus

USGS quad(s): Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
	Modesto		

PLSS:

UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	9/28/2012	ccic-admin	
Last modified:	5/12/2017	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	11/21/201	Anthro	I.R
	12/1/2015	Anthro	edits by RH

Record status:

Resource Detail: P-50-001999

Identifying information

Primary No.: P-50-001999

Trinomial:

Name: City of Modesto Elevated Water Tower and Tank, near 10th & D

Other IDs:

Type	*Name*
Resource Name	City of Modesto Elevated Water Tower and Tank, near 10th & D

Cross-refs:

Attributes

Resource type: Structure

Age: Historic

Information base: Survey

Attribute codes: HP11 (Engineering structure) - Elevated Water Tower and Tank

Disclosure: Unrestricted

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
8/1/2008	Dana E. Supernowicz	Historic Resource Associates; for EarthTouch, Inc.	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
ST-06775	2008	Collocation ("CO") Submission Packet FCC Form 621, Project Name: "Downtown Modesto", Project Number: CA-9799; Cultural Resources Study of the Downtown Modesto Project AT & T Mobility Site No. CA-9799 Intersection of 10th & D Streets, Modesto, Stanislaus County, Ca 95354.	Historic Resource Associates; for Earth Touch, Inc.
ST-07589	2012	Collocation Submission Packet FCC Form 621, CVL01322, Downtown Modesto, 920 D Street, Stanislaus County, CA; Proposed AT & T Wireless Telecommunications Site CVL01322 (Downtown Modesto), 920 D. St..	CARE Cellular Archaeological Resource Evaluations; for ATC Associates

Location information

County: Stanislaus

USGS quad(s): Riverbank

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
Near intersection of 10th and D Streets	Modesto	106-046-001	95354

PLSS:

UTMs:

Management status

Database record metadata

	Date	*User*
Entered:	10/13/201	ccic-admin
Last modified:	11/8/2016	Anthro

IC actions:

Date	*User*	*Action taken*
11/24/201	Anthro	I.R

Record status:

Resource Detail: P-50-002018

Identifying information

Primary No.: P-50-002018
Trinomial:
Name: Modesto Pump Station Number 5, 629 2nd St.
Other IDs:

Type	Name
Resource Name	Modesto Pump Station Number 5, 629 2nd St.

Cross-refs:

Attributes

Resource type: Structure
Age: Historic
Information base: Survey
Attribute codes: HP09 (Public utility building) - Public utility building
Disclosure: Unrestricted
Collections:
Accession no(s):
Facility:

General notes

It has been demolished.

Recording events

Date	Recorder(s)	Affiliation	Notes
2/4/2009	Kenneth Horrillo	City of Modesto Recreation and Neighborhood	

Associated reports

Report No.	Year	Title	Affiliation
ST-07076	2009	An Evaluation of Pump Station Number 5, City of Modesto, California	Peak & Associates, Inc.

Location information

County: Stanislaus
USGS quad(s): Salida
Address:

Address	City	Assessor's parcel no.	Zip code
629 2nd Street	Modesto		95351-3351

PLSS: T3S R9E SE¼ of NW¼ of Sec. 32 MDBM
UTMs:

Management status

Database record metadata

	Date	User
Entered:	10/13/201	ccic-admin
Last modified:	7/5/2016	EGreathouse

IC actions:

Date	User	Action taken
11/26/201	Anthro	I.R

Record status:

P-50-000001
CA-STA-000350H

SITE NAME: Southern Pacific San Joaquin Valley Mainline
SITE NUMBERS: SPM-1 through SPM-35
QUAD SHEET: Various; see site forms
PIPELINE LOCATION: Various; see site forms

Ceres, Salida 7.5' 5/96

Description of Feature

The proposed Mojave pipeline alignment crosses the Southern Pacific Railroad's San Joaquin Valley lines at 35 places in Kern, Tulare, Fresno, Madera, Merced, Stanislaus, San Joaquin and Sacramento counties. The sites fall into eight categories (the total equals 36 because one site fit into two categories):

Mainline single track, no other features	8
Mainline double track, no other features	4
Mainline with road crossing at grade, with gates, warning equipment	9
Mainline with sidings or side tracks	7
Mainline single or double track with a street or highway over/undercrossing	2
Mainline junctions with branch line	1
Sidings and spurs off mainline	2
Mainline with trestle or bridge	3

At all of the mainline sites (33 of 35) the tracks show evidence of heavy use (shiny rails) and recent maintenance (regular shaping of embankment, consistent ballasting, etc.) Rail dates indicate that of the 106 observed dates on the mainline, only 15 were before 1950; 91 date from 1950-1990. Of the three railroad bridges or trestles, one was a standard plate girder bridge over Highway 99, the second was a wooden trestle on wood pilings crossing a stream bed, and the third a wooden trestle on concrete abutments carrying the railroad over a Highway 99 underpass.

The 35 sites are located in a variety of settings: rural points in the San Joaquin Valley; rural/residential zones at the edges of valley towns; commercial/industrial sites at the edge of towns; or sites within valley towns. In several instances the railroad runs adjacent to new residential subdivisions created in what were rural agricultural areas.

Detailed information regarding the 35 sites, with photographs and site maps showing location is provided in the attached "Railroad Feature Inventory Forms."

History of Feature

Construction of the Southern Pacific line on the east side of the San Joaquin Valley began in December 1869 at Lathrop, the Western Pacific junction nine miles south of Stockton. The specific route was not dictated by the wishes of valley residents, but by engineering considerations, and grant requirements, local aid, and the desire for monopoly control.

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The line was located about midway between the San Joaquin River and the Sierra Nevada foothills in the northern part of the valley and tapped the region with the highest population density and agricultural potential. In the arid southern portion of the San Joaquin Valley the railroad continued along the eastern side of the plains where streams flowing from the mountains made irrigation possible. Whereas engineering considerations such as favorable sites for bridging rivers were important, the potential for town promotion and townsite acquisition by the railroad to a large degree controlled route selection. The absence of urban centers southward from Lathrop and the small requirements for grading facilitated construction of an efficient, straight route through the valley. Crossing rivers and streams would be the main item of expense, but as Charles Crocker pointed out in most cases they could be crossed in culverts, instead of bridges (Smith 1976:116)

Employing a crew of about 200 Chinese laborers, the company pushed the San Joaquin Valley mainline south eleven miles to the Stanislaus River by May 1870. The first Central Pacific locomotive entered the new railroad town of Modesto, sixteen miles south of Lathrop, on May 5, 1870. The railroad had a profound effect on earlier local supply and service centers. People from the surrounding towns of Tuolumne City, Paradise, Empire, and Westport, for example, moved their businesses and many commercial buildings to the new town site of Modesto. Early settlements on the Kings, Kaweah, and Tule river fans were similarly drained of population by new railroad towns.

The Southern Pacific bridged the Tuolumne River just south of Modesto in June 1871 and continued its construction south founding the towns of Turlock and Merced before year's end. To meet the Southern Pacific's contractual obligations under the congressional land grant, the company settled on the solution of connecting their twenty miles of Southern Pacific lines south of Visalia to the San Joaquin Valley railroad before July 1, 1872. During early 1872 the Southern Pacific drove with extraordinary intensity southeast through Merced County to the new town of Fresno in May 1872 (Tinkham 1923: 94; Carothers 1934: 47-48, 52-54; Preston 1981: 128-129).

The Southern Pacific proceeded south to the proposed Goshen junction with the Southern Pacific's west side line that was planned to link the main valley line with San Francisco by way of Gilroy, Tres Pinos, and Huron. Goshen, located seven miles east of Visalia, dates from the completion of the railroad tracks to that point in June 1872. The town was laid out with more than ordinary care as it was made a division point with a roundhouse, machine shop, hotel, and depot (Carothers 1934: 56-57).

Visalia, one of the few pre-railroad towns in the valley and nearly 1,000 residents in 1870, was bypassed when its citizens voted not to pay the subsidies demanded by the Southern Pacific. The Big Four chose to continue their southern trajectory from Goshen to a point midway between the foothills and Tulare Lake where the railroad founded the town of Tulare City. Tracks were laid out over the semi-barren, dusty plains to Tipton and reached Delano Station, an important shipping point for wool and stock, in July 1873. In April 1874 construction resumed south of Delano to the Kern River. When the town of Bakersfield balked at providing a right of way and land grant to the railroad, the company constructed a bridge over the river on higher land upstream a short distance east of Bakersfield and laid out a new town called Sumner (East Bakersfield). The Southern

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Pacific railroad was open for travel to Sumner in August 1874. Two years later the line had been completed through the foothills through Tehachapi Pass and the Mojave Desert, to Los Angeles (Preston 1981: 122-123).

The Southern Pacific contracted out much of its construction work in the San Joaquin Valley to the Contract and Finance Company, a construction company controlled by the Southern Pacific, and which had built other lines for the company elsewhere in the state. The Big Four set up the Western Development Company in 1874 to replace the Contract and Finance Company. It built the line from Sumner to San Fernando (Daggett 1966: 75-82, 131-133).

Railroad building on the flat, alluvial plains enabled the crews to make rapid progress, wrote another observer: "A few furrows are made on each side, the dirt thrown to the center and the grade is made. Then the ties are laid, and the rails, a few spikes driven, and the road is complete." (Small 1926: 164). Bridge builders constructed trestles across creeks and rivers ahead of the crews laying track. Track laying proceeded in a highly regimented manner with several miles laid each day.

Loading platforms and water stations were located at five to seven mile intervals along the tracks. Town sites were not platted at these crossroad locations (Preston 1981: 123, 125). When the construction crews reached an area the company selected as a future townsite, the engineers staked off a large tract for a railroad yard for warehouses, switching tracks, a depot, and the townsite. Many of the valley's larger cities were laid out as isolated railroad towns in the 1870s and 1880s by the Southern Pacific, which built, settled, and nurtured the infant cities until settlement was successful. Nearly all San Joaquin (and for that matter Central Valley) railroad towns share a common plan: a central depot with a surrounding uniform plat. Lots were laid out in a regular pattern on a rectangular grid aligned with the tracks rather than with the grid of the government survey. As railroad towns grew, surrounding landowners who subdivided their property did not always conform to the railroad plat. The legacy of this two-phase process of subdivision is a special hybrid street pattern characteristic of all Central Valley railroad towns (Smith 1976: passim).

The Central Pacific, its leased lines, and, later, the Southern Pacific were from the beginning under unified control. In March 1884 the Central Pacific and Southern Pacific combined into the Southern Pacific Company. During the next 15 years the Southern Pacific added a total of 2,630 miles of lines (Hofsommer 1986: 1-8).

In a brief time, the Big Four had created a prodigious railroad empire that transformed California and much of the American West. Nowhere was the transformation more profound than in the San Joaquin Valley. Between 1870 and 1880 the population grew by 45 percent and the acreage of improved land increased by 71.6 percent. By the 1880s the Southern Pacific had established about 50 stations in the six San Joaquin Valley counties. Townsite locations were founded at 24 of these stations; of these eight became major towns. Also, by the end of the 1880s Southern Pacific held patents to more than a million acres of valley land. Much of the land went to large land developers, but the railroad made hundreds of thousands of acres available to small farmers and pioneer agricultural colonies (Smith 1976).

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Since the time of its construction the San Joaquin mainline has served the San Joaquin Valley. At numerous points sidings, spurs and side tracks were added to tap local industries or commercial centers. For example, two sites, SPM-24 and SPM-25, are connected to the mainline by spurs originally built in 1898s (Kathy Bisphas, Heublein Wines, April 27, 1994)

In 1923 the Southern Pacific began a major program of rehabilitation and development that lasted through 1930 and cost $387,000,000; it was one of the largest such programs in the company's history (Heath 1945: 25-30). During the Great Depression, Southern Pacific's revenue dropped and reduction of services followed; some branch lines were abandoned and torn up, unprofitable services curtailed, and old equipment scrapped.

In contrast, World War II brought record freight orders and greatly increased passenger traffic. Because most of the Southern Pacific's mainline in California is single track, increased traffic presented a serious problem. To speed wartime delivery schedules, the company installed a Centralized Traffic Control system on its California lines. Further major improvements in the tracks included: installation of 1,400 miles of new rail, mostly 113-pound and 132-pound replacement track for lighter, older rails; 268 sidings and siding extensions; strengthening track structures, such as bridges and trestles; construction of new roundhouse and shop facilities; and expansion of stations (Hofsommer 1986: 190-1207; Heath 1945:44-50).

After the war, Southern Pacific used its wartime gains to enhance its operating system. Perhaps the biggest improvement to the Southern Pacific railway route in California during the post-World War II period was its impressive 78.3 mile, $22 million Palmdale cut-off completed in 1967, which included upgrading the main line through the San Joaquin Valley with new welded "ribbon rails" manufactured at the Tracy rail-welding plant. The ties, rails, and ballast were laid with newly developed, mechanized track-laying machines that placed the ties, aligned rails, drove spikes, and spread ballast with precision impossible to obtain in the previous century. These rails are still functioning on hundreds of miles of Southern Pacific track throughout the Central Valley (*Sacramento Bee*, May 14, 1967; Southern Pacific Bulletin, December 1967). This program accounts, to a large degree, for the modern condition of the San Joaquin mainline seen at the recordation points.

Evaluation of Feature

The Southern Pacific San Joaquin Valley mainline crossing sites evaluated as a part of this inventory do not appear to be eligible for listing in the National Register of Historic Places. While the line was built in the 1870s, and played an important role in the history of transportation in California and the western United States, and to the development of towns and agriculture in the San Joaquin Valley, the railroad related resources at the 35 sites recorded have insufficient integrity of materials, setting, design, workmanship, feeling and association to be eligible to the National Register.

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The resources that would be significant and eligible for the National Register would be those that were related to the original construction of the Southern Pacific main line through the San Joaquin Valley during the period 1869-1876, or which exhibit important characteristics (construction techniques, engineering features, etc.) of that period. None of the crossing points surveyed, however, have resources from the period of significance.

Like most heavily used main railroad routes, this line has aspects that are more similar to a machine than a structure. As with all pieces of heavy equipment, over time parts become worn out or break and are then replaced. The technology of railroad construction has also undergone significant evolution in the past 100 years with respect to rail manufacturing. The iron rails laid in the 1870s were far different from the modern rails rolling out of steel plants today. In the case of the 35 mainline sites (SPM-1 through SPM-35), the major resource related to the period of significance (1869-1876) is the right of way itself; all other resources -- rails, tie plates, ties, ballasting, signals, warning arms, road crossings, etc. -- have been replaced and exhibit either dates or characteristics that place their installation well after the period of significance.

Rail dates at these locations provide an insight into the process of rebuilding the valley railroad in the 20th century. JRP field crews collected 106 rail dates at the 35 sites on the mainline. Of these, only 15 were from the period 1928-1949; none were earlier. Ten rail dates were from 1956, 40 from 1966-67 (consonant with the Southern Pacific's rebuilding program of that time), 28 were from 1969-70, and 14 were from the years 1971-1990. The sites that have the oldest elements, such as SPM-17, SPM-24, and SPM-25 still only dated to the late 1920s; and those have survived primarily because of lighter and less regular use off the mainline. Furthermore these sites, primarily sidings or short spurs, are not of the same historical significance as the mainline. Therefore none of the 35 Southern Pacific San Joaquin Valley Lines sites crossed by the Mojave Pipeline proposed main line or alternatives described above are eligible for listing in the National Register owing to an overall lack of integrity to the period of significance, primarily in setting, design, materials, workmanship, feeling and association.

RAILROAD FEATURE INVENTORY FORM

P-50-000001
CA-STA-000350H

PROJECT: Mojave Natural Gas Pipeline, Northern Extension Project
LOCATION NO: SPM-30
MILEPOST: 197.8
PHOTO DATE: April 19, 1994
QUAD NAME & NO.: Ceres (34)

1. **Name of Line:** Southern Pacific - San Joaquin Mainline

2. **Location of recordation:** This site is located just south of where the welded double tracks pass under the Service Road overcrossing in Ceres **(Photograph 1).**

3. **Structures at or near this location:** There are no railroad related structures at this site. The railroad alignment runs in a southeast-northwest direction at this site. There are two sets of parallel tracks, roughly 13' feet apart; the eastern set contains rails consistently dated 1966, and the western set contains rails dated in the late 1940s. Both sets contain rails welded into continuous track. Service Road passes over the two sets of tracks just north of the APE. West of the APE Lucas Road diverges off Service Road and then extends south, parallel to the west side of the tracks. State Route 99 extends parallel to the north side of the tracks.

4. **Setting at this location:** Southwest of the APE is an orchard, and to the northwest is an auto wrecking and salvage company. State Route 99 lies to the east of the APE.

5. **Integrity considerations for this feature:** Southern Pacific replaced rails along the eastern alignments sometime after 1966. Along the western alignment rails were replaced sometime after 1946.

6. **Attributes at this location (measurements in feet):**

   Width, berm-berm: 34

   Top width (crown): 28

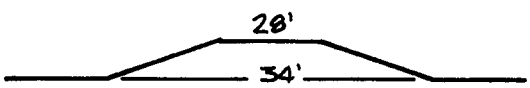
   Height or Depth: 2' 6"

   Ballast Material: Crushed granite

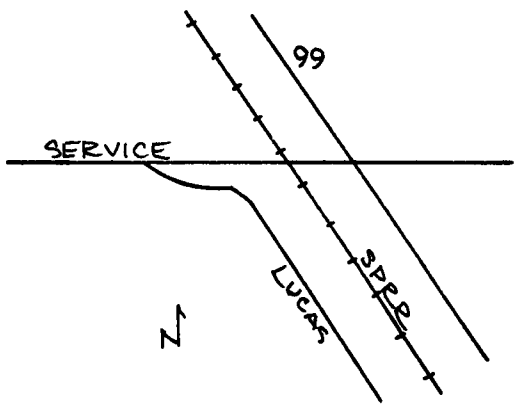
7. **Observed dates:**

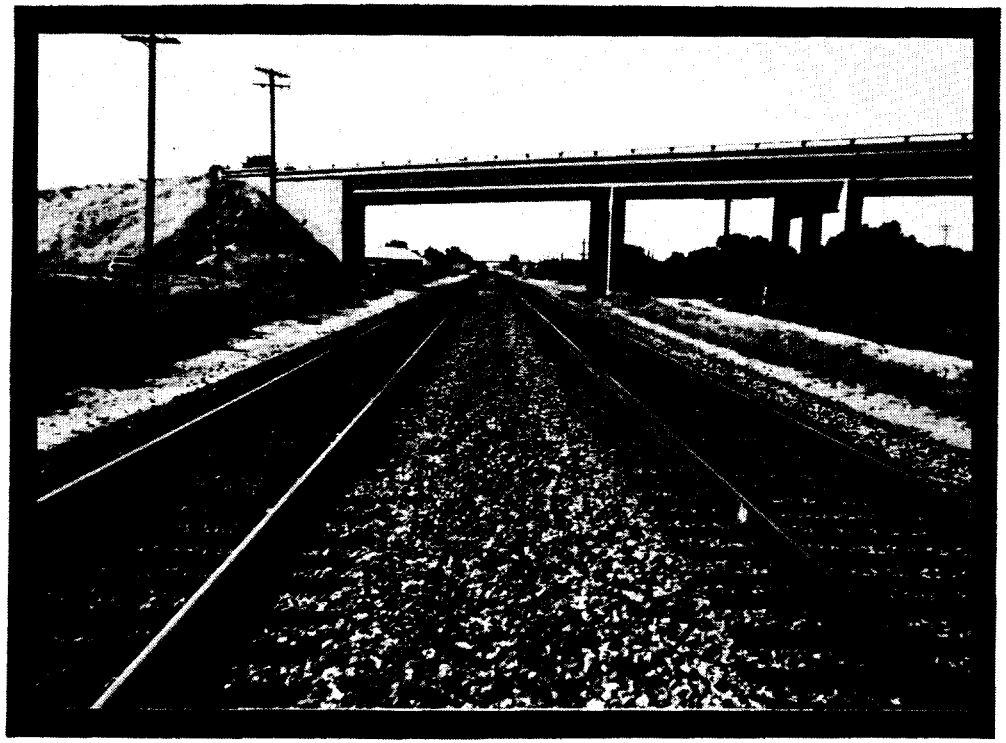
Rails:	APE w/e: 1946/1966	North w/e: 1948/1966	South w/e: 1947/1966
Tieplates:	APE w/e: 1938/1966	North w/e: 1938/1966	South w/e: 1938/1966
Other:			

Sketch, in cross section: Looking northwest



Location Sketch:





1

Photograph Number: 1
Site Number: SPM-30
Common Name: Southern Pacific San Joaquin Mainline

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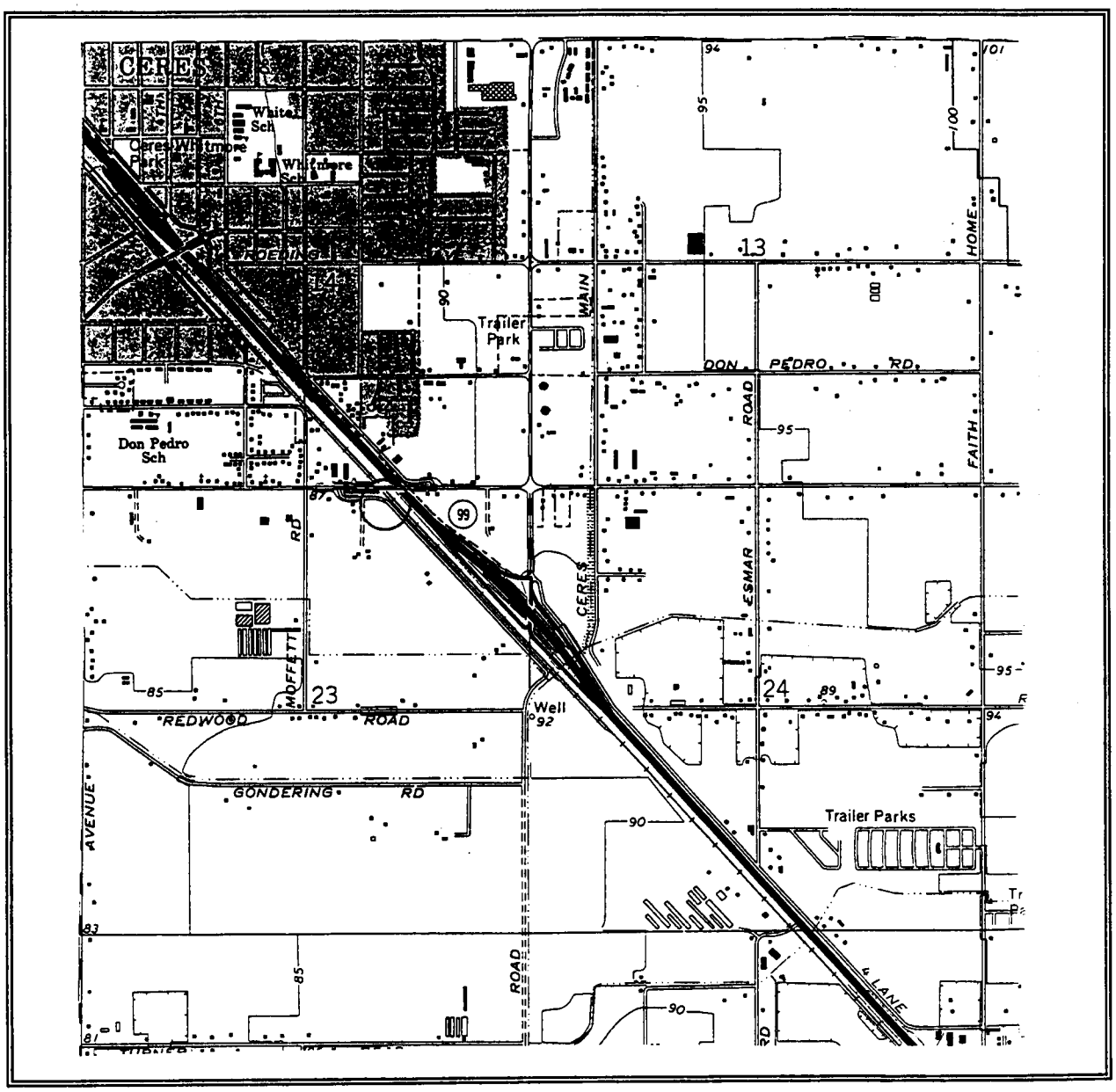
CA-STA-000350H



SITE NAME: Southern Pacific San Joaquin Mainline, Stanislaus County
SITE NUMBER: SPM-30
QUAD SHEET: "Ceres Quadrangle," USGS: 1969, photorevised 1987
PIPELINE LOCATION: MP 197.8

RAILROAD FEATURE INVENTORY FORM

P-50-000001
CA-STA-000350H

PROJECT: Mojave Natural Gas Pipeline, Northern Extension Project
MILEPOST: 0.0 A-118 (205.3 on Mainline)
QUAD NAME & NO.: Salida (36)
LOCATION NO: SPM-31
PHOTO DATE: April 19, 1994

1. **Name of Line:** Southern Pacific San Joaquin Mainline

2. **Location of recordation:** This site is located parallel to the west side of North 9th Street, across from Clayton Avenue in Modesto. The Carpenter Road overcrossing is located about 200 yards to the northwest **(Photograph 1)**.

3. **Structures at or near this location:** There are no structures at this site related to the two sets of parallel tracks.

4. **Setting at this location:** The area east of this site is a commercial district. To the west lies the Regional Fire Training Center.

5. **Integrity considerations for this feature:** Southern Pacific began replacing rails along the western track sometime after 1947. The company began replacing rails along the eastern track sometime after 1966. The eastern rails are welded into a continuous track.

6. **Attributes at this location (measurements in feet):**

   Width, berm-berm: 41

   Top width (crown): 26

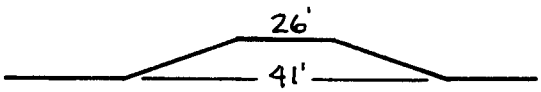
   Height or Depth: 3

   Ballast Material: Crushed granite

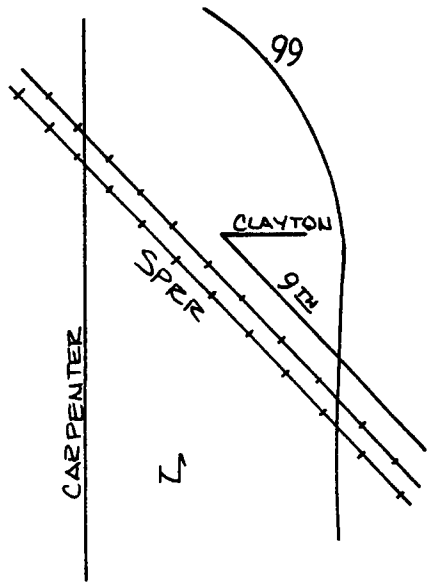
7. **Observed dates:**

Rails:	APE w/e: 1949/1966	North w/e: 1947/1966	South w/e: 1972/1977
Tieplates:	APE w/e: 1955/1966	North w/e: 1941/1966	South w/e: 1957/1966
Other:			

Sketch, in cross section: Looking north



Location Sketch:



1

Photograph Number: 1
Site Number: SPM-31
Common Name: Southern Pacific San Joaquin Mainline

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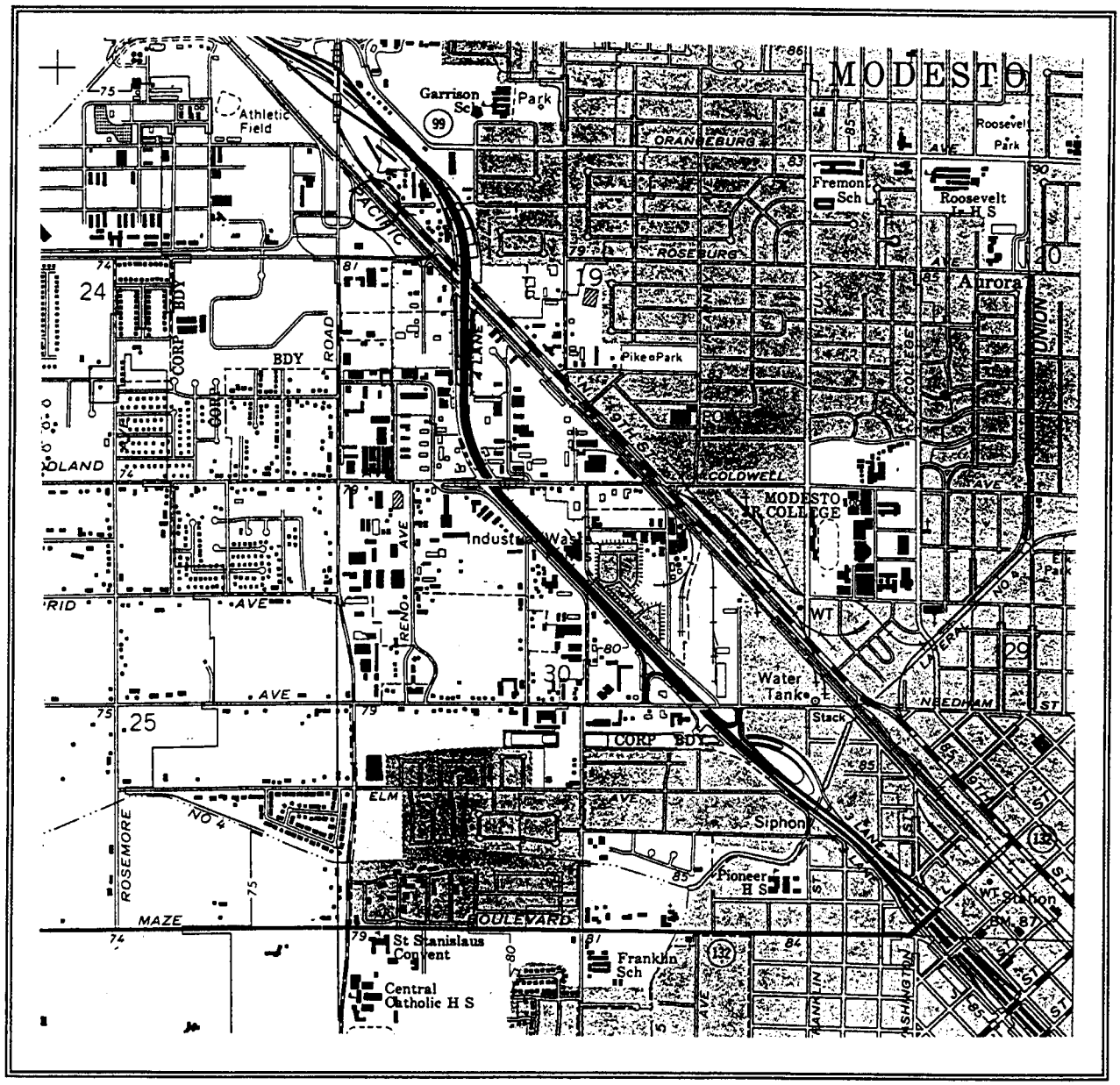
CA-STA-000350H



SITE NAME: Southern Pacific San Joaquin Mainline, Stanislaus County
SITE NUMBER: SPM-31
QUAD SHEET: "Salida Quadrangle," USGS: 1969, photorevised 1987
PIPELINE LOCATION: MP 0.0 A-118 (205.3 on Mainline)

P-50-000083

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 50-00083
HRI#
Trinomial

*Resource Name or # (Assigned by recorder) Tidewater Southern Railroad

*Recorded by: N. Lawson *Date: 3/16/09 ☒ Continuation ☐ Update

P2. Location: ☒ Not for Publication ☐Unrestricted *a. County: Stanislaus

8/13

*b. USGS 7.5' Quad: *Ceres* Date: 1987 T 4S;R 9E; Sections 4, 9, 16, 21; M.D.B.M.

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: Segment of the UPRR rail line which runs south from Hatch Road to Wood Road, approximately one half mile east of Crow's Landing Road.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The TSRR segment recorded here runs adjacent to the 69 kV line to be reconductored for approximately four miles. The section of rail line visible on the historic maps reviewed and located in the A2PP APE is a segment of the TSRR interurban electric railway. This segment runs between Hatch Road and Wood Road and was a part of the TSRR completed in 1916. Although the segment recorded in the A2PP was initially intended to be an electric line, it was never actually electrified (Hatoff et al. 1995). The newly-recorded section of TSRR located within the transmission line corridor runs along the footprint of the original historic railroad grade; however, modern upgrades to the rail line, including modern rail crossings, upgraded rail lines and ties are extant. Additionally, the rail grade itself has been modified to allow for heavier loads to be run upon the tracks.

This line has been recorded in other parts of Stanislaus County as P-50-00083 (Napton, 1994; Sharpe 2003) and in San Joaquin County (Hatoff 1995) as P-39-00015 (CA-SJO-256H). In the A2PP APE, the TSRR has not yet been recorded. None of the segments of the TSRR investigated by Napton (1994), Sharpe (2003),and Hatoff (1995) were determined to be NRHP or CRHR-eligible. These previously recorded and discontinuous segments are not considered eligible to the NRHP as the segments lack integrity due to modern improvements made to the tracks, the rail ties, and the rail beds (Napton, 1994; Sharpe, 2003; Hatoff, 1995). This segment, likewise, was determined not eligible for listing on the NRHP or the CRHR.

P5. Description of Photo: (View, date, accession #) TSRR, view to the south at Hatch Road.

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") TID Almond Power Plant No. 2, AFC Application.

Historic Context

The Central Valley is defined historically by agriculture and transportation. The area around Modesto and Ceres is no exception. In addition to the railroads, such as the Central Pacific and the Western Pacific, ferries serviced the area via several ferry landings and the Tuolumne and the San Joaquin Rivers. The road that would eventually become State Route 99 was planned and permitted in the late 1800's, although the paved highway was not completed until 1968. Ceres was first settled in 1870 and by 1872, the CPRR stopped at Ceres. Wheat was planted on thousands of acres in the region. The settlement of Crow's Landing was founded by J.B. Crow, one of the first wheat growers in the area. Crow established a landing on the San Joaquin River to ship his wheat to market and Crow and his two partners operated a ferry at that landing from 1870 until 1885 (Napton 1991). Crow's Landing Road represents the original road which connected two ferries, the Davis and Maze's Ferry on the Tuolumne and the Fairbank's Ferry on the San Joaquin. This main road was established in 1870. Several small taverns were constructed along this main road and served as way stations for (Brotherton 1982).

Hot dry summers and over cultivated lands made wheat growing less and less prosperous as the 19th century drew to a close. In 1887, the Wright bill, a bill that proposed the creation of irrigation districts in California, passed the California Senate and Assembly and was signed into law by then Governor Washington Bartlett. Local irrigation districts, including the TID and the Modesto Irrigation District (MID), created water conveyance systems in the early 1900s and started the flow of water into the area. Farmers began to diversify their crops and experimented with fruit and nut trees that did not require as much water as wheat. The combined efforts of the TID and the MID resulted in the construction of the La Grange Dam in 1893. The promise of water and cheap land brought an influx of settlers into the area. Expanding rail lines and ferry service made travel into the region easier.

By 1912, the Tidewater Southern Railroad connected Modesto with Stockton. This line operated as a freight feeder system and connected with the Western Pacific Railroad at Manteca Junction. Modesto was connected with Turlock via rail by 1916 (Paterson 1989) providing easy access to rail lines for local growers. A rise in canneries throughout the region provided convienient buyers for local fruit and vegetable sellers who, prior to the opening of the canneries had to haul their figs, apricots, and peaches to San Jose or Santa Clara for processing.

Period of Significance

From the standpoint of agriculture, which was the primary occupation of the people that settled the TID region, the years from **1900 to 1920** were the ones of growth and development. These were the pioneering times when many families livened in one end of a barn while their cattle resided in the other end until the family could afford a barn and a house. World War I brought a sharp increase in the price of agricultural products and the local gross farm income soared from 14,300,000 dollars in 1910 to 34,204,000 dollars in 1919. Prices crashed in 1920 and did not recover until World War II (Hohenthal 1972: 217).

The recorded segment of the TSRR was completed in 1916, thus making settlement in the region easier as well as providing easy shipping access to local farmers. Using 1900 to 1920 as the period of significance effectively captures the important historical context of the historic built environment in the immediate project area. Buildings, farms, and associated outbuildings were constructed in direct response to the newly expanded freight line.

The TSRR, which runs adjacent to the 69 kV line to be reconductored and less than 200 ft to the west of the proposed plant site, has been recorded in other parts of Stanislaus County as P-50-00083 (Napton, 1994; Sharpe 2003) and in San Joaquin County (Hatoff 1995) as P-39-00015 (CA-SJO-256H). In the A2PP APE, the TSRR has not yet been recorded. None of the segments of the TSRR investigated by Napton (1994), Sharpe (2003),and Hatoff (1995) were determined to be NRHP or CRHR-eligible. These previously recorded and discontinuous segments are not considered eligible to the NRHP as the segments lack integrity due to modern improvements made to the tracks, the rail ties, and the rail beds (Napton, 1994; Sharpe, 2003; Hatoff, 1995).

The section of rail line visible on the historic maps reviewed and located in the A2PP APE is a segment of the TSRR interurban electric railway. This line originally connected passengers between Taylor Street in Stockton and downtown Modesto. The line was eventually converted into a feeder line for the main Southern Pacific and Central Pacific lines, which were the first railroads to run through the San Joaquin Valley. The TSRR is now a part of the Union Pacific Railroad (UPRR). One separate section of this railroad is recorded elsewhere in Stanislaus County as site P-50-00083.

The historic TSRR was incorporated in 1910 and was originally an interurban electric railway that was intended to run from Stockton south through the San Joaquin Valley. In 1912, the TSRR consolidated with the Tidewater and Southern Transit and began operation as the Tidewater Southern Railway (Napton, 1994). By 1916, the line ran south to Turlock. The line was only electrified to Modesto and steam engines ran on the remainder of the track between Modesto and Turlock. The TSRR remained an independent line until 1917 when it was acquired by the the Western Pacific Railroad who bought much of the stock in the TSRR and began changing the line into a conventional feeder line. The purchase of the TSRR was a part of the WPRR's expansion designed to extend its market though the acquisition of feeder lines which ran into the main WPRR line. By the 1930's, passenger service on the TSRR was stopped and most of the electric service was removed (Hatoff et al. 1995). The line was further upgraded after World War II as the newer heavier diesel locomotives required heavier rail (Sharpe, 2003). The line is still actively used between Modesto and Stockton as a freight feeder line.The WPRR merged with the UPRR in 1983, two months before its 80th anniversary. Shortly after, the UPRR began an additional series of improvements to the Old WPRR tracks to enable larger locomotives and heavier freight cars running at higher speeds to run on the WPRR. The upgrades included heavier rails, new ties, and improved rail beds to permit higher tonnage on the tracks (Bridges, 1983).

The newly-recorded section of TSRR located within the transmission line corridor runs along the footprint of the original historic railroad grade; however, modern upgrades to the rail line, including modern rail crossings, upgraded rail lines and ties are extant. Additionally, the rail grade itself has been modified to allow for heavier loads to be run upon the tracks. Consistent with all other recorded segments of this rail line, this particular segment of the TSRR does not appear to be eligible for listing on the NRHP as it no longer retains integrity. This railroad segment was evaluated in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. This railroad segment does not appear to meet any of the significance criteria as outlined in these guidelines.

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Sharpe, James J. 2003. *Primary Record From P-50-00083, Tidewater Southern Railroad*. Document on file, Central California Information Center, Stanislaus State University, Turlock, CA.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # 50-00083
HRI #
Trinomial

Resource Name or #: (Assigned by recorder) Segment of the Tidewater Southern Railroad

L1. Historic and/or Common Name: Tidewater Southern Railroad; now the Union Pacific Railroad

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map) The recorded section is limited to the section which runs from Hatch Road south to Wood Road. This section is located on the *Ceres* 7.5′ quadrangle approximately ½ mile east of the intersection of Hatch Road and Crow's Landing Road.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) This section of railroad is a single track with modern heavy gauge rails and pressure treated ties. Cross streets, including Hatch Road, Whitmore Road, and Service Road are paved with asphalt. The remainder of the recorded line is situated upon a crushed granite ballast berm. All crossing guards, warning lights, and associated signage are modern.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)
- **a. Top Width:** 12 feet
- **b. Bottom Width:** 20 feet
- **c. Height or Depth:**
- **d. Length of Segment:** approximately 4 miles

L5. Associated Resources: Modern crossing guards, warning lights

L4e. Sketch of Cross-Section (include scale) **Facing:**

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.) This segment is located near agricultural fields, farms, residences, and a small dairy.

L7. Integrity Considerations: The integrity of this segment has been compromised due to the improvements made to the track in the 1940's after complete removal of the electric lines north of this segment, as well as in the 1980's following the UPRR acquisition of the WPRR. The original historic features of this line have been removed and thus, the historic integrity is gone.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) View to the south.

L8a. Photograph, Map or Drawing

L9. Remarks:
While the original location of the TSRR line remains, the track has been upgraded and thus, has lost historic integrity.

L10. Form Prepared by: (Name, affiliation, and address)
Natalie Lawson, CH2M HILL, 6 Hutton Centre Drive, Santa Ana, CA 92707

L11. Date: January 1, 2009

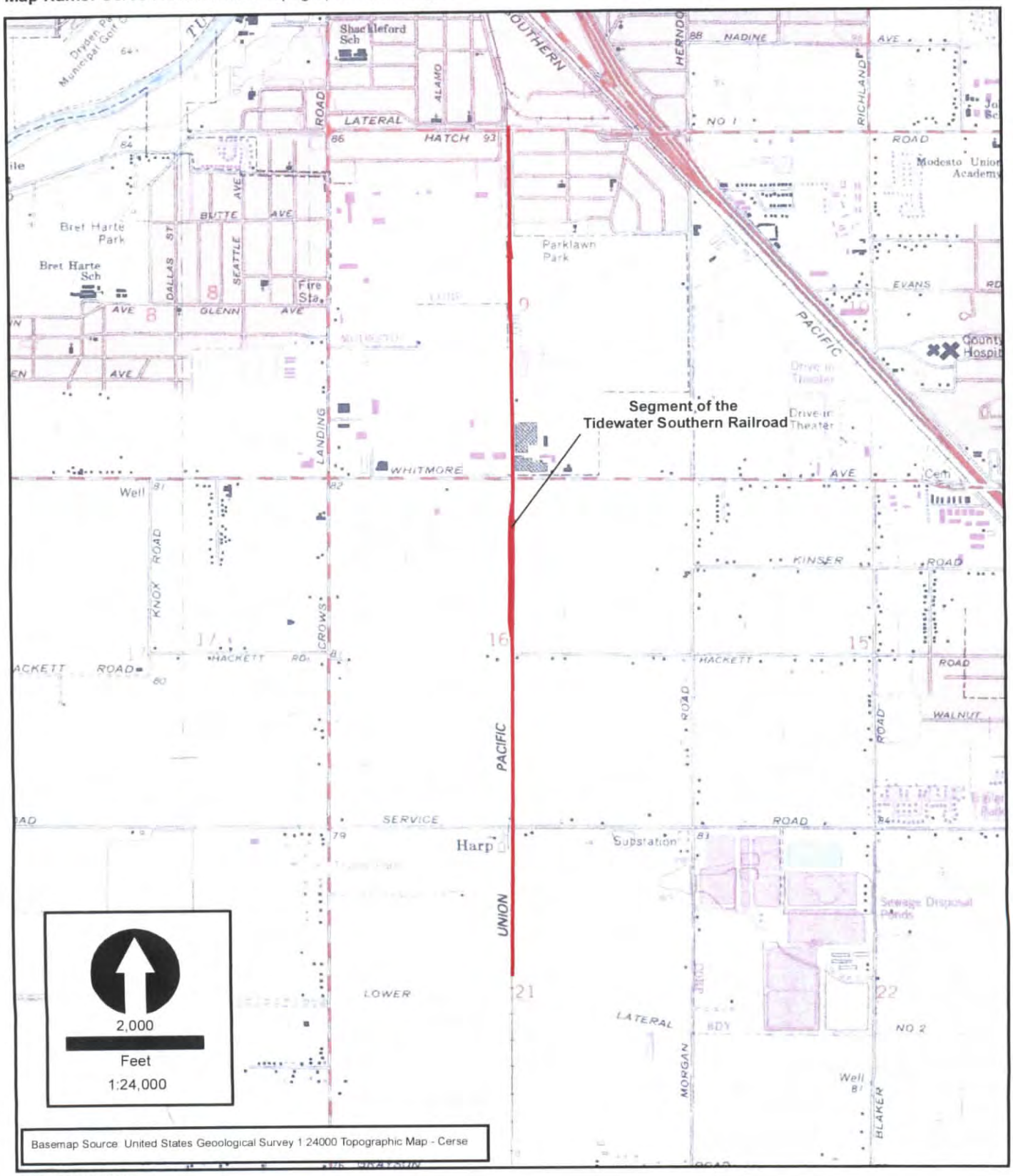
State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-50-000083
HRI#
Trinomial:

Resource Name or #: Segment of the Tidewater Southern Railroad

Map Name: Ceres 7.5 min USGS Topographic Quadrangle **Scale:** 1:24000 **Date of Map:** 1987



Basemap Source United States Geological Survey 1 24000 Topographic Map - Cerse

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-50-000083
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date 1/28/03

Page 1 of 5 *Resource Name or #: Segment of the Tidewater Southern Railroad

1/07

P1. Other Identifier: Tidewater Southern Railroad
*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County: Stanislaus
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad: Turlock, CA. Date: 1980 T ; R ; ¼ of ¼ of Sec ; M.D. B.M.
c. Address: City: Turlock Zip:
d. UTM: Zone: 10 ; 685444 mE/ 4150979 mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

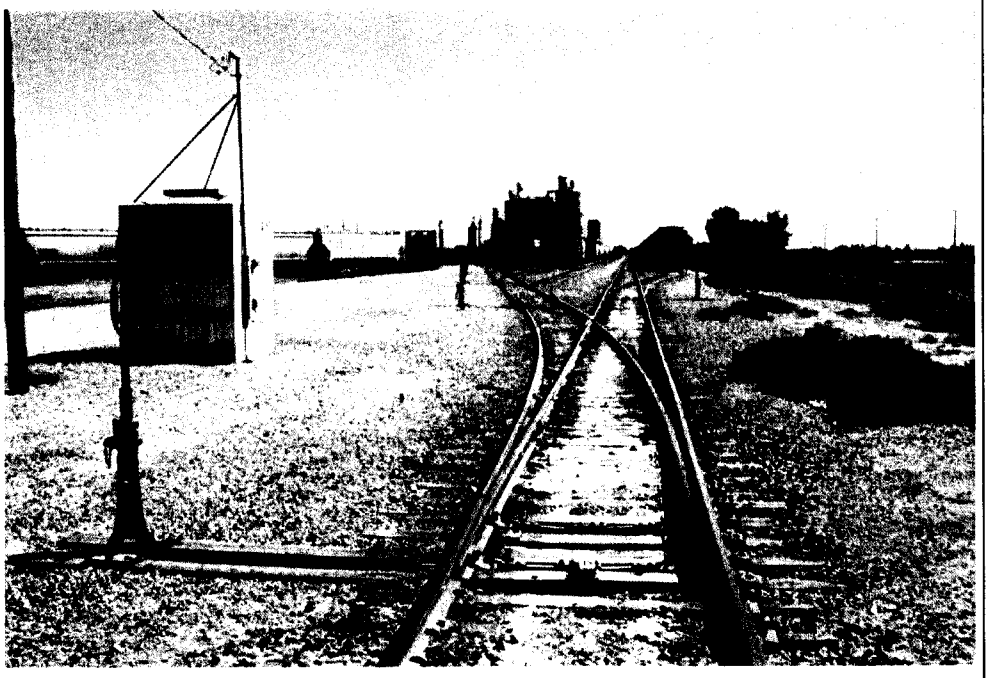
The survey point was located at the crossing of the Tidewater Southern Railroad and Washington Road.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This segment of the railroad is located in an agricultural setting and used in part to transport grain to the Tyson elevators a short distance to the east of Washington Road. At Washington Road, the rail consists of a single set of tracks set at grade with concrete pad added for traffic crossing. Railroad signal gates are located on each side of the crossing. A short distance east of Washington Road, is a small silver building used as a relay case for the signal light and a switch stand track. West of Washington at the switch stand, the railroad has five spur lines used by the Tyson grain elevators.

*P3b. Resource Attributes: (List attributes and codes) AH7. Railroad Grade
*P4. Resources Present: ☐Building X Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Photo #15, Looking east from Washington Road, 9-20-02.

*P6. Date Constructed/Age and Sources: X Historic ☐Prehistoric ☐Both

*P7. Owner and Address: Tidewater Southern Railroad Owned & Operated by the Union Pacific Railroad

*P8. Recorded by: (Name, affiliation, and address) James J. Sharpe, CH2M HILL 2485 Natomas Park Drive, Sacramento, CA.

*P9. Date Recorded: 9/20/02
*P10. Survey Type: (Describe) General Reconnaissance Inventory

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Cultural Resource Management Report, Walnut Energy Center, Stanislaus County, California. James C. Bard with James J. Sharpe, Robin D.McClintock and Elizabeth D.Calvit (January 10, 2003). CH2MHILL, Inc., Sacramento. Report on file, California Energy Commission,Sacramento.

*Attachments: ☐NONE X Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record X Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

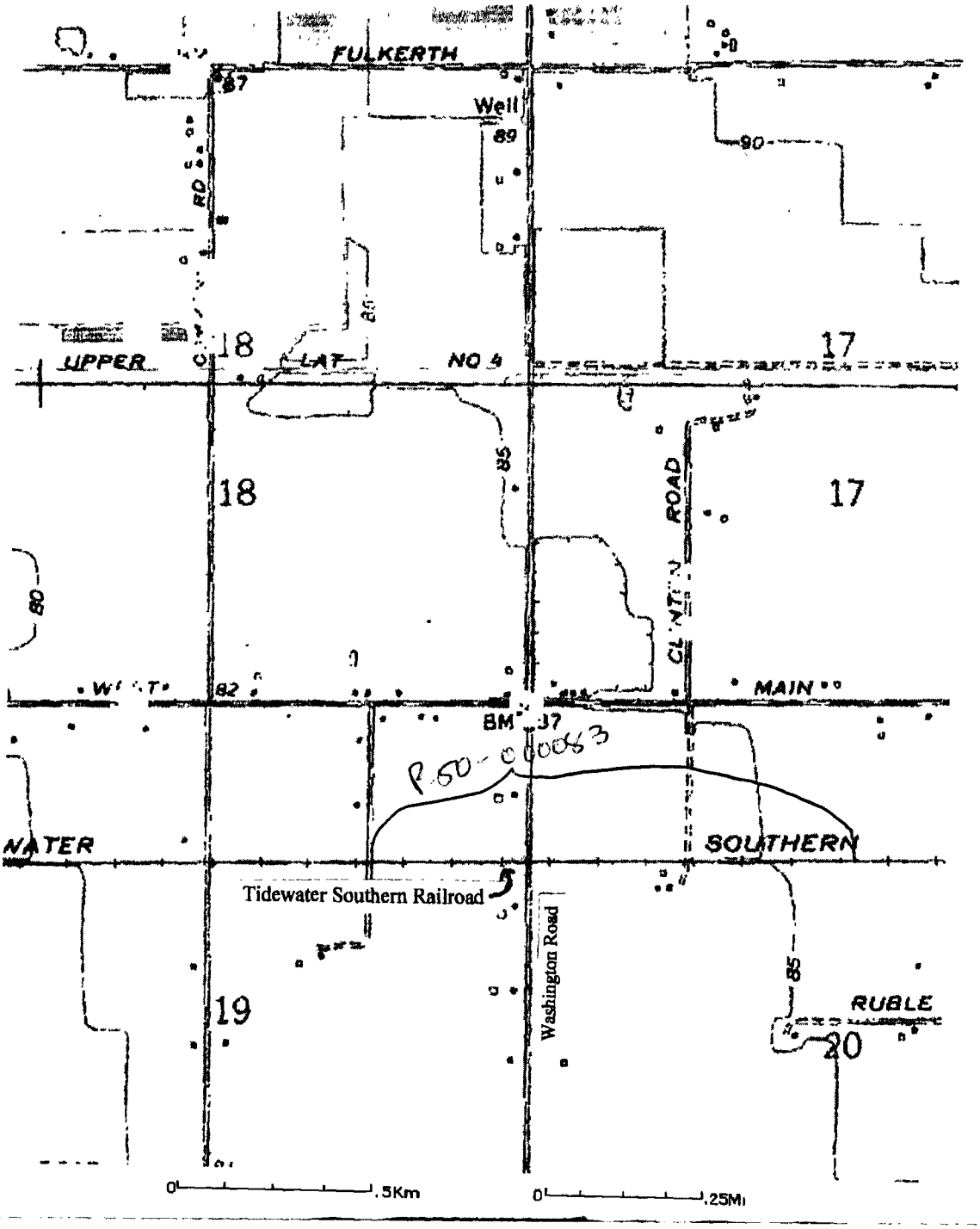
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-50-000083
HRI#
Trinomial

*Resource Name or #: Tidewater Southern Railroad

*Map Name: Turlock, CA (20ft Contour) *Scale: 1:24,000 *Date of Map: 1980



*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-50-000083
HRI #
Trinomial

Resource Name or #: (Assigned by recorder) Tidewater Southern Railroad

L1. Historic and/or Common Name: Tidewater Southern Railroad
L2a. Portion Described: ☐ Entire Resource X Segment ☐ Point Observation
Designation: Washington Road Crossing

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

The track segment, west of Turlock,CA. crosses Washington Road. The segment's UTM coordinates at that location are Zone 10, 685444 mE, 4150979 mN.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

The rails rest on gravel basalt held in place with wood railroad ties. The track is oriented in an east/west direction.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)
One lane crossing

L5. Associated Resources:
Railroad crossing signs, relay building, and switching mechanism are shown in photographs.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
The tracks are located in an agricultural setting.

L4e. Sketch of Cross-Section (include scale)
Facing: See photographs

L7. Integrity Considerations:
The Tidewater Southern began operations as an interurban electric railway to serve a route projected to extend from Stockton south along the San Joaquin Valley. On October 4, 1910, the Tidewater and Southern Railroad was incorporated and soon it constructed railroad grade to a point about 4 miles south of Modesto (Guido 1950:3-13). The Tidewater and Southern consolidated in 1912 with another company (Tidewater and Southern Transit) and then operated under the name Tidewater Southern Railway (Napton 1994).

The new railroad accelerated construction during 1912 and opened for service 32.23 miles of electric railway between Taylor Street in Stockton and the downtown Modesto passenger terminal. Operated as a freight feeder system, the railroad connected with the Western Pacific Railroad (WPRR) at Manteca Junction some 3 miles north of Manteca. The TSRR gradually expanded its operations in 1916 by opening a 16-mile extension from Modesto into Turlock. The extension of electrification failed to materialize and the interurbans never operated south of Modesto.

In 1907, W.A. Irwin promoted construction of a townsite south of Turlock, to be called Irwin City. The TSRR proposed to run its line through Irwin City to Fresno, but the residents of Irwin demurred, so the railroad encouraged development of an alternative townsite to the north, called Hilmar. The latter was founded and Irwin soon faded away.

According to Hohenthal et al. (1972) and Shireman (1970), the TSRR line was electrified as far as Modesto, steam locomotives being used on the 28-mile run south to Hilmar. The southward extension of the railroad was attractive to the WPRR, and in 1917 that company bought the majority of stock in the TSRR. A 10-wheel locomotive was operated on the line, and branch lines were constructed during this period for freight service. These included an 8-mile extension to Hilmar (south of Turlock), opened in 1917, and a 6.6-mile branch to Manteca, opened in 1918. It was planned to extend service from Nile Garden near Manteca south down the San Joaquin Valley as far as Bakersfield, but this ambitious scheme never materialized (Napton 1994).

Incrementally, the WPRR transformed the TSRR from its original electric interurban configuration to a conventional feeder railroad. The line's passenger service was discontinued in 1932, and the WPRR began dismantling the electric overheads along the mainline between Stockton and the northern limits of Modesto.

After World War II, the WPRR began to upgrade the mainline long-haul freight traffic and abandoned some of its branches. The WPRR brought in new diesel locomotives for the Tidewater Southern, some of which were used on the Sacramento Northern Western Pacific subsidiary as well. This heavier equipment required a heavier rail, and virtually all of the track was replaced after 1945 (Guido 1950). In time, the TSRR abandoned its Manteca Branch, but the line is still actively used along the Modesto to Stockton mainline as well as the Turlock Branch.

References:

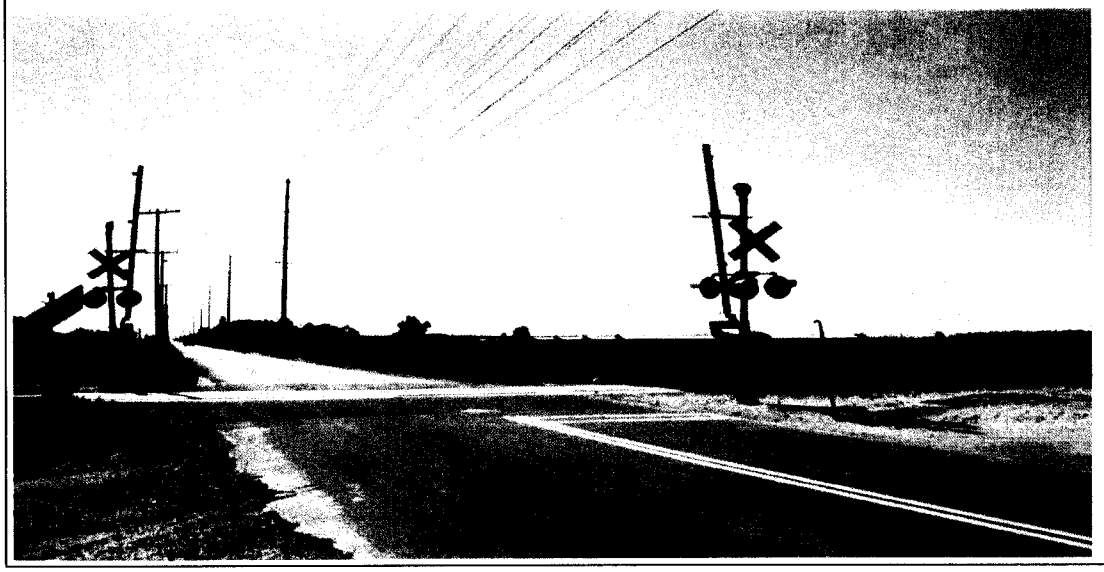
Guido, F. (ed). 1950. *Tidewater Southern Railway.* The Western Railroader 13(11)[No.131]:3-13. Northern California Railroad Club, San Mateo.

Hohenthal, H.A., J.E. Caswell, and V. Sonntag. 1972. *Streams in a Thirsty Land,* City of Turlock, California.

Napton, L. K. 1994. *Primary Record From P-39-15 (CA-SJO-256H)-Tidewater Southern Railway (between Lathrop Road and Sprenckles Road, Manteca, CA.).* Document on file, California Historical Resources Information System, Central California Information Center, Stanislaus State University, Turlock, CA.

Shireman, K. 1970. *Tidewater Interurban: A Short History of Electric Interurban Service Between Modesto and Stockton.* Senior Thesis, Department of History, California State College, Stanislaus. Turlock.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing (View, scale, etc.) Photo # 18, Looking north from Washington Road, 9-20-02.

L9. Remarks: None

L10. Form Prepared by: (Name, affiliation, and address) James J. Sharpe, CH2M HILL 2485 Natomas Park Drive, Sacramento, CA. Form Reviewed by: Elizabeth D. Calvit, CH2M HILL - Secretary of the Interior-qualified Architectural Historian. NRHP/CRHR eligibility evaluation (see Page 5 of 5) provided by Ms. Calvit.

L11. Date: 1/28/03

*Recorded by: James J. Sharpe CH2M HILL 2485 Natomas Park Drive, Sacramento, CA. *Date: 1/28/03 X

Criteria A: This segment of the Tidewater Southern Railroad branch evaluated for this project does not appear to meet the criteria for listing in the National Register nor does it appear to be a historical resource for the purposes of CEQA, primarily because of its loss of historic integrity with the replacement of the track in 1945 and the updating of the Washington Road crossing. Therefore the section under evaluation in this form does not appear to have the potential to be a contributor to any larger historic property, nor does the segment appear to meet the criteria individually.

Criteria B: This property does not appear to be associated with any individuals who made significant contributions to national, state, or local history as required under Criterion B. This property does not convey any association with W.A. Irwin (Turlock townsite promoter) or any of the well-known historical figures associated with California's major railroads (e.g., Stanford, Crocker, etc).

Criteria C: This property does not appear to be an important example of a type, period, or method of construction. No special engineering or construction techniques were known to be used in the construction of this segment of the railroad. Improvements and upgrades to this segment of the railroad have compromised the integrity.

Criteria D: The railline is documented and does not appear to be a principal source of important information in this regard.

This property has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The property does not appear to meet the criteria for listing in California Register of Historical Places.

Evaluated by Ms. Elizabeth D. Calvit, CH2M HILL. Secretary of the Interior-qualified Architectural Historian.

* also P-50-000083 P-39-000015
in Stanislaus Co. CA-SJO-000256H *

SITE NAME: Tidewater Southern Railway
SITE NUMBER: UP-1, UP-2, UP-3. UP-4, UP-5
QUAD SHEET: Various; see individual "Railroad Feature Inventory Forms" S 196
PIPELINE LOCATION: Various; see individual "Railroad Feature Inventory Forms"

Riverbank 7.5' Manteca 7.5'

Feature Description

The proposed Mojave pipeline crosses the alignment of the Tidewater Southern Railway at five locations, identified as UP-1 through UP-5. It will be noted that these five crossings carry "UP" prefixes, recognizing that the line is currently owned by the Union Pacific, although it was built by the independent Tidewater Southern Railway and owned for many years by the Western Pacific Railroad.

As discussed under "History of Feature," the Tidewater Southern Railway originally comprised three segments: a mainline from Stockton to Modesto; a branch from the mainline to Manteca, south of Stockton; and a branch from Modesto south to Turlock. Sites UP-1 and UP-2 are on the Turlock Branch, UP-3 is on the mainline, and UP-4 and UP-5 are on the Manteca Branch.

The existing tracks reflect various stages of post-World War II modernization undertaken by the Western Pacific, which owned the line after 1917. The two sites on the Turlock Branch (UP-1 and -2) show signs of the most recent modernization. The rails were laid at these points some time after 1966. The track at the one site on the original mainline (UP-3) appears to have been upgraded in the immediate post-war years, with rails dating to some time after 1947. The Manteca Branch was abandoned in the post-war period and all ties and rails have been removed. Only the earthen embankment remains from the branch line at these points.

History of Feature

The Tidewater Southern Railway began as a small interurban electric passenger and freight operation. Although its founders had visions of extending the line as far south as Fresno and to the Southern California coast, the line was always a limited facility in San Joaquin and Stanislaus counties, extending from Stockton to Modesto and from Modesto to Turlock, a distance of less than 50 miles. The independent line was short-lived; it went into service in 1912 and was acquired by the Western Pacific Railroad in 1917. Little by little, it was transformed from electric to steam (later diesel) service; it was always a dual-motive line, with an electric main between Stockton and Modesto and steam branch service south of Modesto and on a small branch to Manteca. By the mid-1930s, passenger service had been discontinued and virtually all of the electric service removed. The line operates today as a feeder branch for the Union Pacific (formerly Western Pacific) service, providing a connection between Modesto and the Union Pacific mainline at Stockton.

(R-SO-83 Sta. Co.) P-39-000015 CA-SJO-256H

The Tidewater Southern was organized in 1910, with Byron Bearce, a Stockton investor, as president (Strapac, 1973: 3). The original intent of the company was to build an electric railroad from Stockton to Fresno, with possible connections to Bakersfield as well as a branch to connect with the Pacific coast in Ventura County. In its initial (and ultimately its only) phase of construction, the company began laying track north from Turlock toward Modesto and south from Stockton toward Modesto. The key mainline from Stockton to Modesto (UP-3 is on the mainline) was completed as a conventional (steam) railroad in 1912 and electrified in 1913. The southern extension from Modesto to Turlock was completed in 1916 but was never electrified (UP-1 and UP-2 are on the Turlock Branch). A small branch line was built in the initial phase of construction to connect with Manteca, due south of Stockton but not on the main line (UP-4 and UP-5 are on the Manteca Branch). This short branch was never electrified.

On its mainline, the Tidewater Southern used overhead wires to power its locomotives. In its earliest years, the line offered extensive passenger service between Stockton and Modesto; freight service only was offered on the non-electric branches to Manteca and Turlock. Although unprofitable from the outset, passenger service survived until 1932 (Strapac, 1974: 10). Freight service, by contrast was generally quite profitable and the company invested in modern electric and steam locomotives for its freight operations (Western Railroader, 1950: 7).

In 1917, the Western Pacific Railroad purchased a controlling interest in the Tidewater Southern. This purchase was part of a substantial expansion program by the WP, designed to extend its market through acquisition of existing shortlines which could be operated as feeders for the WP mainline. Incrementally, the Western Pacific transformed the Tidewater Southern from its original electric interurban configuration to a conventional feeder railroad. As noted, the line's passenger service was discontinued in 1932. The same year, the WP began dismantling the electric overheads along the mainline between Stockton and the northern limits of Modesto. The electric lines were retained in Modesto, however, between 1932 and 1946, requiring the use of doubleheaded steam and electric locomotives within that city (Strapac, 1974: 10). In 1946, the last of the electric lines were removed.

After World War II, the Western Pacific began to upgrade the mainline long-haul freight traffic and abandoned some of its branches. The WP brought in new diesel locomotives for the Tidewater Southern, some of which were used on the Sacramento Northern WP subsidiary as well. This heavier equipment required a heavier rail and virtually all of the track was replaced after 1945 (*Western Railroader* 1950: 11). In time, the Tidewater Southern abandoned its Manteca Branch; however, the line is still in active use along the Modesto to Stockton mainline as well as the Turlock Branch.

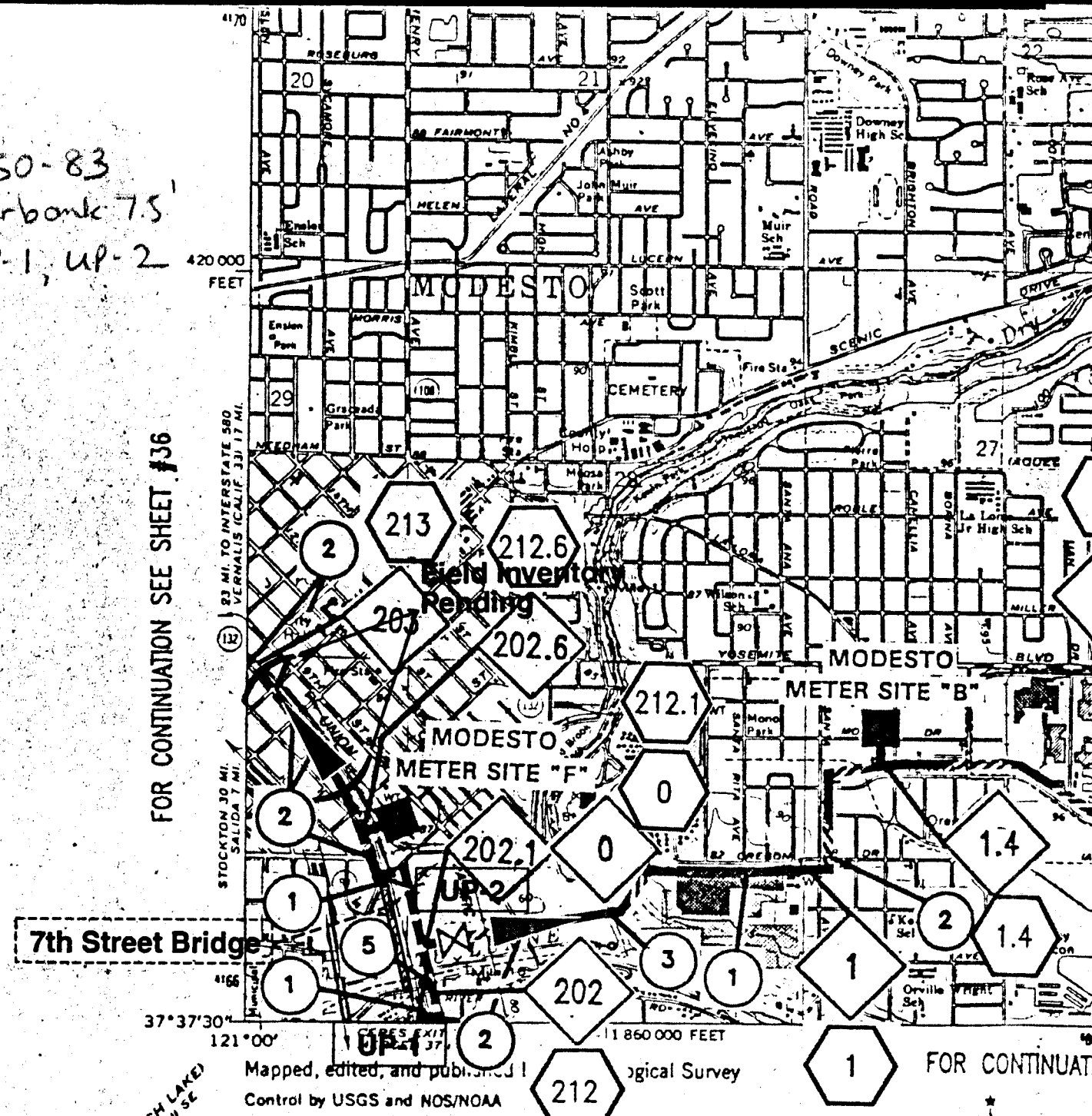
Evaluation of Feature

The five sites associated with the Tidewater Southern Railway do not appear to be eligible for listing in the National Register of Historic Places because they do not retain integrity of setting, design, materials, workmanship, feeling and association. Potential significance

(P-50-83 Sta. Co.) P-39-000015
CA-SJO-000250/H

for this shortline relates chiefly to the fact that it was one of a small number of interurban electric train lines in the San Joaquin Valley. As noted under "History of Feature," all vestiges of the old interurban line were dismantled in the 1930s, when the line was converted to conventional motive power, and in the 1940s, when it was rebuilt for heavier diesel locomotives. The Manteca Branch was affected most dramatically when the branch was abandoned and the track removed. The existing line is almost entirely a product of the post-World War II period, with only the alignment serving as a reminder of its past use as an interurban. Track on the Turlock Branch dates to the late 1960s; track on the main line dates to the late 1940s; there is no track on the Manteca Branch. Because they lack integrity to the potential period of significance for the line, these five sites do not appear to meet the eligibility criteria for listing in the National Register.

P-50-83
Riverbank 7.5'
UP-1, UP-2



Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1967. Field checked 1969
Supersedes map dated 1914, revised 1953

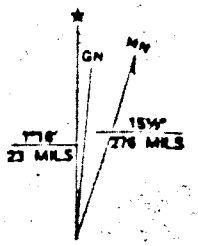
Polyconic projection. 1927 North American datum
10,000-foot grid based on California coordinate system, zone 3
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

To place on the predicted North American Datum 1983, move the projection lines 12 meters north and 91 meters east as shown by dashed corner ticks

There may be private inholdings within the boundaries of the National or State reservations shown on this map

Red tint indicates areas in which only landmark buildings are shown

Fine red dashed lines indicate selected fence lines



UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-50-000083 new seg
HRI #
Trinomial CA-STA-425H
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

Page 1 of 3 + map *Resource Name or #: (Assigned by recorder) Tidewater Southern Railroad Abandonment (grade)
P1. Other Identifier:
*P2. Location: __ Not for Publication ✓ Unrestricted
*a. County Stanislaus and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad Salida 7.5' Date City T 3S; R 9E; __ of N ½ of Sec 8; MD B.M.
c. Address Zip
d. UTM: (Give more than one for large and/or linear resources) Zone 10, 676023 mE/ 4173758 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
Crosses the San Joaquin Pipelines around MP 73.50.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Tidewater Southern Railway Abandonment runs north-south and crosses the San Joaquin Pipeline (SJPL) at around MP 73.50. As an abandonment, no extant tracks are located along the railroad right-of-way. A slightly raised berm covered with ballast is the only remaining evidence of the railroad line.

2/2012

*P3b. Resource Attributes: (List attributes and codes) HP39 -- other
*P4. Resources Present: __ Building ✓ Structure __ Object __ Site __ District __ Element of District __ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) Tidewater Southern Abandonment, looking north
*P6. Date Constructed/Age and Source: ✓ Historic __ Prehistoric __ Both
1912 (Brotherton, 1981)
*P7. Owner and Address:
Union Pacific Railroad
1400 Douglas Street
Omaha, NE 68179
*P8. Recorded by: (Name, affiliation, and address)
Carey & Co.
460 Bush Street
San Francisco, CA. 94108
*P9. Date Recorded:
8/13/2007
*P10. Survey Type: (Describe)
Intensive Survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")
San Francisco Public Utilities Commission, San Joaquin Pipeline Existing Conditions Report, 2007.

*Attachments: __NONE __Location Map ✓ Continuation Sheet ✓ Building, Structure, and Object Record
__Archaeological Record __District Record __Linear Feature Record __Milling Station Record __Rock Art Record
__Artifact Record __Photograph Record __Other (List):

DPR 523A (1/95) *Required information

State of California The Resources Agency Primary # P-50 - 000083
DEPARTMENT OF PARKS AND RECREATION HRI#
BUILDING, STRUCTURE, AND OBJECT RECORD CA-STA-425H

*NRHP Status Code 6Z

Page 2 of 3 *Resource Name or # (Assigned by recorder) Tidewater Southern Railroad Abandonment

B1. Historic Name: Tidewater Southern Railroad Abandonment
B2. Common Name: Union Pacific Railroad
B3. Original Use: Transportation B4. Present Use: Transportation
*B5. Architectural Style: N/A
*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed in 1912

*B7. Moved? ✓ No Yes Unknown Date: Original Location:
*B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown
*B10. Significance: Theme Central Valley Railroad Development Area Northern California

Period of Significance 1912 Property Type Railroad Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Tidewater Southern Railway began as an interurban electric passenger and freight line. It stretched from Stockton to Modesto and then from Modesto to Turlock. The line was established in 1912 and was purchased by the Western Pacific railroad in 1917, when the Modesto to Turlock branch was converted to steam power. By the 1930s, the line no longer carried passengers and was primarily steam driven. It later became part of the Union Pacific system and is now abandoned (Brotherton, 1981).

(See continuation sheet.)

B11. Additional Resource Attributes: (List attributes and codes) HP39 – other
*B12. References:

Brotherton, Jack. "Central Pacific Dominated Stanislaus County Railroading." Stanislaus Stepping Stones, vol. 5, no. 2. Modesto, CA: Stanislaus County Historical Society, 1981.

B13. Remarks:

*B14. Evaluator: E. Schultz & A. Vanderslice, Carey & Co.
*Date of Evaluation: 8/13/2007

(This space reserved for official comments.)

DPR 523B (1/95) *Required information

B10. Significance (continued)

The Tidewater Southern Railway does not appear to be eligible for the National Register or the CRHR, since it lacks sufficient historic significance and integrity. The Tidewater Southern Railway's inferred period of significance dates to 1912 when it was constructed. It was one of several electric interurban passenger lines serving the San Joaquin Valley from the 1910s to the 1930s, and the abandonment was the main line for the Tidewater railway from Stockton to Modesto. This rail line is an expansion of existing lines, although it did specifically cater to local passenger service, and does not mark a significant event or shift in local settlement. The rail was also not the first interurban or electric rail introduced in the area, and therefore, is not associated with the introduction of interurban electric rail to the valley. Therefore, it is not significant under National Register Criterion A or CRHR Criterion 1. The Tidewater Southern Railway does not have significance under National Register Criterion B or CRHR Criterion 2. Research has not found this railway to have any significant associations with any person of historical significance. The Tidewater Southern Railway does not have significance under National Register Criterion C or CRHR Criterion 3. It is one of many railroads in the San Joaquin Valley, including other interurban lines, and does not exhibit unusual or exemplary construction techniques or workmanship. Additionally, it does not appear that the railway abandonment has the potential to yield information important to the prehistory or history of the local area, state, or the nation. The Tidewater Southern Railway maintains poor physical integrity due to the removal of the original tracks and all other equipment when the line was abandoned. Although the resource may retain some integrity related to its inferred period of significance, the resource lacks historic significance, and therefore, does not appear to be eligible for the National Register or the CRHR.

P-50-000083
CA-STA-425H

Salida
~~Ripon~~ USGS 7.5'

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-50-000083
HRI #
Trinomial CA-STA-425H
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 of 4 *Resource Name or #: Tidewater Southern Railway (1910-1987)

4/09

P1. Other Identifier: Union Pacific Railroad (1987 to present)

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County:** Stanislaus

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Ceres **Date:** 1963 rev 1987 **T** 4S **R** 9E N/E¼ **of** N/W¼ **of Sec21** ; M.D. **B.M.**

c. Address: City: Ceres Zip:

d. UTM: Zone: 10 Point A: 677991 mE/ 4160357 mN
Point B: 677982 mE/ 4160561 mN (G.P.S NAD 84.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: Elv 80'

From Ceres CA take East Service Road west 2.6 miles to where the railroad line intersects with the road. The railroad is parallel with Morgan Road to the east and Crows Landing Road to the west.
The track segment length is 405 feet. Railroad mile marker 35.75.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

There is a single set of standard gauge railroad tracks sitting on wood timber ties and set on a slightly raised bed of course granite ballast. The rails are still used for the transportation of goods on the line that ran from Modesto Junction to Hatch with continuation to Turlock. The surrounding landscape is flat, agricultural land with occasional light industrial complexes.

***P3b. Resource Attributes:** (List attributes and codes) AH-7 (Railroad grade).

***P4. Resources Present:** ☐Building ☑Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
View looking northeast. February 2009.

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Line was constructed in 1916. History of the Tidewater Southern Railway, Dreams of Empire 1910-1917, www.tidewatersouthern.com

***P7. Owner and Address:**
Union Pacific Railroad Company
Omaha, Nebraska

***P8. Recorded by:**
Pamela Daly, M.S.H.P.
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

***P9. Date Recorded:** 3/20/2009

***P10. Survey Type:** Pedestrian

***P11. Report Citation:** Cultural Resources Inventory for the Hughson-Grayson 115V Transmission Line and Substation Project in Stanislaus County, California.

***Attachments:** ☐NONE ☑Location Map ☐Sketch Map ☐Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☑Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary # P-50-000083
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD CA-STA-425H

*NRHP Status Code

*Resource Name or # Tidewater Southern Railway

B1. Historic Name: Tidewater Southern Railway (1910 to 1996)
B2. Common Name: Union Pacific Railroad (UPRR) (1996 to present)
B3. Original Use: Local freight and passenger railroad line B4. Present Use: Freight railroad line
*B5. **Architectural Style:** Standard gauge railroad tracks
*B6. **Construction History:** (Construction date, alterations, and date of alterations)
The rail lines were constructed from Stockton starting in 1910. Service to Modesto began in 1912. Extended to Turlock in 1916 and to Hilmar in 1917. The rail line was started with steam locomotives, but switched to electric overhead service in 1913.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
*B8. **Related Features:** bridges, canals, etc.

B9a. Architect:
b. Builder: Robert Engineering Company
*B10. **Significance: Theme:** Transportation/Railroad **Area:** San Joaquin Valley
Period of Significance: 1910 to 1917 **Property Type:** Inter-urban Railroad System **Applicable Criteria:** NR/CR
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Tidewater & Southern Railway Company filed corporation papers in October of 1910. Shares of stock were issued to support the construction of a standard gauge railroad line from Stockton south to Turlock, with long range plans to build all the way south to connect with the Ventura County Railroad. After two years, The Tidewater & Southern Railway Company had only put down four miles of rail line and it merged with the Tidewater & Southern Transit Company in 1912 to form the Tidewater Southern Railway. After the merger almost 33 miles of new track was laid from Stockton to Modesto. The Stockton Hotel (which still stands on El Dorado Street in Stockton) was the joint terminal office of the Tidewater Southern Railway and the Central California Traction Company. With the popularity of the automobile in the 1920s and 1930s, the rail line became more dedicated to hauling freight from the small towns to Stockton for shipping downriver. The Railway changed majority ownership many times until being bought in its entirety by Union Pacific Railroad in 1996.

While the Tidewater Southern Railway line appears eligible for listing in the National Register and California Register under Criteria A/1 for being an important inter-urban railroad transportation line, this small segment is not eligible as it has been continually upgraded with the replacement of rails, ties, ballast bed, crossing guards and other related equipment. The segment has not retained the historical integrity of materials, workmanship, setting and feeling. It is not eligible for listing in the National or California Register.

B11. Additional Resource Attributes: (List attributes and codes) AH 7 (Railroad grades)

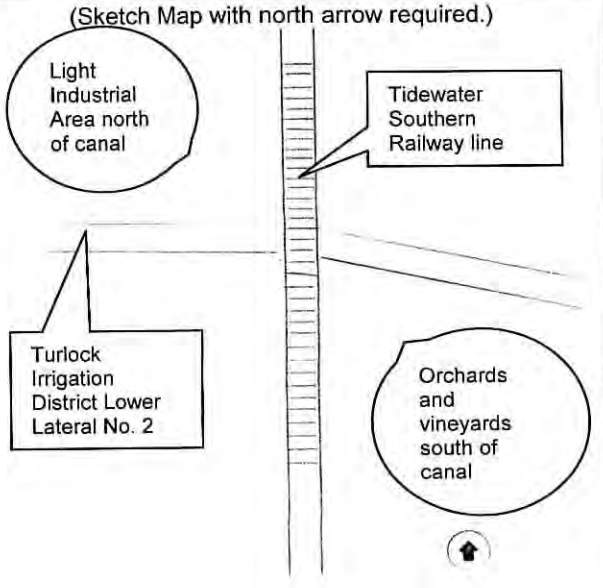
*B12. **References:**
History of the Tidewater Southern Railway, Dreams of Empire 1910-1917, www.tidewatersouthern.com

B13. Remarks: The proposed project for which this survey was performed will not physically impact the railroad line.

*B14. **Evaluator:**
Pamela Daly, M.S.H.P.,
Cultural Research Assoc.,
295 E. 8th St.,
Chico, CA 95928

*Date of Evaluation: March 18, 2009

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-50-000083
HRI #
Trinomial CA-STA-425H

 Resource Name or #: Tidewater Southern Railway

L1. Historic and Common Name: Tidewater Southern Railway/Union Pacific Railroad

L2a. Portion Described: ☐ Entire Resource ☑ Segment ☐ Point Observation **Designation:**

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

UTM: Zone: 10 Point A: 677991 mE/ 4160357 mN
Point B: 677982 mE/ 4160561 mN (G.P.S NAD 84.)
Railroad mile marker 35.75

L3. Description:
A 400 foot section of standard gauge railroad track. The single set of rails are placed on wood ties and sit in a slightly elevated bed of rock ballast.

The Tidewater Southern Railway was an interurban rail line that ran from Stockton to Turlock. The rail lines are now owned by Union Pacific Railroad.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)
Standard gauge railroad tracks: 4 feet 8 ½ inches apart.
a. Top Width:
b. Bottom Width:
c. Height or Depth:
d. Length of Segment: 404 feet

L5. Associated Resources:
Turlock Irrigation District Lower Lateral No. 2.

L4e. Sketch of Cross-Section (include scale) **Facing:**

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
Light industrial setting, orchards and agricultural land.

L7. Integrity Considerations: Good, line is still in use by Union Pacific Railroad. While the Tidewater Southern Railway line appears eligible for listing in the National Register and California Register, this small segment is not eligible as it has been continually upgraded with the replacement of rails, ties, ballast bed, crossing guards and other related equipment. The segment has not retained the historical integrity of materials, workmanship, setting and feeling. It is not eligible for listing in the National or California Register.

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing
View looking south from intersection of railroad line and East Service Road.

L9. Remarks:
The proposed project will not physically impact the railroad tracks.

L10. Form Prepared by:
Pamela Daly, M.S.H.P.
Cultural Research Assoc.
295 E. 8th Street
Chico, CA 95928

L11. Date: 3/20/2009

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

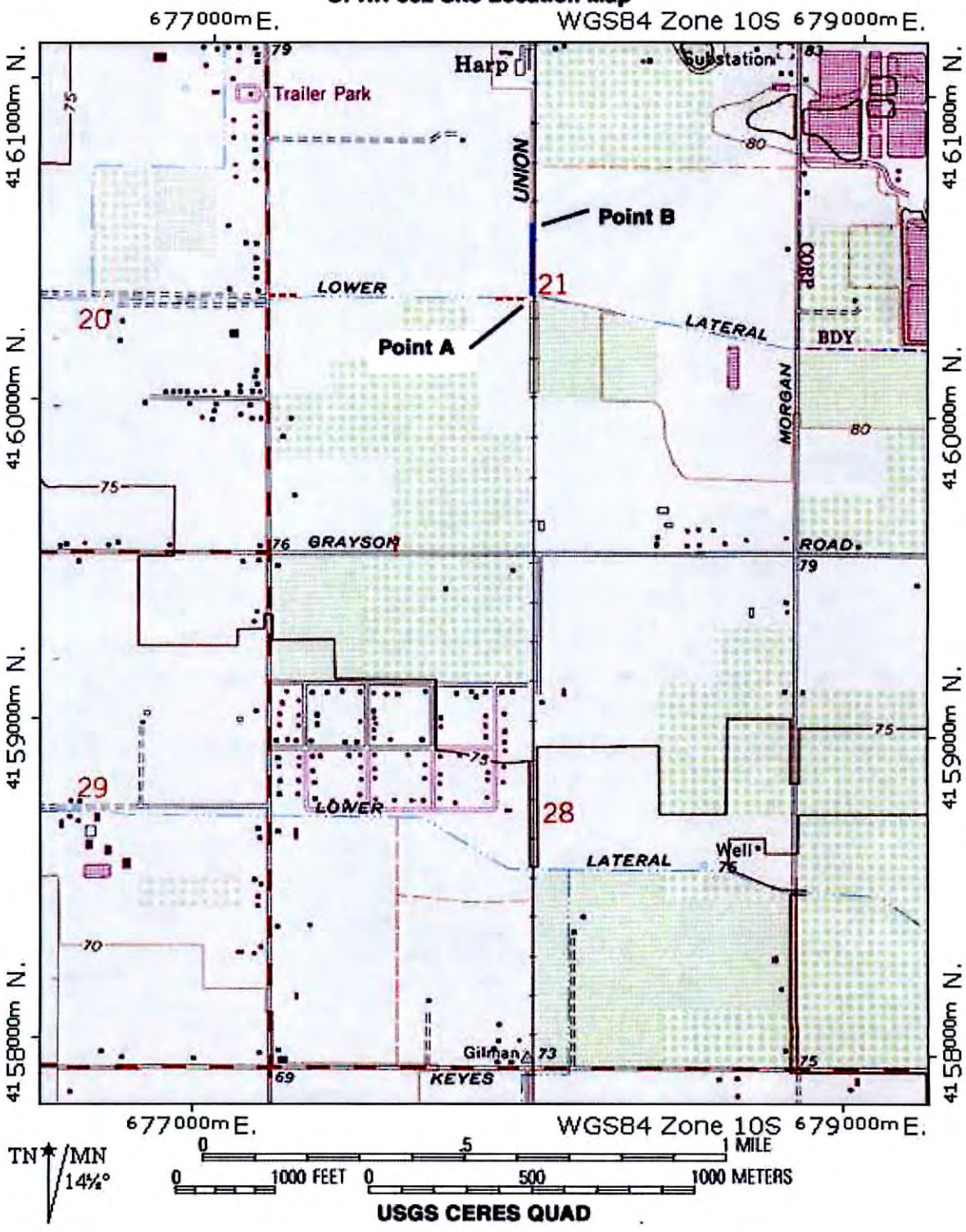
Primary # P50 0000 83
HRI#
Trinomial CA-STA-425H

*Resource Name or #: Southern Tidewater Railway

*Map Name:
DPR 523J (1/95)

*Scale: *Date of Map: 1963 rev 1987
*Required information

UPRR-002 Site Location Map



USGS CERES QUAD

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-50-000084
HRI #
Trinomial CA-STA-000393H
NRHP Status Code

Page 1 of 5

Other
Review Code ____ Reviewer ____ Date ____

P1. Resource Identifier: Thurman Field Scatter

P2. Location: **a. County** Stanislaus and (**Address** and/or **UTM** Coordinates. Attach Location Map as required.)

b. Address

City Modesto **Zip**

c. UTM: USGS Ceres **(7.5'/15') Date** 1987 ; **Zone** 10 , see P2.d **mE/** see P2.d **mN**

d. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTMs, etc., when appropriate):

From Hwy 99 take Tuolumne Road exit north to Neece Rd. Turn right on Neece Rd. And drive .3 miles to the datum, which is a light pole on the east side of Neece Rd. The site is adjacent to and surrounds the datum. NW 1/4 of NE 1/4 of Section 15, T4S, R9E. NW pt.=676,660 mE/ 4,165,800 mN. NE pt.=676,710mE/ 4,165,800mN. SE pt.=676,690 mE/ 4,165,520 mN. SW pt.=676,610 mE/ 4,165,480 mN.

P3. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.):

Resource is a historic artifact deposit and scatter. There are 4 artifact concentrations. The largest concentration shows evidence of extensive pot hunting. Artifacts have eroded along with the soil, and are strewn the entire width of the slope to the Tuolumne River below. The largest of the pot holes was dug to a depth of approximately 27 inches. A burn layer occurs from 21 inches to 27 inches.

P4. Resources present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District

P5. Photograph or Drawing (Photograph required for buildings, structures, and objects)

P6. Date Constructed/Age:
☐ Prehistoric ☒ Historic ☐ Both

P7. Owner and Address:
City of Modesto
801 Eleventh Street
Modesto, CA 95353

P8. Recorded by (Name, affiliation, and address):
T. Fernandez
Jones & Stokes Associates, Inc.
2600 V Street, Suite 100
Sacramento, CA 95818-1914

P9. Date 8-1-96

P10. Type of Survey: ☒ Intensive
☐ Reconnaissance ☐ Other

Describe:

P11. Report Citation (Provide full citation or enter "none"): Jones & Stokes Associates, Inc. 1996. Cultural resources inventory report for the City of Modesto Thurman Field Project. Sacrmento, CA. Prepared for the City of Modesto Community Development Department.

Attachments: ☐ NONE ☒ Map Sheet ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Linear Resource Record
☒ Archaeological Record ☐ District Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record
☒ Other (List): Map Sheets: Site Location and Site

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD (Part 1)

Primary # P50-000084
Trinomial CA-STA-000393H

A1. Resource Identifier: Thurman Field Scatter

A2. Resource Attributes (List attributes and codes.): _____

A3. Dimensions: a. Length 320 (ft.) × b. Width 80 (ft.

Method of Measurement: ☑ **Paced** ☐ Taped ☐ Visual estimate ☐ Other: _____

Method of Determination (Check any that apply.): ☑ **Artifacts** ☐ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain): _____

Reliability of Determination: ☑ **High** ☐ Low Explain:

Limitations (Check any that apply): ☐ Restricted access ☑ **Paved/built over** ☑ **Disturbances**
☐ Site limits incompletely defined ☐ Other (Explain):

A4. Depth: ~ 27 inches ☐ None ☐ Unknown Method of Determination: tape measured pot hole

A5. Human Remains: ☐ Present ☑ **Absent** ☐ Possible ☐ Unknown (Explain): _____

A6. Features (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.):

Only features associated with this site are pot holes and undulating soil which may be a result of older, grown over potholes.

A7. Cultural Constituents (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):

Artifacts observed include: burn-fused glass, metal and concrete; 1 porcelain button; 1 shell button; 2 square molded clear glass bottles with "The Jones-Paddock Co San Francisco"; melted glass; patina glass fragments; cobalt blue glass bottle fragments; thick cloudy green glass fragments; amethyst glass fragments; green molded glass fragments; square molded clear glass bottle fragments; patina window glass; light-fixture glass fragments; 1 metal barrel ring; red brick fragments; porcelain saucer fragment with gold leaf and rose design; large stoneware with a light outside wash and brown glaze inside; rice bowl fragment with blue transfer print; large burnt brick fragments; corroded metal pieces; two broken pieces of river-rock-encased-cement; broken concrete slabs with heavy aggregate; broken concrete slabs with a light aggregate; chicken wire and mortar; bed springs; butchered and burnt bone fragments.

A8. Were Specimens Collected? ☑ **No** ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

A9. Site Condition: ☐ Good ☑ **Fair** ☐ Poor (Describe disturbances.):

Extensive pot holes, assumed that many artifacts of commercial value to amateurs and diagnostic value to professionals were taken.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD (Part 2)

Resource Identifier: Thurman Field Scatter
Primary # P-50-000089
Trinomial CA-STA-000393H

A10. Nearest Water (Type, distance, and direction.):

Tuolumne River, east and adjacent to site.

A11. Elevation: 85 feet

A12. Environmental Setting (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc., as appropriate.):

Vegetation at this site is characteristic of the Valley Foothill Riparian Habitat, which is associated with low velocity river flow. This habitat is home to at least 50 amphibians and reptiles, 147 bird species, and 55 mammal species. Dominant tree species include the cottonwood, California sycamore, valley oak, shite alder, boxelder, Oregon Ash, and willows. Shrubs include wild grape, wild rose, California blackberry, blue elderberry, poison oak, and button brush. Also in this habitat exist sedges, rushes, grasses, miner's lettuce, Douglas sagewort, poison hemlock, and hoary nettle. Slope at the site ranges from 0% to 60%.

A13. Historical Information (Note sources and provide full citations in Field A16 below.):

See Jones & Stokes Associates, Inc. 1996. Cultural Resources Inventory Report for the City of Modesto Thurman Field Expansion Project. Sacramento, CA. Prepared for City of Modesto Community Development Department. Modesto, CA.

A14. Age: ☐ Prehistoric ☐ Pre-Colonial (1500-1769) ☐ Spanish/Mexican (1769-1848) ☐ Early American (1848-1880)
☑ **Turn of century (1880-1914)** ☑ **Early 20th century (1914-1945)** ☐ Post WWII (1945+) ☐ Undetermined
Factual or Estimated Dates of Occupation (Explain):

A15. Remarks and Interpretations (Discuss scientific, interpretive, ethnic, and other values of site, if known.):

A16. References (Give full citations including the names and addresses of any persons interviewed, if possible.):

See Jones & Stokes Associates, Inc. 1996. Cultural Resources Inventory Report for the City of Modesto Thurman Field Expansion Project. Sacramento, CA. Prepared for City of Modesto Community Development Department. Modesto, CA.

A17. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): _____

Original Media/Negatives Kept at: _____

A18. Form Prepared by: T. Fernandez **Date:** 8-1-96

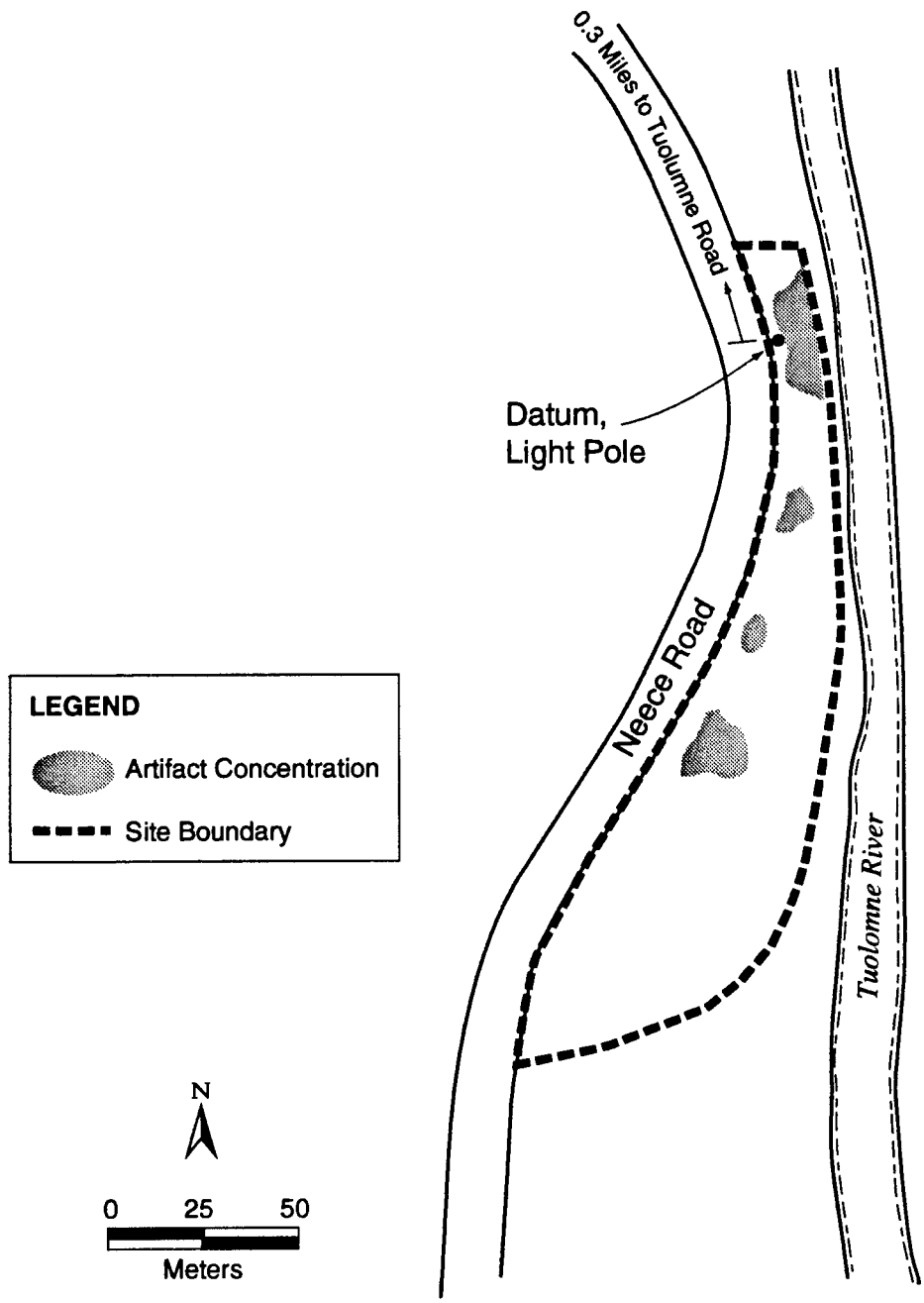
Affiliation and Address: Jones & Stokes Associates, Inc. 2600 V Street, Suite 100, Sacramento, CA 95818.

CALIFORNIA Department of Parks and Recreation
Office of Historic Preservation

Primary # P-50-000084
HRI# /Trinomial CA-STA-000393H

Map Sheet

Page 4 **of** 5
Resource Identifier: Thurman Historic Artifact Deposit
Map Name: Site Map Scale: 1" = 50m Date: 8-1-96

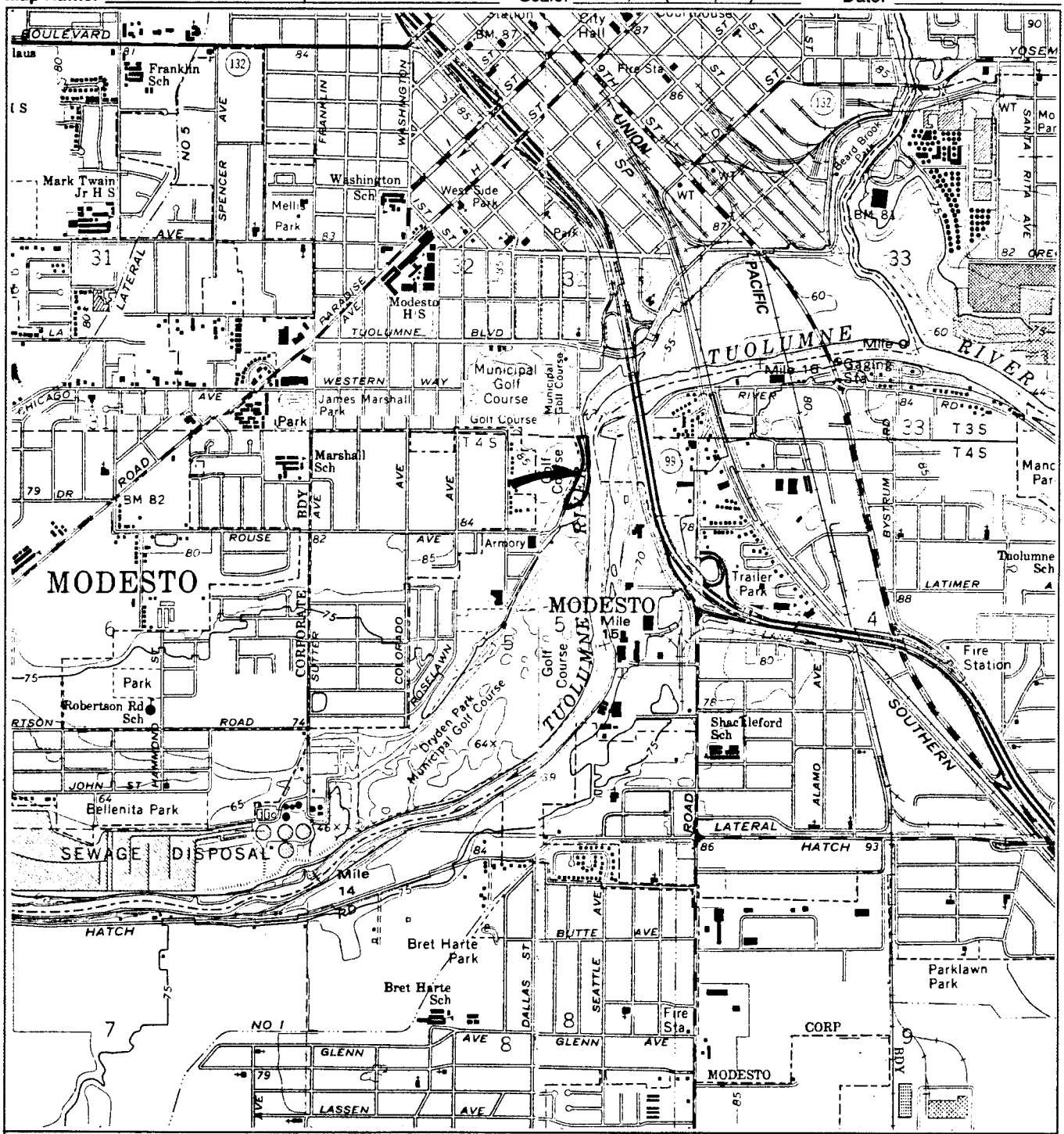


CALIFORNIA Department of Parks and Recreation
Office of Historic Preservation

Primary # P-50-000084
HRI# /Trinomial CA-STA-000393H

Map Sheet

Page 5 **of** 5
Resource Identifier: Thurman Historic Artifact Deposit
Map Name: Site Location Map Scale: 1:24,000 (1" = 2,000') Date: 8-1-96



Base map: USGS Salida, Riverbank, Brush Lake, and Ceres, California 7.5-minute quadrangles.

P-50-000438

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM

MAP REFERENCE NO. 3

County - Route - Postmile:

☐ LISTED
☐ APPEARS ELIGIBLE
☐ DETERMINED ELIGIBLE
√ APPEARS INELIGIBLE

Riverbank 7.5'

IDENTIFICATION

1. Common Name: Lion's Market

2. Historic Name: Sanders Bros. Market

3. Street or rural address: 439 Seventh Street

City: Modesto **Zip Code:** 95351 **County:** Stanislaus

4. Parcel Number: 38-03-11 **Present Owner:**

Address: 439 Seventh Street **City:** Modesto **Zip Code:** 95351

10/96

5. Ownership is: ☐ Public √ Private

6. Present Use: Market **Original Use:** Market

DESCRIPTION

7a. Architectural Style: Modern

7b. Briefly describe the present PHYSICAL CONDITION of the site or structure and describe any major alterations from its original condition: This one-story rectangular building has a front gable roof clad in asphalt shingles. The front facade consists of a pedimented false front with a central louvre. The building is concrete block, with the front elevation clad in stucco. The central front wooden door is modern and flanked by two frame windows, with plywood covering the lower half of the sash. Modern metal grilles cover the windows and doorway.

8. Construction date 1947
Estimated: √ **Factual:** ☐

9. Architect: Unknown

10. Builder: Unknown

11. Approx. property size (in feet)
Frontage: **Depth:**
9.32 acres

12. Date(s) of enclosed photograph(s):
March 1996

P-50-000438

13. Condition: Excellent ☐ Good ☐ Fair √ Deteriorated ☐

14. Alterations: Lower portion of windows boarded up, metal grilles.

15. Surroundings: (Check more than one if necessary) Open land ☐ Scattered buildings ☐ Densely built-up ☐
Residential ☐ Industrial ☐ Commercial √ Other:

16. Threats to site: None known √ Private Development ☐ Zoning ☐ Vandalism ☐ Public Works Project ☐
Other:

17. Is the structure: On its original site? √ Moved? ☐ Unknown? ☐

18. Related features: Del Rio Mobile Home Park

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site): The Lion's Market building was constructed ca. 1947 to service the adjacent Shady Acres Court, now known as the Del Rio Mobile Home Park (Stanislaus County Assessor's Files). In 1957 the trailer court consisted of Sanders Bros. Grocery (Lion's Market), Tex's Garage, U & I Lunch, Ray's Rod and Gun Club, and several trailer homes (Polk Directory 1957). The motor court was established ca. 1920, and was the home of many migratory workers during the Dust Bowl era in Modesto. The cafe was constructed ca. 1934 and other buildings followed in the late 1940s and early 1950s (Don Gackle, personal communication 1996). Although the building was constructed post-1945, it was included in the inventory as it was built 49 years ago and will reach the 50-year age date by the current Seventh Street Bridge project is completed. The building does not appear to be eligible for inclusion in the NRHP under any of the criteria. Under Criterion A it is associated with the growth and development of Modesto after World War II, but is not associated with any persons significant in history (Criterion B). It does not embody any distinctive architectural characteristics (Criterion C), nor is it likely to yield information important in history (Criterion D).

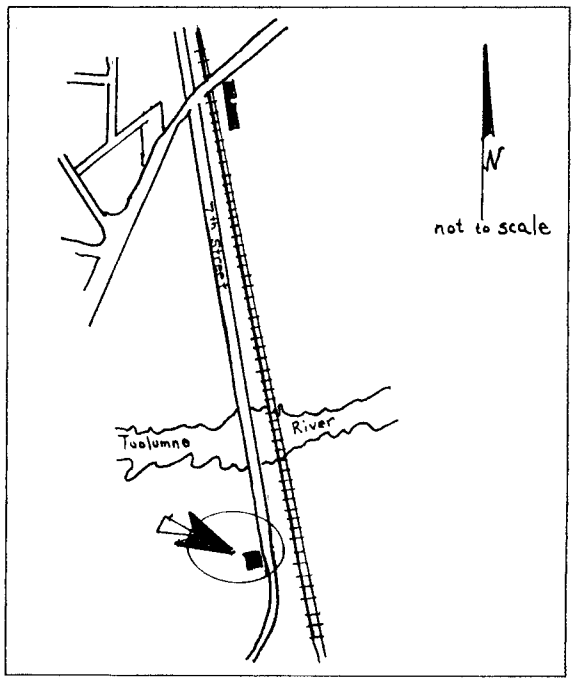
20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)

Architecture ☐ Arts & Leisure ☐
Economic/Industrial √ Exploration/Settlement ☐
Government ☐ Military ☐ Religion ☐
Social/Education ☐

21. Sources (List books, documents, surveys, personal interviews and their dates.)
Polk Directories, 1920, 1930, 1940, 1957
Stanislaus County Assessor's Office Files
Don Gackle, personal communication 1996

22. Date form prepared: 30 March 1996
By: Judith Marvin
Organization: Foothill Resources, Ltd.
Address: P.O. Box 2040
City: Murphys, CA
Zip Code: 95247
Phone: (209) 728-1408

Location sketch map (draw & label site and surrounding streets, roads, and prominent landmarks)



P-50-000439

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM

MAP REFERENCE NO. 4

County - Route - Postmile:

☐ LISTED ☐ DETERMINED ELIGIBLE
☐ APPEARS ELIGIBLE √ APPEARS INELIGIBLE

Riverbank 7.5'

IDENTIFICATION

1. Common Name: W. H. Breshears, Inc., Chevron Products

2. Historic Name: Standard Oil of California Products

3. Street or rural address: 720 B Street

City: Modesto **Zip Code:** 95351 **County:** Stanislaus

4. Parcel Number: 102-17-01 **Present Owner:** W. H. Breshears, Inc.

Address: 720 B Street **City:** Modesto **Zip Code:** 95351

10/98

5. Ownership is: ☐ Public √ Private

6. Present Use: Chevron Distribution **Original Use:** Standard Oil Distributorship

DESCRIPTION

7a. Architectural Style: Industrial

7b. Briefly describe the present PHYSICAL CONDITION of the site or structure and describe any major alterations from its original condition: This facility consists of an office, storage buildings, and storage tanks. The office building is modern, as are the storage tanks. Two buildings, now attached, are located on the western boundary of the complex. The small structure on the southwest corner of Seventh and B streets, possibly the original office, is a one-story frame building with corrugated metal gable roof with exposed rafters. The building is clad in corrugated metal siding. Original fenestration consists of a six-light window; all others have been replaced with one-light frame sash. The building has a wood pier foundation. Attached to the corner building is a long, rectangular storage facility with a loading dock on the east elevation. The building has an end-gable roof, covered in corrugated metal, with a shed roof protruding over the loading dock. The entire building is clad in corrugated metal.

8. Construction date 1913, 1946
Estimated: √ **Factual:** ☐

9. Architect: Unknown

10. Builder: Unknown

11. Approx. property size (in feet)
Frontage: **Depth:**

12. Date(s) of enclosed photograph(s):
March 1996

P-50-000439

13. Condition: Excellent ☐ Good ☐ Fair √ Deteriorated ☐

14. Alterations: Original six-light windows replaced.

15. Surroundings: (Check more than one if necessary) Open land ☐ Scattered buildings ☐ Densely built-up ☐
Residential ☐ Industrial √ Commercial ☐ Other:

16. Threats to site: None known √ Private Development ☐ Zoning ☐ Vandalism ☐ Public Works Project ☐
Other:

17. Is the structure: On its original site? √ Moved? ☐ Unknown? ☐

18. Related features: Modern office building and storage tanks.

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site): Adjoining and served by the Southern Pacific Railroad, the W. H. Breshears Chevron Products facility was constructed in stages, with the small building on the corner of Seventh and B streets serving as the original office when it was built ca. 1913. The storage facility and loading docks were added ca. 1946 (Stanislaus County assessor's Files). Although it is unknown who constructed the small corner building, it has been utilized by Standard Oil Company as part of the distributorship complex since at least 1940. In 1930 the facility was operated by General Gasoline Company, with the Standard Oil Company facility located at 802 B Street, near Eighth Street. There are no listings for either company in 1920 (Polk Directories, 1920, 1930, 1940, 1957). The Breshears buildings do not appear to be eligible for inclusion in the National Register under any of the criteria. Under Criterion A, they are associated with the growth of the City of Modesto and the San Joaquin Valley when the automobile and truck were replacing the horse and railroad as the primary methods of transportation, and oil and gasoline distribution facilities were developed along railroad lines as transfer stations. The building was evidently constructed by an oil company and operated by a succession of managers and so does not appear to be eligible under Criterion B, nor does it appear to be likely to yield information important in history (Criterion D). Under Criterion C it does not retain any integrity of design or represent the work of a master or embody any distinctive characteristics of construction.

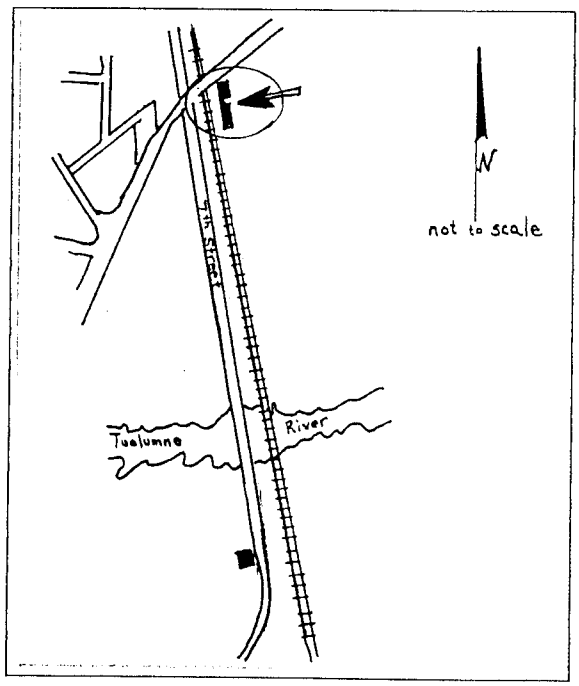
20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)

Architecture ☐ Arts & Leisure ☐
Economic/Industrial √ Exploration/Settlement ☐
Government ☐ Military ☐ Religion ☐
Social/Education ☐

21. Sources (List books, documents, surveys, personal interviews and their dates.)
Polk Directories, 1920, 1930, 1940, 1957
Stanislaus County Assessor's Office Files

22. Date form prepared: 30 March 1996
By: Judith Marvin
Organization: Foothill Resources, Ltd.
Address: P.O. Box 2040
City: Murphys, CA
Zip Code: 95247
Phone: (209) 728-1408

Location sketch map (draw & label site and surrounding streets, roads, and prominent landmarks)



P-50-000514

MAP REFERENCE NO. 25

BRIDGE EVALUATION FORM

(NOTE: This form is only to be used for structure types listed in the Caltrans/FHWA/SHPO Memorandum of Understanding dated December 1980.)

11/99

LOCATION: (attach copy of appropriate map showing structure location)

Riverbank 7.5
T.3S/R.9E, Sec.32

COUNTY: Stanislaus
ROUTE: N/A
VICINITY: Modesto
NAME: Tuolumne River Bridge
BRIDGE NUMBER: 113.75

DESCRIPTION:

TYPE: STANDARD

TYPE OF SUPERSTRUCTURE: Timber stringer trestle with ballast deck approach spans, with timber rails. Main spans consist of: two 100'6" riveted deck girder spans built in 1945 by Bethlehem Steel Co.; one 59'10' riveted deck girder span built in 1944 by Pacific Bridge Co., and relocated to this site from the Feather River; one 60'6" riveted deck girder span built in 1897 by Phoenix Bridge Co. and reinforced in 1944; and one 50' deck girder span built in 1897 by Phoenix Bridge Co. and reinforced in 1944; all with ballast deck.

TYPE OF SUBSTRUCTURE: Timber pile bents beneath timber stringer approach spans; five stone masonry piers and one (south) stone masonry abutment beneath main spans.

HISTORY/DATE OF CONSTRUCTION/DESIGNER: 1897-1945/Southern Pacific Railroad

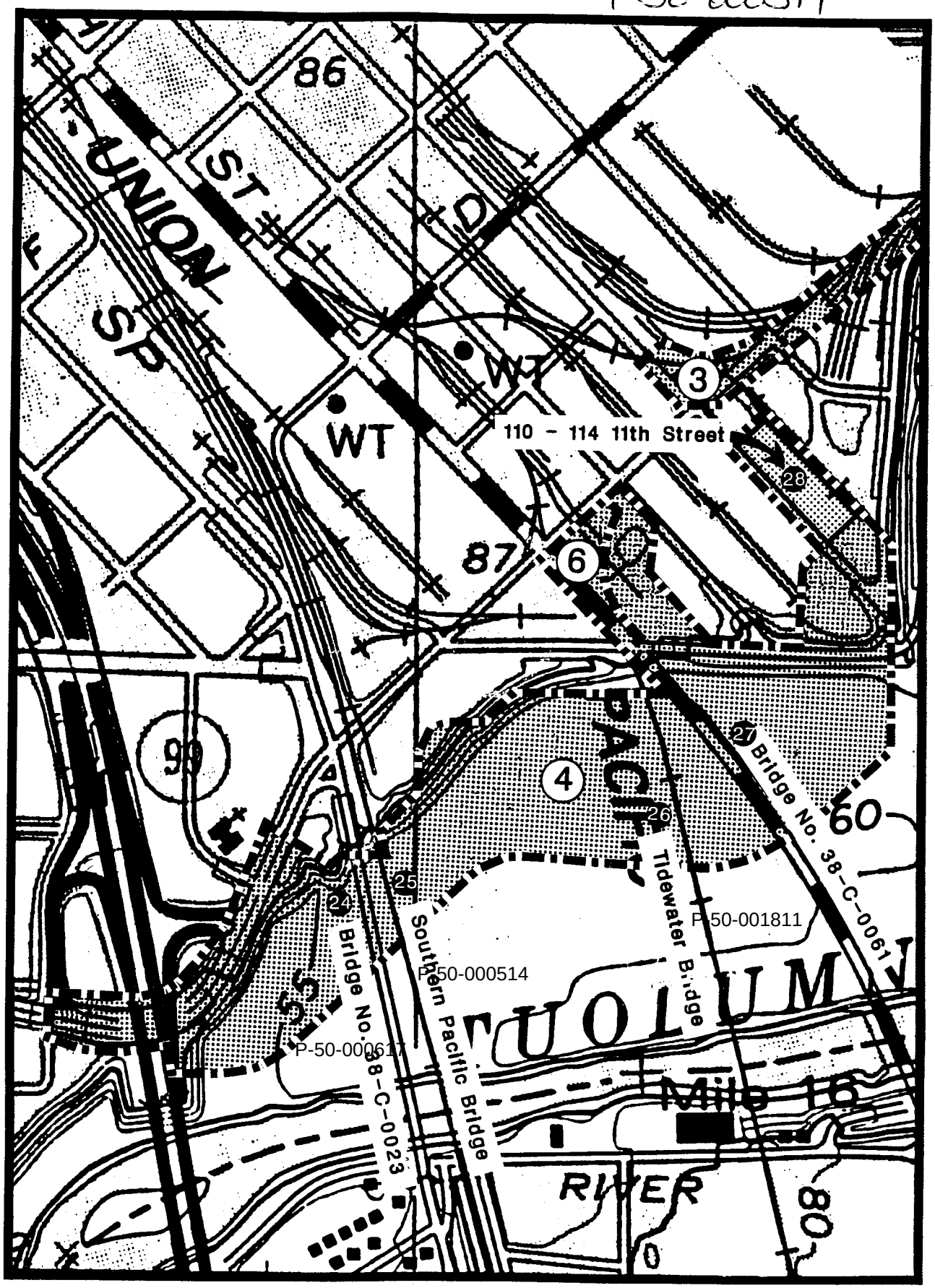
OTHER HISTORICAL INFORMATION (persons, events--e.g. WPA/CCC):

Built in 1897 to replace earlier 1870s crossing of the Tuolumne River. Timber spans continually renewed over the years. Three new main spans in 1944-45, with original main spans heavily rebuilt at that time. Integrity very compromised.

PREPARED BY: John W. Snyder, Chief
Architectural & Historic Studies
Caltrans

DATE: July 22, 1991

Map Reference #25 = P-50-000514



Project Locations #3, 4 & 6 Architectural Study Area: Map ID #24 and 27

P50-000524

CALIFORNIA DEPARTMENT OF TRANSPORTATION
ARCHITECTURAL INVENTORY/EVALUATION FORM

MAP REFERENCE NO. 28

County - Route - Postmile:

( ) **LISTED** ( ) **DETERMINED ELIGIBLE**
( ) **APPEARS ELIGIBLE** (X) **APPEARS INELIGIBLE**

Riverbank 7.5' 11/99
T.3.S./R.9E., Sec.33

IDENTIFICATION

1. **Common Name:** Booth's Packing Company
2. **Historic Name:**
3. **Street or rural address:** 110-114 11th Street

   City: Modesto **Zip Code:** 95350 **County:** Stanislaus

4. **Parcel Number:** **Present Owner:**

   Address: **City:** **Zip Code:**

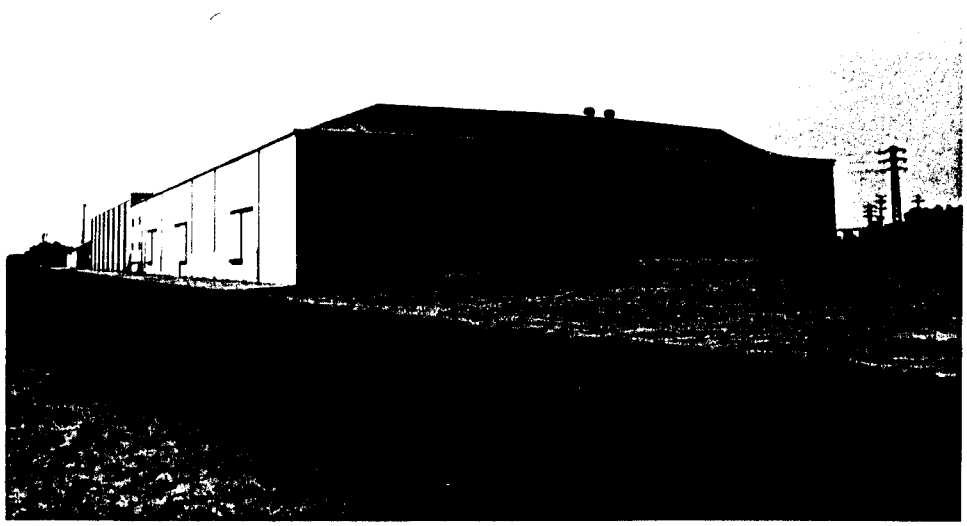
5. **Ownership is:** ( ) **Public** (X) **Private**
6. **Present Use:** Warehouse **Original Use:**

DESCRIPTION

7a. **Architectural Style:** Industrial

7b. **Briefly describe the present PHYSICAL CONDITION of the site or structure and describe any major alterations from its original condition:**

This rectangular plan building is of concrete tilt-up construction and has a hipped roof covered with tar roofing paper.



8. Construction date: 1960-61
   Estimated: ( ) Factual: ( )
9. Architect:
10. Builder:
11. Approx. property size (in feet)
    Frontage: Depth:
12. Date(s) of enclosed photo(s):
    July, 1991

Photographer: Ward Hill

P50-000574

13. Condition: Excellent ( ) Good ( ) Fair ( ) Deteriorated ( )

14. Alterations:

15. Surroundings: (Check more than one if necessary) Open land ( ) Scattered buildings ( ) Densely built-up ( ) Residential ( ) Industrial ( ) Commercial ( ) Other:

16. Threats to site: None known( ) Private Development( ) Zoning( ) Vandalism( ) Public Works Project ( )
Other:

17. Is the structure: On its original site? ( ) Moved? ( ) Unknown? ( )

18. Related features:

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site):

This warehouse was constructed in two phases between 1960 and 1961 (Building Permit # 16174, January, 1960; #23472, September, 1961). The building is not a distinguished example of its type and does not appear to meet the National Register criteria for eligibility for post-1945 buildings.

20. Main theme of historic resource:
(If more than one is checked, number in order of importance.)

Architecture ( ) Arts & Leisure( )
Economic/Industrial ( )
Exploration/Settlement ( )
Government ( ) Military ( ) Religion ( )
Social/Education ( )

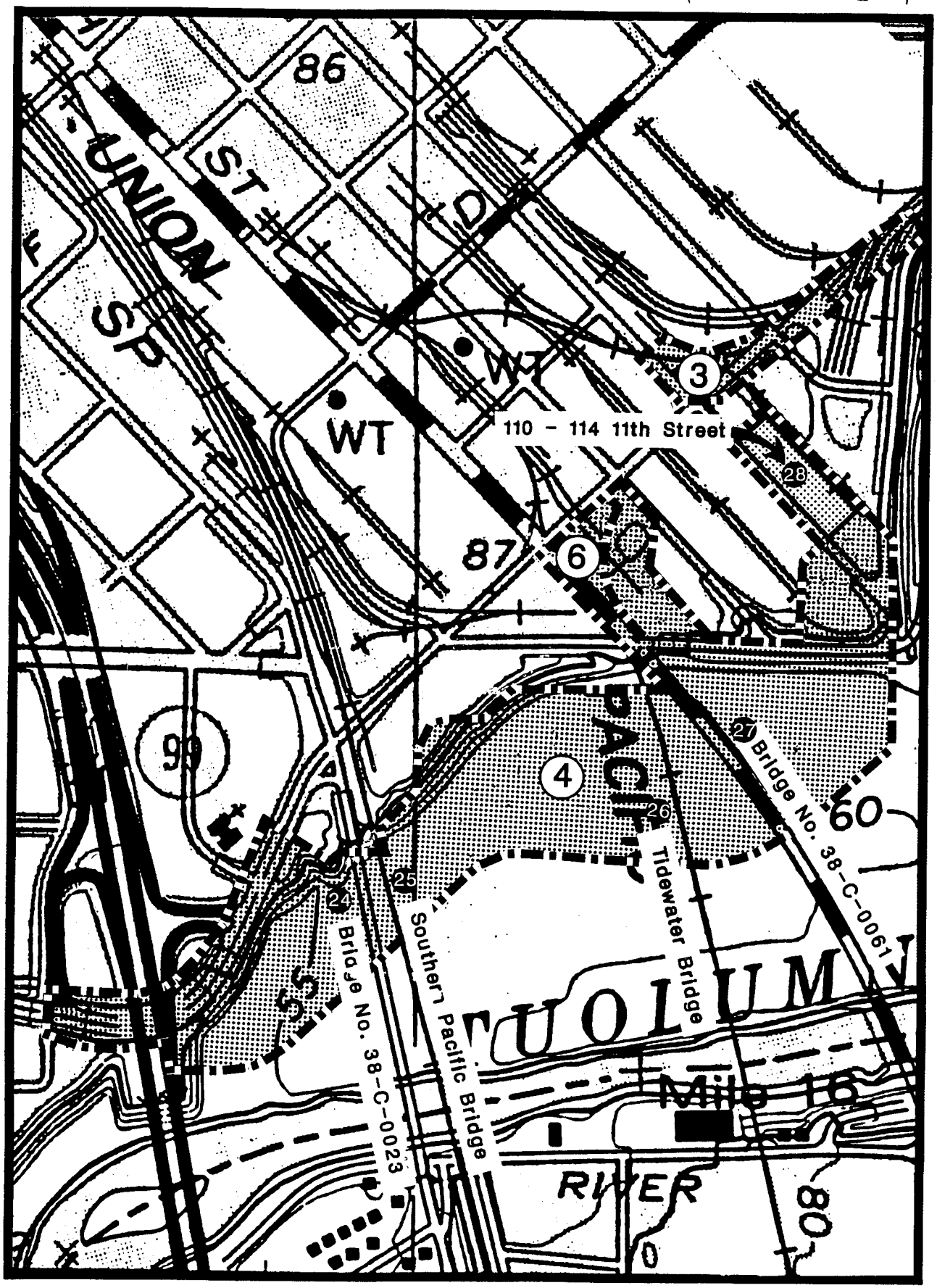
Location sketch map
(see continuation pages)

21. Sources:

Records of the Office of the Assessor,
Stanislaus County, Modesto

22. Date Form Prepared: December 3, 1991
By: Ward Hill
Organization: Corbett & Hill
Address: 2054 University Avenue, #505
City: Berkeley
Zip Code: 95704
Phone: (510) 441-4071

P50-000534



Project Locations #3, 4 & 6 Architectural Study Area: Map ID #28 110-114 11th Street

P-50-000617 # 114971.
DOE-50-86-0001-0000

CANTICRETE BRIDGE RATING SHEET

252

Bridge #:38C-23 Common Name: Seventh Street Bridge
County: Stanislaus
District: 10
Feature Intersected: Tuolumne River
Road: Seventh Street
Route: Postmile:
Routesuf:
Quad: Riverbank (7.5)
UTM Zone: 10 E: 677230 N: 4166086
Lat: 37 37 30 N Long: 120 59 30 W
Ownership:County
City/Vicinity: in the city/town limits of Modesto
Date: 1916
Designer: Leonard & Day
This is a major example of a significant designer
Contractor: C.E. Cotton & Co.
Description: MAINSPAN: rein. conc.,
101 feet long
BRIDGE: A 35.8 feet wide, 14 spans, 1170 feet long,
2 lane bridge
additional spans length: 100; 100;84;84 feet,
and with a flush walkway

Riverbank 7.5'

RESEARCH STATUS

Invest Int: SDM
Entry Int: SDM
Done: yes
Update: 5/01/86
Rundate: 08/18/86
Assign Rate: 3

Technical Merit: excellent
Special Features
Lanterns: electroliers; fair condition
Railings: arched window rail
Pylons: yes
Decorative Fascia: none
Distinctive Texture: smooth
Pedestrian Amenities: seating
Transportation/Historical Association: local
Aesthetics:
Site: excellent
Structural: excellent
Integrity:
Location/Setting: excellent
Design/Material: excellent
Feeling/Association: excellent
Plans/Specifications: plans on microfiche at CalTrans

Comments:
The Seventh Street Bridge is significant under Criteria A and C. It was designed through the collaborative efforts of the engineering firm, Leonard & Day, and architect, Fay Spangler. It is by far the largest extant example of John B. Leonard's "Canticrete" bridge design. This bridge form, Leonard's invention, involves a cantilevered steel truss encased in concrete. Architecturally, it is the only major example in the San Joaquin Valley of the "City Beautiful" bridge, an urban bridge design of the second decade of this century, always placed at a major entrance to the city and adorned in Beaux Arts classical detail. It is almost completely unmodified.

P 50-000617

Bridge #: 38C-23
Common Name: Seventh Street Bridge
UTM Zone: 10 E: 677230
N: 4166086
River: Tuolumne River
Road: Seventh Street
Vicinity: Modesto
State: California

F-50-000617

P50-000617

Riverbank 7.5

PROJ.REVW AND RES.PROT.UNIT LOG-OUT PRINTOUT HANS KREUTZBERG

Undertaking Identifier: FHWA860919Z 04/02/98 Page: 38
Undertaking Name: THEME DOE FOR CA CONCRETE SPAN BRIDGES
Property number: 114971
BRIDGE #38C-23 / 7TH STREET BRIDGE
Address: County: STA
7TH ST X-Street: TUOLOMNE RIVER
MODESTO 95354 Vicinity:
Parcel #:

Category: S # of Props:
Owner Type: C Pres. Use: P
Other Recognition: CHL #:
Dates of Construction: 1916 -
Architect: LEONARD & DAY Builder:
Historic Attributes: 19,95
Eth:

Previous Determinations on this property:

Program	Prog. Ref Number	Eval	Crit	Eval-date	Evaluator
HIST.RES.	DOE-50-86-0001-0000	2S2	AC	10/19/86	HANS KREUTZBERG
PROJ.REVW.	FHWA860919Z	2S2	AC	10/19/86	HANS KREUTZBERG

****

The Seventh Street Bridge (Lion Bridge) over the Tuolumne River in Modesto opened to traffic in 1917. Designed by famed architect John B. Leonard, it is one of only four Canticrete (concrete with internal steel trusses) structures still in California. The first vehicle across the bridge was a Studebaker carrying the Board of Supervisors. County Surveyor E.A. Annear supervised the project. In 1973, his daughter, Ellen Crippen, recalled some farmers in the area wanted cows instead of lions on the bridge approaches. *Photos by Ken Williams*

February

2001

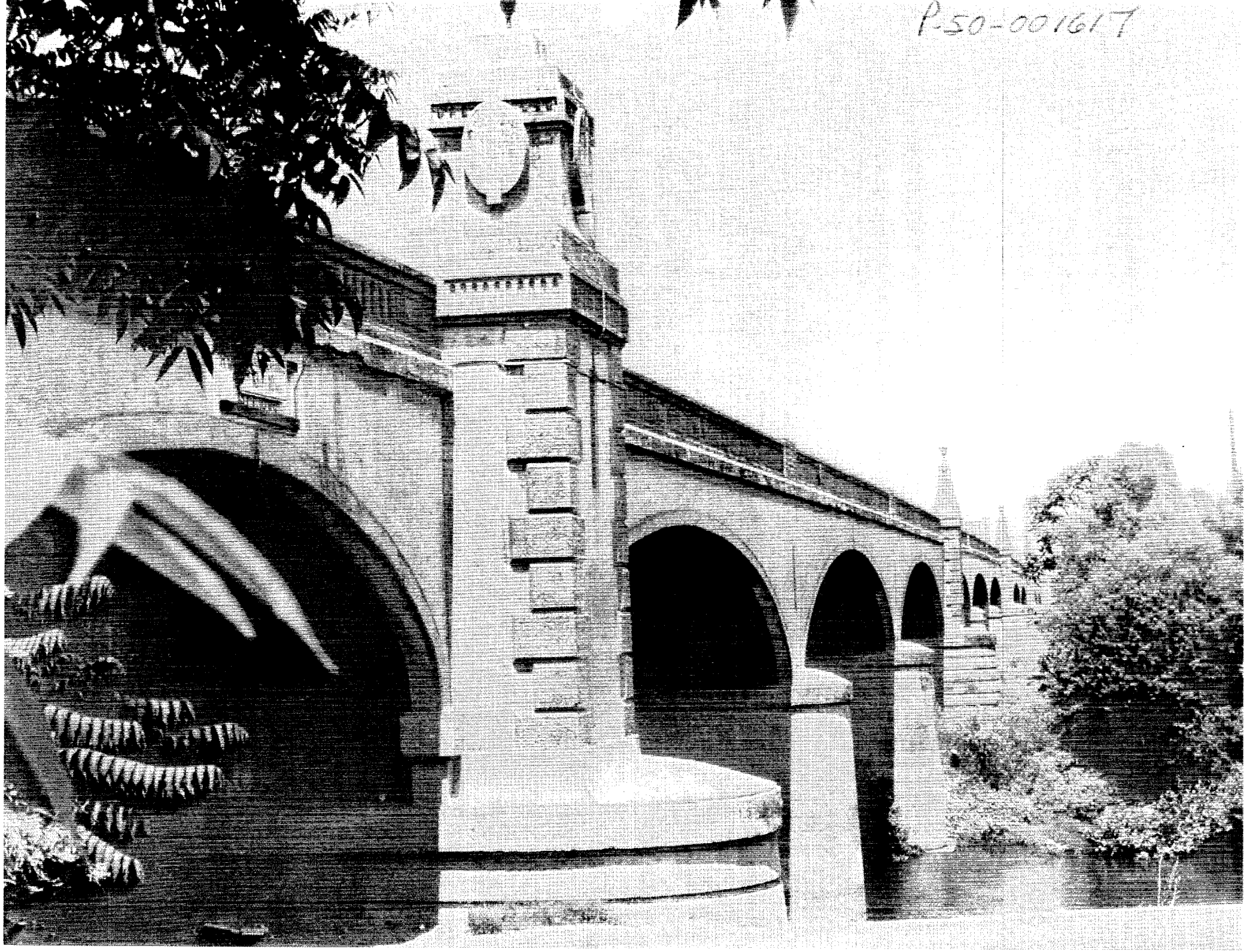
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
January 2001 S M T W Th F S 1 2 3 4 5 6 7 8 9 10 11 12 13	March 2001 S M T W Th F S 1 2 3			1	2 Groundhog Day	3

Special Events

Central West Ballet Art

P-50-000177

P-50-001617



P-50-000617 # 114971.
DOE-50-86-0001-0000

CANTICRETE BRIDGE RATING SHEET 252

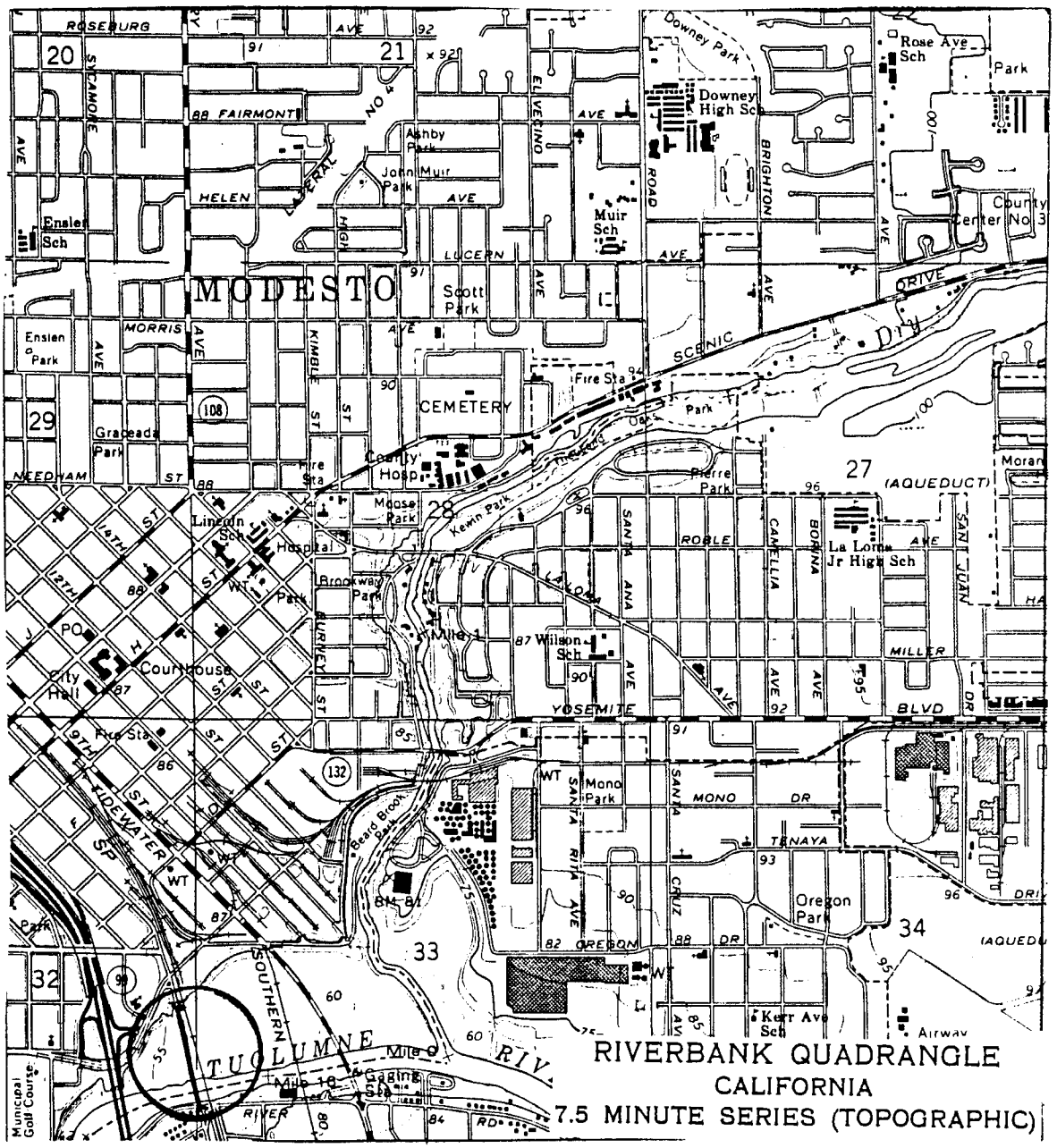
Bridge #:38C-23 Common Name: Seventh Street Bridge Riverbank 7.5'
County: Stanislaus
District: 10 RESEARCH STATUS
Feature Intersected: Tuolumne River
Road: Seventh Street Invest Int: SDM
Route: Postmile: Entry Int: SDM
Routesuf: Done: yes
Quad: Riverbank (7.5) Update: 5/01/86
UTM Zone: 10 E: 677230 N: 4166086 Rundate: 08/18/86
Lat: 37 37 30 N Long: 120 59 30 W Assign Rate: 3
Ownership:County
City/Vicinity: in the city/town limits of Modesto
Date: 1916
Designer: Leonard & Day
This is a major example of a significant designer
Contractor: C.E. Cotton & Co.
Description: MAINSPAN: rein. conc.,
101 feet long
BRIDGE: A 35.8 feet wide, 14 spans, 1170 feet long,
2 lane bridge
additional spans length: 100; 100;84;84 feet,
and with a flush walkway

Technical Merit: excellent
Special Features
Lanterns: electroliers; fair condition
Railings: arched window rail
Pylons: yes
Decorative Fascia: none
Distinctive Texture: smooth
Pedestrian Amenities: seating
Transportation/Historical Association: local
Aesthetics:
Site: excellent
Structural: excellent
Integrity:
Location/Setting: excellent
Design/Material: excellent
Feeling/Association: excellent
Plans/Specifications: plans on microfiche at CalTrans

Comments:
The Seventh Street Bridge is significant under Criteria A and C. It was designed through the collaborative efforts of the engineering firm, Leonard & Day, and architect, Fay Spangler. It is by far the largest extant example of John B. Leonard's "Canticrete" bridge design. This bridge form, Leonard's invention, involves a cantilevered steel truss encased in concrete. Architecturally, it is the only major example in the San Joaquin Valley of the "City Beautiful" bridge, an urban bridge design of the second decade of this century, always placed at a major entrance to the city and adorned in Beaux Arts classical detail. It is almost completely unmodified.

P 50-000617

Bridge #: 38C-23
Common Name: Seventh Street Bridge
UTM Zone: 10 E: 677230
N: 4166086
River: Tuolumne River
Road: Seventh Street
Vicinity: Modesto
State: California



RIVERBANK QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24000

1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

f-50-000617

P50-000617

Riverbank 7.5

PROJ.REVW AND RES.PROT.UNIT LOG-OUT PRINTOUT HANS KREUTZBERG

Undertaking Identifier: FHWA860919Z 04/02/98 Page: 38
Undertaking Name: THEME DOE FOR CA CONCRETE SPAN BRIDGES
Property number: 114971
BRIDGE #38C-23 / 7TH STREET BRIDGE
Address: County: STA
7TH ST X-Street: TUOLOMNE RIVER
MODESTO 95354 Vicinity:
Parcel #:

Category: S # of Props:
Owner Type: C Pres. Use: P
Other Recognition: CHL #:
Dates of Construction: 1916 -
Architect: LEONARD & DAY Builder:
Historic Attributes: 19,95
Eth:

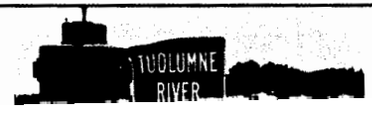
Previous Determinations on this property:

Program	Prog. Ref Number	Eval	Crit	Eval-date	Evaluator
HIST.RES.	DOE-50-86-0001-0000	2S2	AC	10/19/86	HANS KREUTZBERG
PROJ.REVW.	FHWA860919Z	2S2	AC	10/19/86	HANS KREUTZBERG

****

The Seventh Street Bridge (Lion Bridge) over the Tuolumne River in Modesto opened to traffic in 1917. Designed by famed architect John B. Leonard, it is one of only four Canticrete (concrete with internal steel trusses) structures still in California. The first vehicle across the bridge was a Studebaker carrying the Board of Supervisors. County Surveyor E.A. Annear supervised the project. In 1973, his daughter, Ellen Crippen, recalled some farmers in the area wanted cows instead of lions on the bridge approaches. *Photos by Ken Williams*

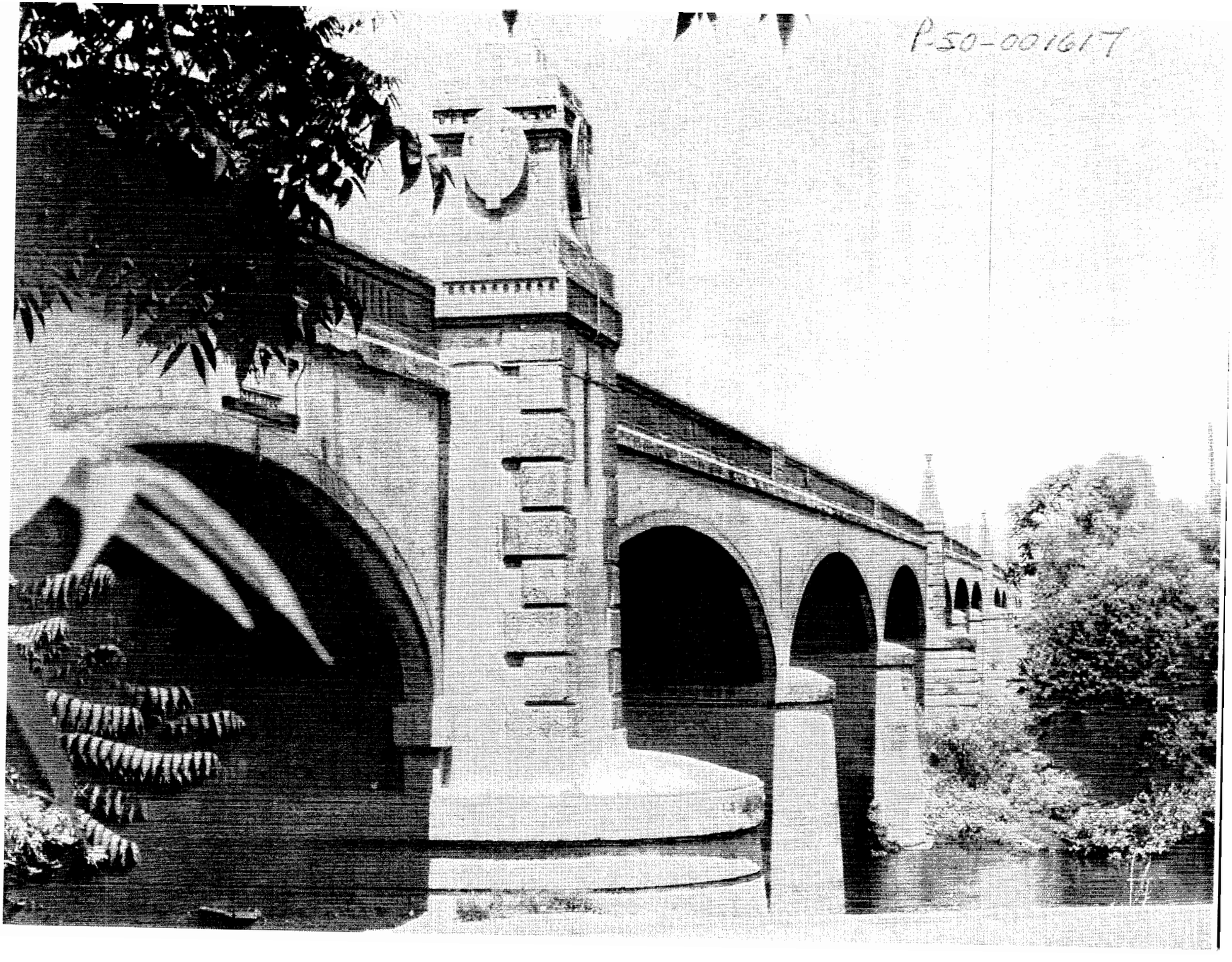
February 2001

Sun	Mon.	Tues	Wed	Thurs	Fri	Sat
January 2001 S M T W Th F S 1 2 3 4 5 6	March 2001 S M T W Th F S 1 2 3			1	2 Groundhog Day	3

Special Events

Central West Ballet Art

P-50-000177


P-50-001617

(update, but first DPR form)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-50-000617
HRI #
Trinomial
NRHP Status Code

Other Listings
Review code _____ Reviewer _____ Date

Page 1 of 4 *Resource Name or #: (Assigned by recorder): Seventh Street Bridge

P1. Other Identifier: Lion Bridge

*P2. Location: ☐ Not for Publication ☑ Unrestricted *a. County Stanislaus

and (P2b and P2c or P2d. Attach a Location Map as necessary.) SW of SW ¼ (and) SE of SE ¼ S. 32

Riverbank 7.5'

*b. USGS 7.5' Quad 7.5 Date 1969 Photorevised 1987 T 3S; R 9E; Section 33; Mt.Diablo B.M.

c. Address 7th Street overcrossing of the Tuolumne River City Modesto Zip 95353

d. UTM: (Give more than one for large and/or linear resources) Zone 10, ~~0~~677066 mE/ ~~4164871~~ 4166390 mN } northern end

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, elevation, etc., as appropriate): Southern end: 677160 mE, 4166000 mN

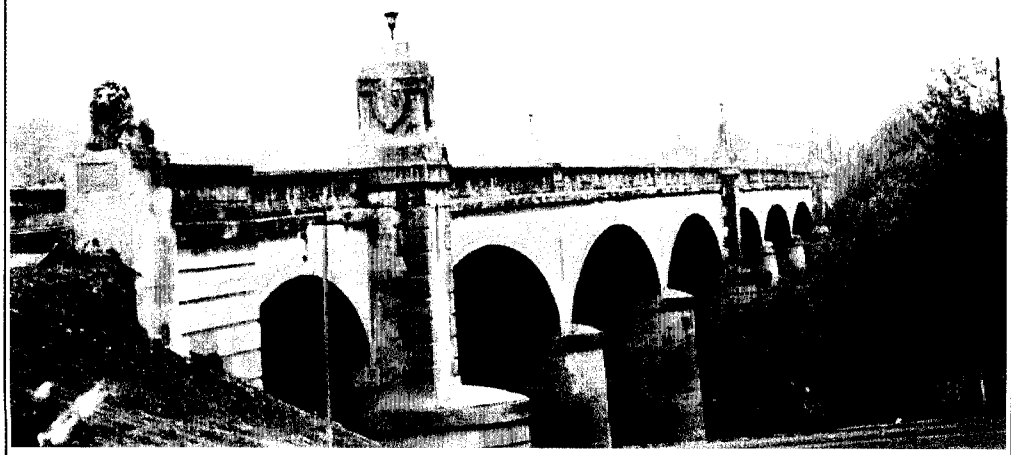
Located at the southern portal to the City of Modesto, the Seventh Street or Lion Bridge(Bridge # 38C-23) crosses over the Tuolumne River between River Road at the south end and B Street at the North end.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): Locally known as the Lion Bridge, the Seventh Street Bridge (Bridge No. 38C-023) is the only major example in the San Joaquin Valley of the "City Beautiful" bridge. Adorned in Beaux Arts Classical detail, two concrete lions stand guard at each portal. Designed through the collaborative efforts of the engineering firm of Leonard & Day and architect Fay Spangler, the Seventh Street Bridge is the most impressive extant example of "Canticrete" bridge design. Invented by John B. Leonard, this bridge form involves a cantilevered steel truss encased in concrete. Built in 1916 by C.E. Cotton & Co., the main span is 101 feet long and 35.8 feet wide with 14 additional spans for a total of 1170 feet. As a result of DOE Process 12/24/85 (DOE-50-86-0001-0000), the Seventh Street Bridge has been determined eligible (2S2) for inclusion in the National Register of Historic Places. Significant under Criteria A and C, it is important both from the engineering perspective and from the perspective of the city planner. The Seventh Street Bridge was also designated a Modesto Landmark Preservation Site by the Modesto City Council in 1992.

*P3b. Resource Attributes: (List attributes and codes) HP19 Bridge

*P4. Resources Present: ☐ Building ☒ Structure ☑Object ☐ Site ☐ District ☐Element of District ☐ Other (Isolates, etc).

P5. Photo or Drawing (Photo required for buildings, structures, and objects.)



*P5b. Description of Photo (view, date, accession #) Overview of Seventh Street Bridge. View southeast. November 2000.

*P6. Date Constructed/Age and Sources: ☑Historic ☐ Prehistoric ☐ Both

*P7. Owner and Address: City of Modesto

*P8. Recorded by (Name, affiliation, and address): Leigh Martin, William Self Associates, PO Box 219

*P9. Date Recorded: November 2000

*P10. Survey Type: (Describe) Mixed survey

*P11. Report Citation (Cite survey report and other sources, or enter "none."): Cultural Resources Assessment Report Tuolumne River Regional Park Master Plan EIR Stanislaus County, California, WSA December 2000.

*Attachments: ☐NONE

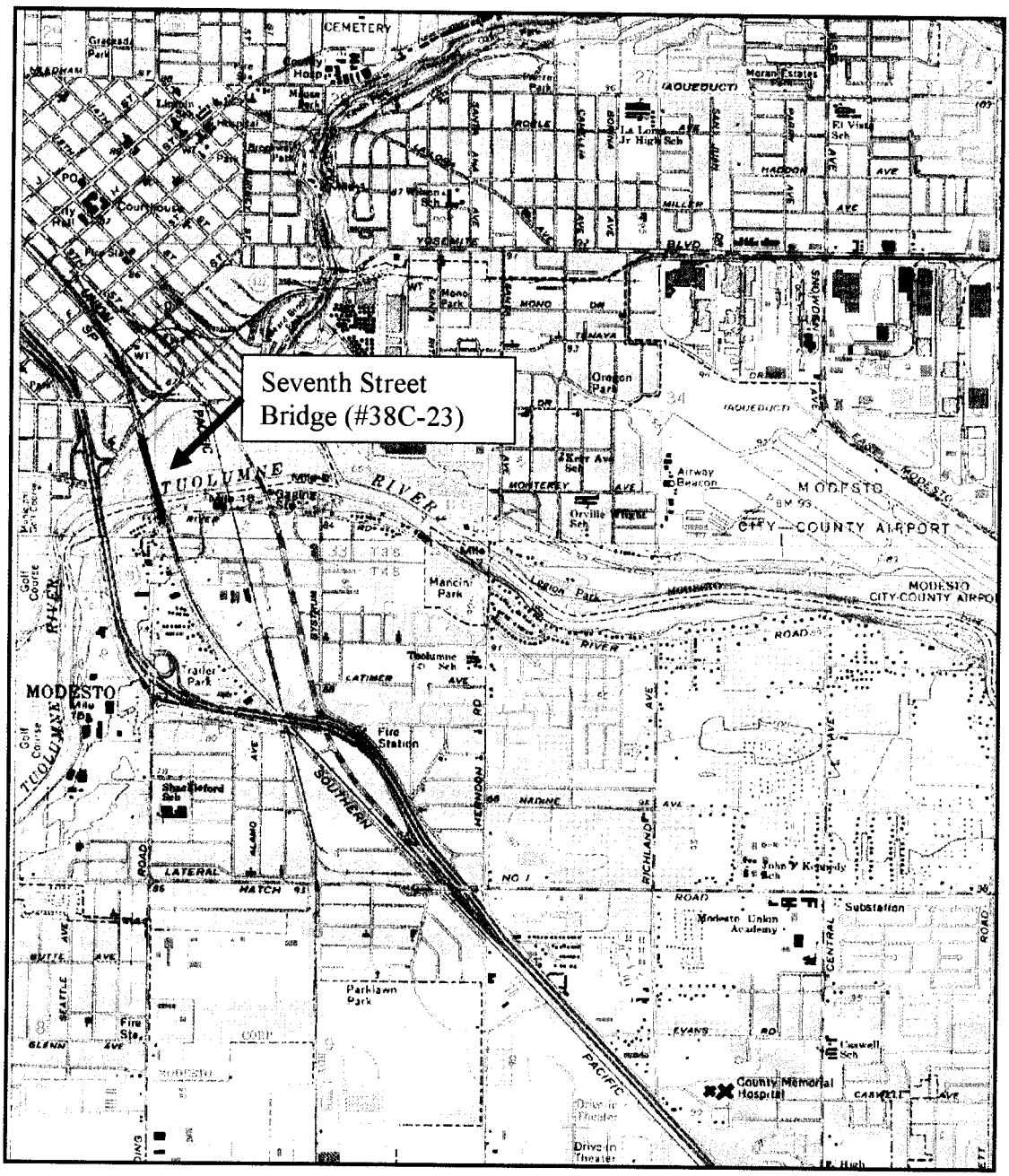
☑Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Resource Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Other (photo pages)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-50-000617
HRI #
Trinomial

Page 2 of 24
*Resource Name or # (Assigned by recorder) Seventh Street Bridge or Lion Bridge (#38C-23)

Map Name: Riverbank Quad 7.5' *Scale: 1:24000 *Date: 1969 Photorevised 1987



DPR 523J (1/95)

*Required information

P-50-000617

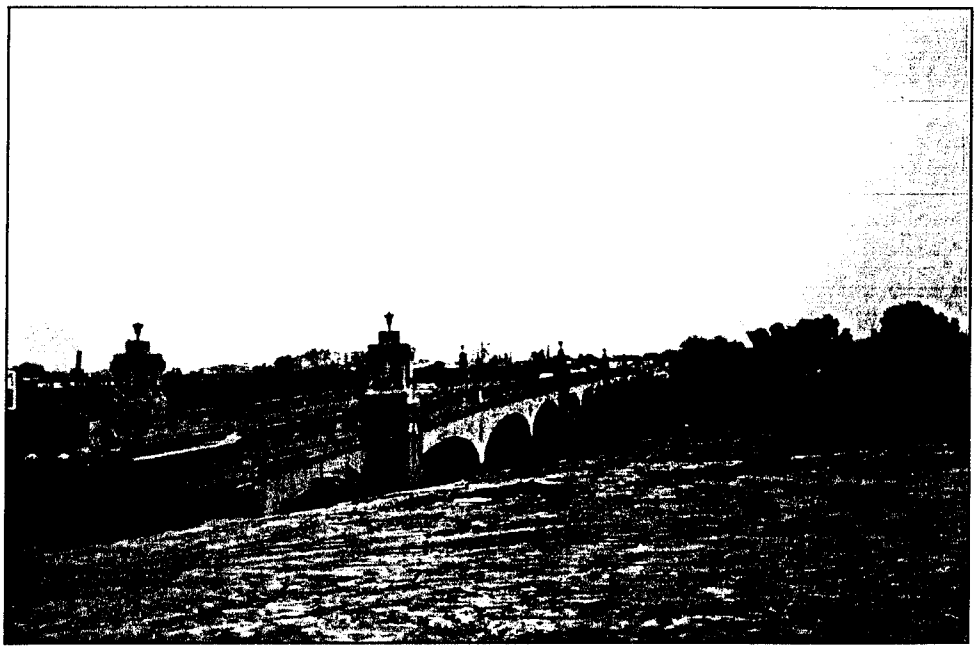


Photo 3. View southeast of Seventh Street Bridge with SPRR Bridge to left.

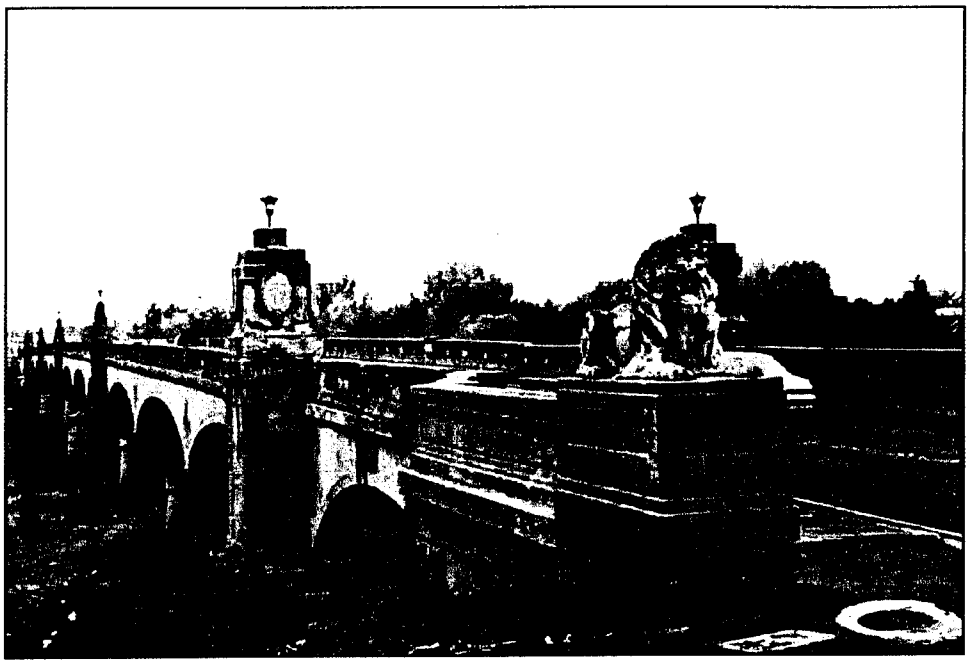


Photo 4. View southwest of the Seventh Street Bridge.

Photos 3 and 4	Tuolumne River Regional Park Gateway Parcel and Gallo/Mancini Area Modesto, California

P-50-000617

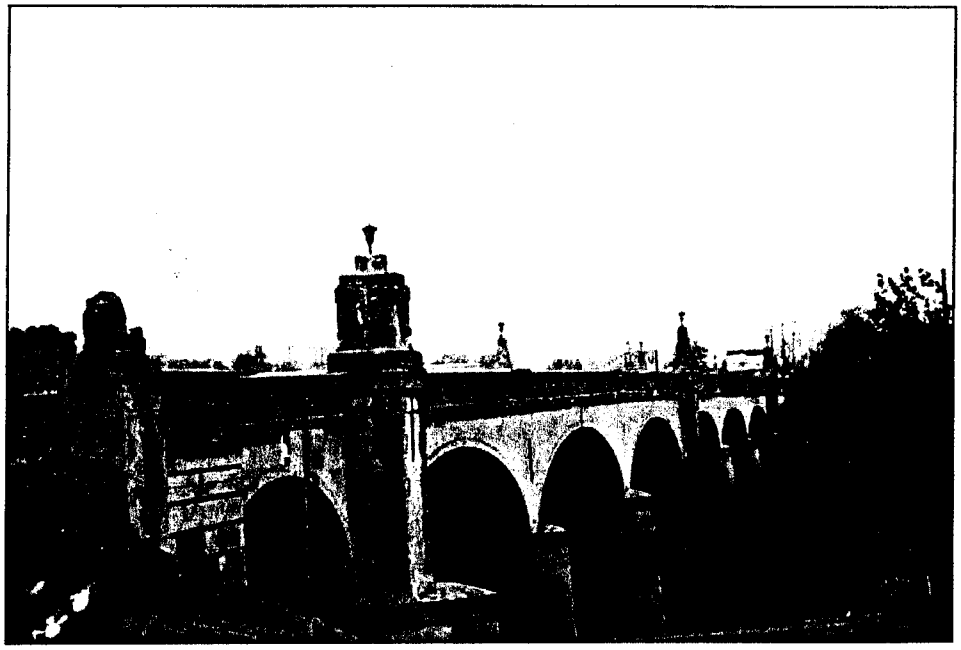


Photo 5. View looking southeast of Seventh Street Bridge.

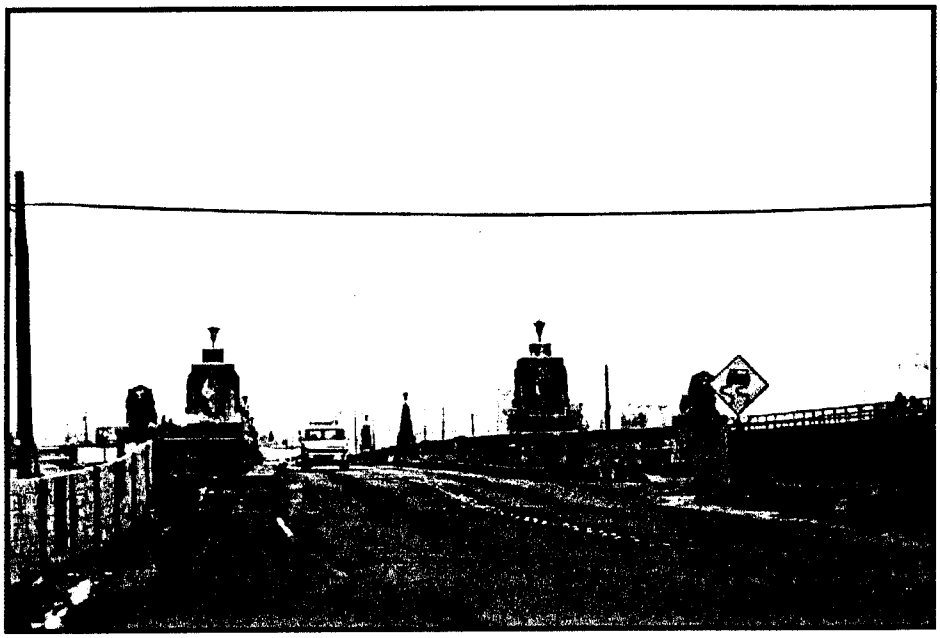


Photo 6. View northwest of Seventh Street Bridge with SPRR Bridge to right.

Photos 5 and 6	Tuolumne River Regional Park Gateway Parcel and Gallo/ Mancini Area Modesto, California

P-50-000617

PROJ.REVW AND RES.PROT.UNIT LOG-OUT PRINTOUT HANS KREUTZBERG

Undertaking Identifier: FHWA860919Z 04/02/98 Page: 38
Undertaking Name: THEME DOE FOR CA CONCRETE SPAN BRIDGES
Property number: 114971
BRIDGE #38C-23 / 7TH STREET BRIDGE
Address: County: STA
7TH ST X-Street: TUOLOMNE RIVER
MODESTO 95354 Vicinity:
Parcel #:

Category: S # of Props:
Owner Type: C Pres. Use: P
Other Recognition: CHL #:
Dates of Construction: 1916 -
Architect: LEONARD & DAY Builder:
Historic Attributes: 19,95
Eth:

Previous Determinations on this property:

Program	Prog. Ref Number	Eval	Crit	Eval-date	Evaluator
HIST.RES.	DOE-50-86-0001-0000	2S2	AC	10/19/86	HANS KREUTZBERG
PROJ.REVW.	FHWA860919Z	2S2	AC	10/19/86	HANS KREUTZBERG

P-50-001811

MAP REFERENCE NO. 26

Riverbank 7.5'

BRIDGE EVALUATION FORM

8/01

(NOTE: This form is only to be used for structure types listed in the Caltrans/FHWA/SHPO Memorandum of Understanding dated December 1980.)

LOCATION: (attach copy of appropriate map showing structure location)

COUNTY: Stanislaus
ROUTE: N/A
VICINITY: Modesto
NAME: Tuolumne River Bridge
BRIDGE NUMBER: N/A

DESCRIPTION:

TYPE: STANDARD

TYPE OF SUPERSTRUCTURE: Single-track timber stringer trestle with open deck. Timbers stringers are creosoted Douglas fir; 10 stringers in two lines of 5, aligned directly beneath rails.

TYPE OF SUBSTRUCTURE: Timber 6-pile bents with timber caps; backfilled timber abutments.

HISTORY/DATE OF CONSTRUCTION/DESIGNER: ca. 1914*/Tidewater Southern Railway

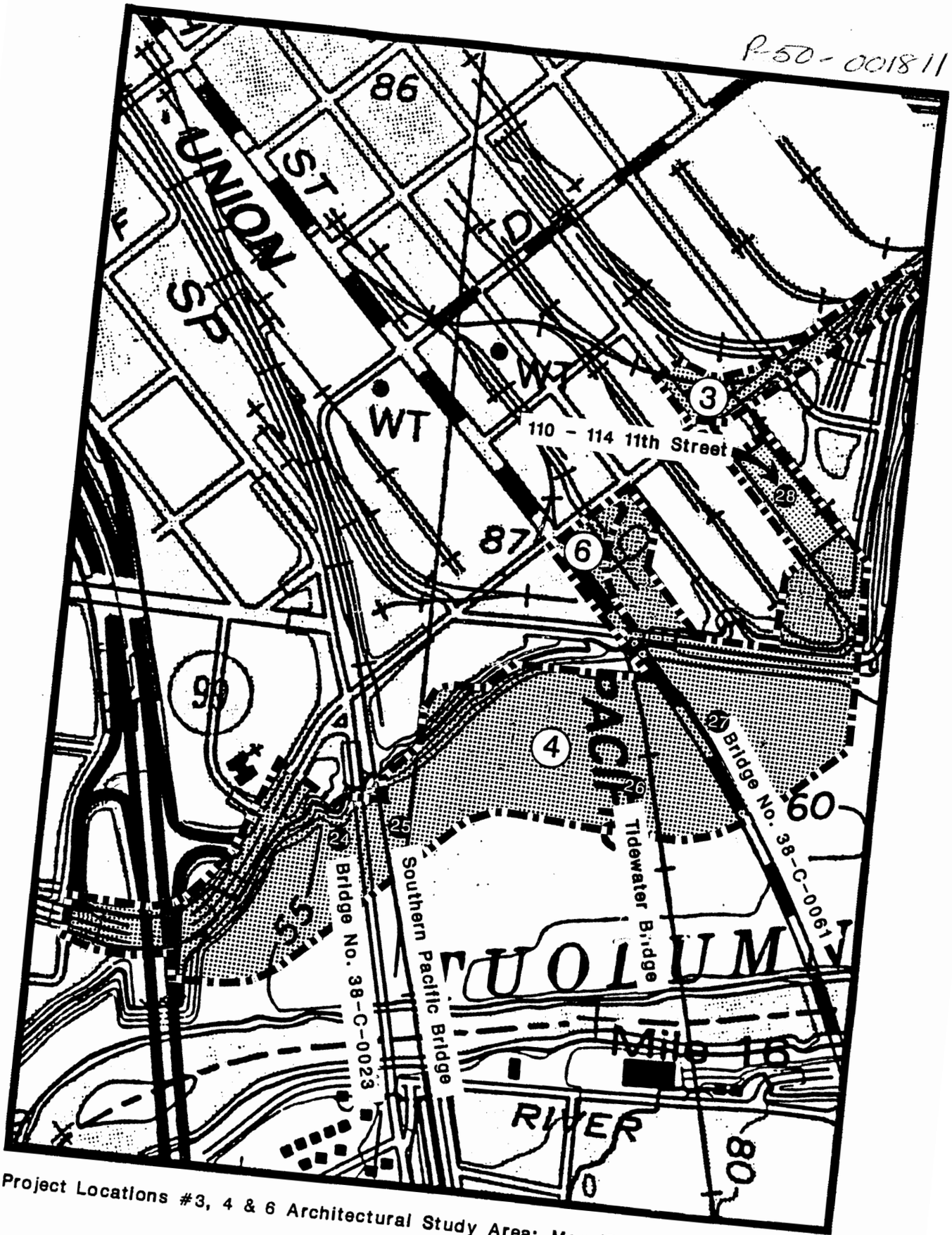
OTHER HISTORICAL INFORMATION (persons, events--e.g. WPA/CCC):

*While original construction of this structure likely dates to ca.1914, maintenance and renewal of timber bridge structures dictates that there is likely little original material left intact. The Tidewater Southern Railway incorporated in 1912, and was acquired by the Western Pacific Railroad in 1917. While this trestle is interesting for its length, it remains nonetheless a simple engineering solution, using a standard-type design, for crossing a broad river basin.

PREPARED BY: John W. Snyder, Chief
Architectural & Historic Studies
Caltrans

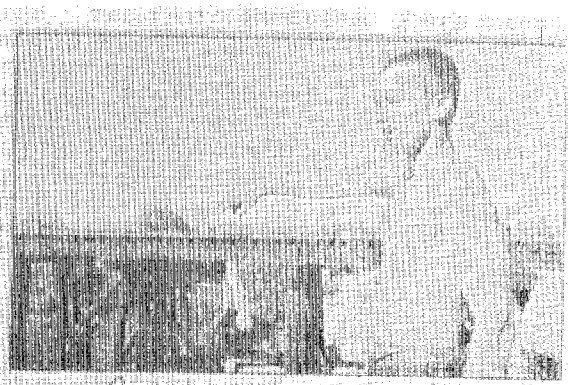
DATE: November 7, 1991

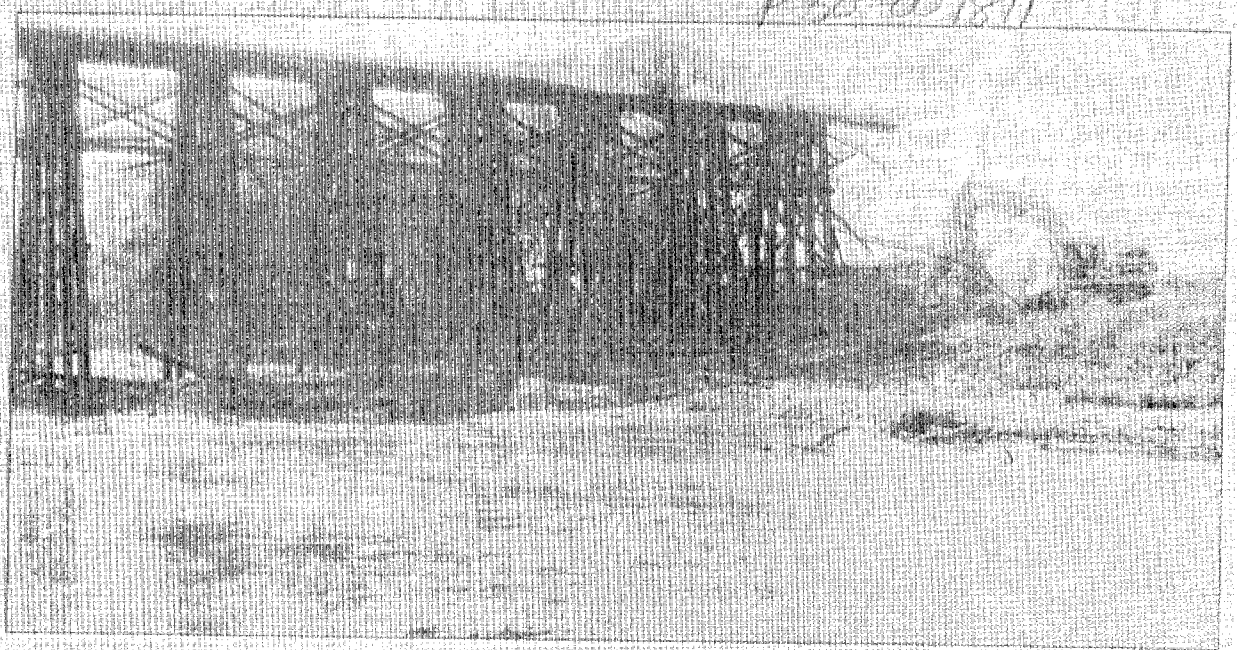
P-50-001811



Project Locations #3, 4 & 6 Architectural Study Area: Map ID #24 and 27

Another piece of Modesto goes down





ADRIAN MENDOZA/THE BEE

A backhoe begins demolition Sunday of the trestle. Top: Johnny Helton points toward spot where homeless stayed.

Historic railroad trestle plowed under after fire destroyed it Saturday

BY JOHN GORENFELD
BEE STAFF WRITER

The trestle over the Tuolumne River creaked, crunched and cracked Sunday afternoon as the metal jaws of a backhoe gnawed off its burnt wooden beams.

On Saturday, fire scorched the 91-year-old railroad bridge next to the Ninth Street Bridge. About a fifth of the bridge's 1,630 feet gave way after the fire was out.

Crews from a contractor planned to collapse the rest of the bridge, now seen as a hazard, by today.

The bridge's death throes provided a spectacle for Modesto residents who parked nearby to watch.

Susan French of Modesto, 41, was upset she had missed Saturday's fire. "I'm loving this," she said as machines tore out trees on the embankment under the bridge.

Saturday, the oil-treated wood that made up the abandoned bridge burned so hot it took two hours to put out and produced smoke visible from the other side of town.

The end of the bridge also means homeless people who lived beneath the former Tidewater Southern Railway trestle would have to move on.

Johnny Helton, 21, who lives farther up the river, said police told people under the bridge that they had to leave the state-owned land.

The fire department is still searching for the cause of the blaze.

The fire came as no surprise to Chris Johnson, 22. He lives in the nearby Beiler's Camp trailer park and said small grass fires have become common in the area. Park residents, he said, suspected groups of children have been starting fires for fun.

He said the bridge was a remnant of a disappearing era. The bridge was built in 1917 and hasn't been used for more than a year.

"It's another piece of Modesto," he said. "It goes down, and a piece of Modesto goes down."

Bee staff writer John Gorenfeld can be reached at 578-2347 or jgorenfeld@modbee.com.

Inside Story

WORK & MONEY

Home sales not as brisk

Sellers may take a little time before deciding on the right house in Modesto, these days. But a local real estate agent says the housing market is still strong in the area, but not at [illegible] a few months ago when home sales were selling in a matter of days and it was the selling point. Today, the agent warned, time for a home is up, a tip-off that sales. *Page C1*

TRAVEL

Old route still has its kicks

[illegible] called it the home of dreams [illegible] Modesto [illegible] to a better life in [illegible] West. Now at age 85, [illegible]'s romance [illegible] of a pilgrimage [illegible] to an artery. *Page H1*

LOCAL NEWS

Street tainted by drugs

[illegible] Westley's [illegible] remember when it used to be [illegible] Used to, they say, [illegible] the well-traveled circle to town [illegible] several homes there where [illegible] deals are being dealt from," Stanislaus County Sheriff's Cmdr. [illegible] Harper. That's terrible news to [illegible] who need an and people [illegible] about public safety and property [illegible]. *Page B1*

WASHINGTON

Bush facing test in Europe

[illegible] first official [illegible] to Europe, [illegible] first Bush [illegible] need to [illegible] with [illegible] diplomatic [illegible]. The package [illegible] trip is history, [illegible] new president [illegible] a foreign policy that [illegible] Europeans [illegible] United States [illegible] priority. On the second [illegible] the [illegible] with Russian President [illegible] Putin and official stops in [illegible] Belgium, Sweden, Poland and [illegible]. *Page A 10*

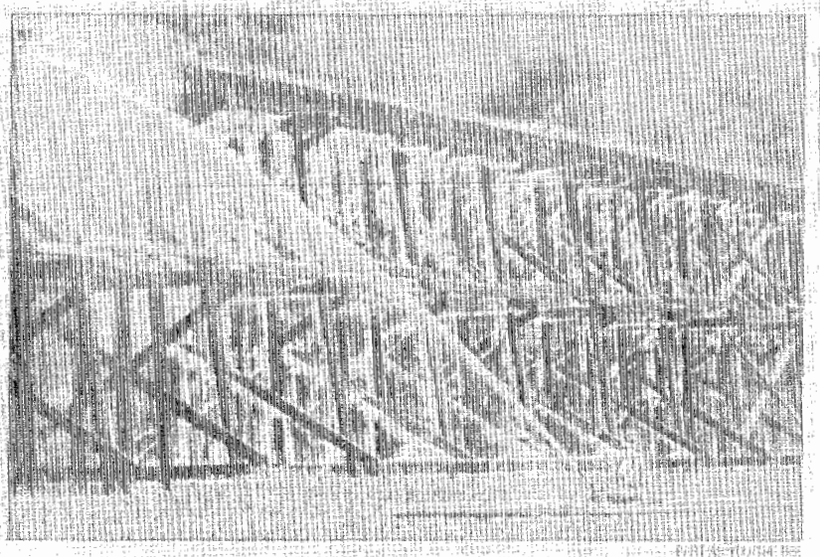
COMING MONDAY

A driver: The number of drivers [illegible] der is growing rapidly in America [illegible] their 16 any earlier and group [illegible] new drivers [illegible] more miles than [illegible] One despite [illegible] fact that [illegible] are [illegible] the worst [illegible] for safe driving [illegible] older because the result is all [illegible] to be increased [illegible] double on the [illegible] roads.

Index

[illegible] ..... E1 | Deaths B5
[illegible] ..... B5 | Obituary B5
[illegible] Homes ..... E1 | Opinion A7
[illegible] ..... B1 | Sports C1
[illegible] ..... A2 | Weather B6

BRIDGE OF FLAMES



The former Tidewater Southern Railway trestle spanned the Tuolumne River for more than 85 years, but fell to a two-hour blaze Saturday. At top, the main deck collapses at 4:07 p.m. Above, a Modesto firefighter douses flames.

Abandoned train trestle blaze gives firefighters a workout

Law enforcement officials busy, too, with spectators

BY BRIAN JOSEPH

A three-alarm fire at a south Modesto train trestle sent a blaze of black smoke hundreds of feet into the late afternoon sky Saturday.

No one was injured in the fire at the trestle, which runs parallel to the Mall. Many Modesto residents gathered to watch as the historic, but unused, structure burned. The trestle has been out of use for many years.

The cause of the fire remains under investigation Saturday night, although officials believe it may have been started by an earlier grass fire in the corner of Needham Drive and Tuolumne Boulevard.

At least more than two hours for about 60 firefighters to get the blaze under control.

The fire was particularly difficult to fight because the trestle was made of dried wood.

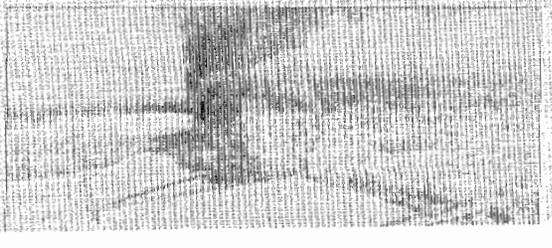
"That was a lot of fuel," Modesto Battalion Chief Rich Stanley said. "It took a lot of gallons of water from the Mall Street Pond."

The Modesto Police Department, the Stanislaus County Sheriff's Department and the California Highway Patrol helped firefighters in controlling hundreds of spectators and in blocking off the streets.

Modesto police officers also searched the vicinity of the trestle to arrest homeless people who were living under the trestle. Modesto police Sgt. Mike Ridenour said police believe some people have been known to live in the area.

[illegible] A-4, [illegible]

Above, the old trestle's lumber, of the open decks, burns like an inferno. Below, a pilot took this photo shortly after taking off from Modesto Airport.



TRESTLE FIRE

[illegible] (5)

FIRE: Several observers report fire by Union Pacific train

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #: P-50-001999
HRI #
Trinomial
NRHP Status Code:
Other Listings
Review Code ____ Reviewer ____ Date ____

***Resource Name or #:** City of Modesto Elevated Water Tower and Tank

9/08

P1. Other Identifier:

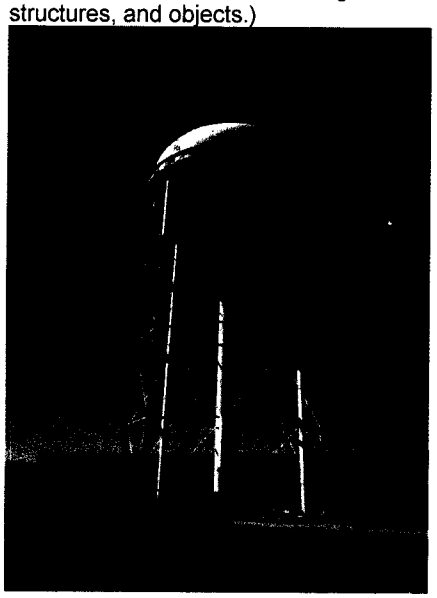
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County:** Stanislaus
b. Address: Near intersection of 10th and D Streets **City:** Modesto **Zip:** 95354
***c. USGS Quad:** Riverbank, CA 7.5' **Date:** 1954
d. UTM:
***e. Other Locational Data:** The water tower is situated southeast of D Street and southwest of 10th Street, APN 106-046-001.

***P3a. Description:** The approximate 130' high elevated water tank and tower is a standard ellipsoidal steel six legged tower with an approximate 100,000 gallon capacity tank. The tower, supported by concrete piers and a concrete pad, is located on a compacted dirt surface adjacent to a circa 1930s industrial building (north side). Character defining features of the water tower and tank include the tower's steel legs, x-bracing, a central pipe between the ground level and the base of the tank, and a narrow catwalk that encircles the tank. The elevated water tank and tower were probably constructed either by the Pittsburgh Tank and Tower Company of Iowa or the Chicago Bridge & Iron Works Company. Both companies were leaders in the industry and built thousands of elevated water towers and tanks all across the United States. The water tower and tank have good integrity of design, workmanship, materials, and association, although the immediate setting beneath the tower has changed with the construction of telecommunications equipment.

***P3b. Resource Attributes:** HP-11 Engineering Structure (Elevated Water Tower and Tank)

***P4. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District

P5. Photograph or Drawing
(Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: Looking northwest at the water tower and tank.

***P6. Date Constructed/Age and Sources:** ■ Historic circa 1950.

***P7. Owner and Address:** City of Modesto, 801 11th Street, Modesto, CA 95353

***P8. Recorded by:** Dana E. Supernowicz, Architectural Historian, Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762

***P9. Date Recorded:** August 2008

***P10. Type of Survey:** ■ Architectural
Describe: Architectural Recordation and Evaluation per Section 106 of NHPA.

***P11. Report Citation:** Cultural Resources Study of the Downtown Modesto Project, AT&T Mobility Site No. CA-9799, Intersection of 10th & D Streets, Modesto, Stanislaus County, California 95354. Prepared for Earthtouch, Inc., 3135 North Fairfield Road, Layton, Utah 84041. Prepared by Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762. August 2008.

***Attachments:** Building, Structure, and Object Record; Photograph Record; Project Location Map

*Required Information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #: P50-001999
HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

 ***Resource Name or #:** City of Modesto Elevated Water Tower and Tank ***NRHP Status Code:** 6Y2

B1. Historic Name: Undetermined
B2. Common Name: Undetermined
B3. Original Use: Water storage and delivery **B4. Present Use:** Same
***B5. Architectural Style:** Industrial elevated water tower and tank
***B6. Construction History:** Based upon historic maps, the elevated water tower and tank were built in circa 1950. The elevated water tank was constructed as a source of water storage for the City of Modesto.
***B7. Moved?** ■ No ☐ Yes ☐ Unknown **Date:** N/A **Original Location:**
***B8. Related Features:** Industrial buildings and warehouses that date from the 1930s through the 1970s.
B9a. Architect: Possibly the Pittsburg-Des Moines Tank & Tower Company, Des Moines, Iowa or the Chicago Bridge & Iron Company.
B9b. Builder: Possibly the Pittsburg-Des Moines Tank & Tower Company, Des Moines, Iowa or the Chicago Bridge & Iron Company.
***B10. Significance: Theme:** Engineering/Elevated tower and tank construction/Manufacturing **Area:** Modesto/Stanislaus County
Period of Significance: circa 1950 **Property Type:** Industrial Water Storage Structure **Applicable Criteria:** A and C

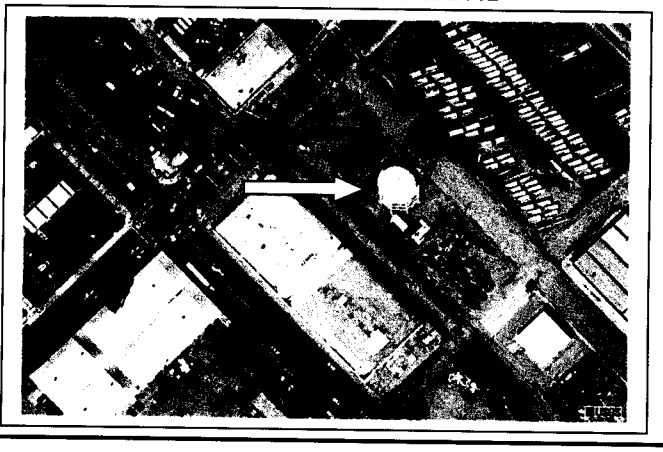
With the expansion of the railroad through the great Central Valley of California, Modesto began its existence with populations from smaller towns along the Tuolumne River - Paradise and Tuolumne City. Their populations and buildings moved entirely to the new village laid out by the Central Pacific Railroad. It was intended to name the station for William C. Ralston, one of the railroad's directors, but he modestly declined and the name was changed to the Spanish adjective meaning "modest" (Gudde 1969:205). The dusty village soon became the center of Stanislaus County, dethroning Knight's Ferry by becoming the county's sixth seat of government since 1854.

In 1870, when it became generally known where the new town of Modesto was to be located, there was a tremendous influx of businesses, dwellings, and people rapidly moving to the one-mile square railroad town. Modesto became the end of the railroad line on November 8, 1870, and it took another two years to construct the tracks as far as Merced. When newcomers got off the train here they saw a community of approximately 25 hastily constructed buildings. By 1910, the population of Modesto was estimated at 4,034 and ten years later it had doubled to 9,241. Modesto soon became known as the "Rose City" and the "Garden City" because of its many rose bushes and well-manicured lawns. From 1920 to 1930 Modesto achieved the greatest growth of any city in Northern California or 49% to 13,842. Then in 1940, the population again increased to 16,830 (Historic Modesto Website 2008) Refer to BSO, Page 3 of 3.

B11. Additional Resource Attributes: N/A
B12. References: Pittsburgh Tank & Tower Company, Inc. Website. www.watertank.com. Accessed 2003; Chicago Bridge & Iron Works. *Elevated Tank Designs: Submitted in a Competition Sponsored by Chicago Bridge & Iron Works.* 1931; Gudde, Edwin G. *California Place Names: The Origin and Etymology of Current Geographical Names.* Berkeley: University of California Press, 1969; Historic Modesto Website. "About Historic Modesto." www.historicmodesto.com. Accessed August 2008; Straus, Rachael; "The Chicago Bridge and Iron Works During the Great Depression," www.lib.niu.edu/ipo/ihy930574.html. Accessed 2005; Hohenthal et al. *Streams in a Thirsty Land: A History of the Turlock Region.* Turlock: City of Turlock. 1972.

B13. Remarks: None
B14. Evaluator: Dana E. Supernowicz, Architectural Historian, Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762
Date of Evaluation: August 2008.

AERIAL PHOTOGRAPH 2002



(This space reserved for official comments.)

*Required Information

***B10. Significance: (Continued):**

The story of the Modesto Irrigation District began with the creation of a California irrigation district law. In 1886, a young Modesto attorney, C.C. Wright, ran for the state legislature in 1886 on one issue - to get a California irrigation district law passed. He was elected, arrived in Sacramento in January 1887 and by March 7th, the law was passed and signed by the governor. Then it was up to the local voters to organize a district under the new law. On July 9, 1887, voters in the Modesto area approved the formation of California's second irrigation district under the new law and elected a five-member board of directors. The Stanislaus County Board of Supervisors declared the Modesto Irrigation District (MID) organized on July 18. Directors held the first meeting on July 23 and went to work to select a source of water for the newly organized district (Hohenthal et al. 1972).

In 1893, directors decided to use water from the Tuolumne River and the Modesto and Turlock irrigation districts built La Grange Dam, a diversion dam, on the Tuolumne River. MID continues to divert water to the north of the river and Turlock Irrigation District (TID) to the south. Don Pedro Reservoir is the District's primary water storage facility, while Modesto Reservoir is a small holding reservoir. Modesto and Turlock irrigation districts constructed the original Don Pedro Reservoir in 1923. It was replaced by the completion of the New Don Pedro Reservoir and Dam in 1971. New Don Pedro is the sixth largest freshwater multi-use reservoir in California. The District's 208 miles of canals operate on a gravity flow system. Canals were completed in 1903 and the first official MID irrigation season opened in 1904 (Hohenthal et al. 1972).

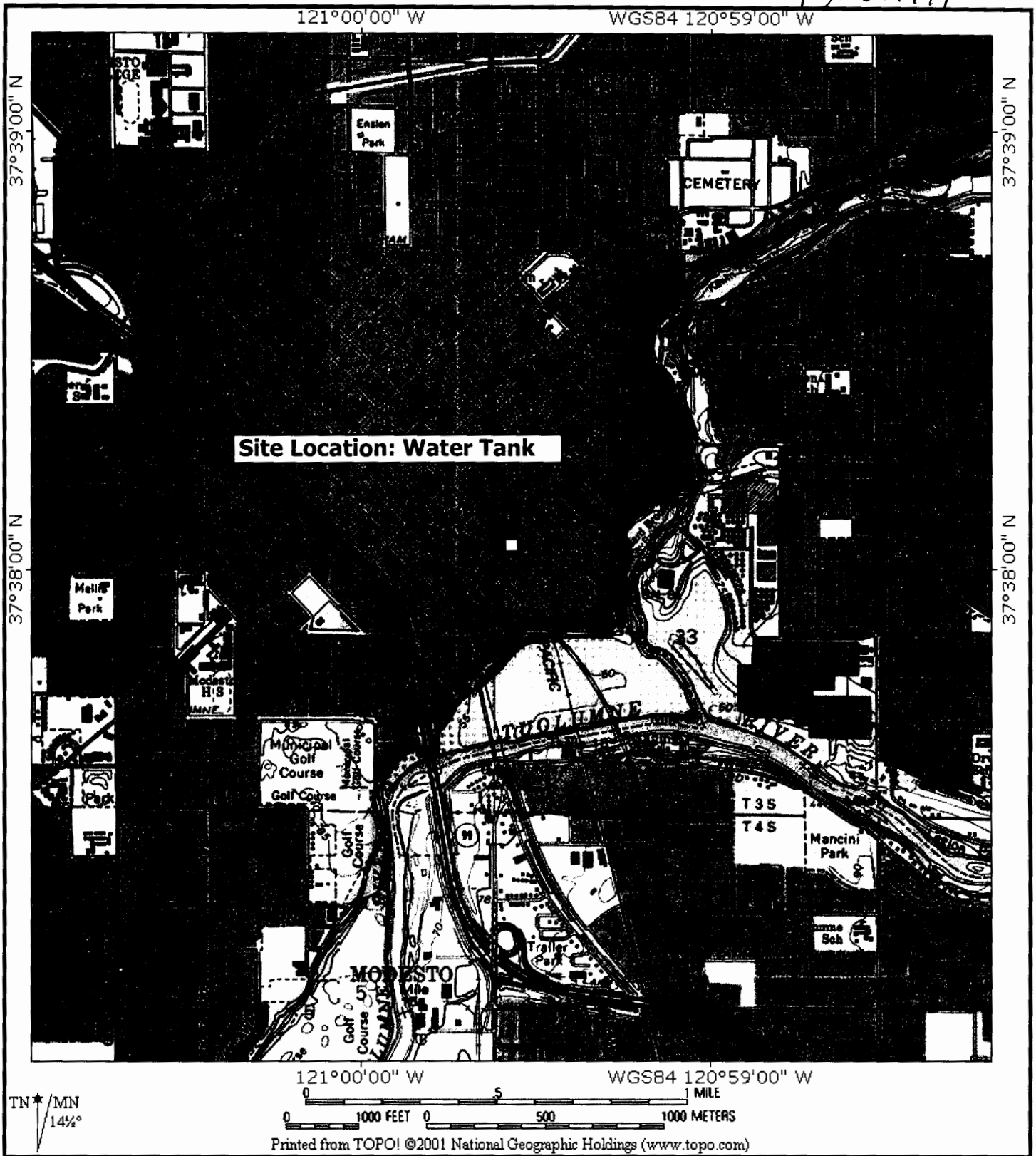
The location of the elevated water tower and tank consists of an approximate ½-acre parcel of land zoned for general industrial use, which contains an elevated water tank owned by the City of Modesto. The surface of the property is covered with a combination of packed dirt and gravel including existing electrical cabinets and other telecommunications equipment. The steel elevated water tower and tank features a design that can still be found throughout the United States, used by private companies and municipalities for water storage. Between the 1920s and the 1970s there had been a number of important technological improvements that had been made to the design of elevated water towers, although the basic principals of engineering and function remain unchanged.

The 1900s-1920s water tower designs were constructed largely of wood, with lattice bracing and a large catwalk around the tank, which featured a conical cap. The second episode of tower construction, circa 1910s-1920s, featured steel four legged, riveted, lattice-braced towers with a distinctive cone shaped steel tank and conical hood. The third class of elevated towers included torospherical or ellipsoidal steel, five or six legged designs with spherical tanks and narrow catwalks. These towers were generally built in the late 1940s or 1950s for municipal or military use, as was the case with the Modesto elevated water tower and tank (Pittsburgh Tank & Tower Company, Inc. Website 2005; Chicago Bridge and Iron Works 1931).

The candidate structure, owned and operated by the City of Modesto, is a circa 1950s ellipsoidal elevated steel water tower and tank, commonly used by municipalities, the military, and private industry. The approximate 130' tower and tank retain good integrity, but the structure itself is very common and can be found in numerous Central Valley communities, including nearby Stockton. Near the tower is a circa 1930s industrial warehouse, but further beyond the elevated water tower are industrial buildings and structures that date from the 1950s through the 1970s. While the property is owned and operated by the City of Modesto, and is part of the city's water storage and distribution network, it is a relatively modern facility as compared to the communities historic water storage system that once included wood-frame elevated water towers and tanks and conical circa 1920s steel water towers.

Therefore, the property does not appear to be individually eligible for the National Register of Historic Places (NRHP) under Criterion A for its association with a significant event in the history of Modesto, or under NRHP Criterion C for its engineering design. The property does not appear to be part of a NRHP historic district, characterized by industrial buildings and structures adjoining D Street.

P-50-001999



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earthTouch inc

EarthTouch, Inc.
3135 North Fairfield Road
Layton, Utah 84041
Tel: 801.771.2800
Fax: 801.771.2838

Topographic Map
(Site Location)

DT Modesto Water Tower and Tank
10th & D Street
Modesto (Stanislaus County), CA 95354
T3S R9E Section 33

Figure: TOPO/APE Map
Append: FCC Form 621

Project: CA-9799-ATT / DT Modesto

Source: USGS 7.5-minute quadrangle
Riverbank, CA

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P50-002018
HRI#
Trinomial
Other Listings:
Review Code: Reviewer: Date:

Page 1 of 6 **Resource Name or #:** (assigned by recorder) **Modesto Pump Station Number 5** 12/09

P1. Other Identifier:

P2. Location: Not for Publication X Unrestricted (P2b and P2c or P2d. Attach a Location Map as necessary)

a. County Stanislaus
b. USGS 7.5' Quad: Salida Date: 1969 (1987) T. 3S ; R. 9E ; SE 1/4 of NW 1/4 of Sec. 32; MDBM
c. Address: 629 2nd Street City: Modesto Zip: 95351-3351
d. UTM: (Give more than one for large and/or linear resources) Zone: 10 ; mE/ ; mN
e. Other Locational Data: (e.g.parcel #, directions to resource, elevation, etc., as appropriate) The former fire station is located at 629 2nd Street , located north of Sierra Drive, and south of G Street in the southwestern portion of the City of Modesto..

P3a. Description: (Describe resource and it major elements. Include design, materials, condition, alterations, size, setting, and boundaries). The pump station structure is single story, rectangular-shaped with a flat roof and parapet with an undecorated entablature, made of concrete. The walls are enclosed with square columns and beam. Two facades have paired, double sash windows divided horizontally. They are enclosed with a lintel with decorative panel, plain trim and plain lugsill. A third facade has a single window with the same treatment. The south-facing facade has an arched porch supported by columns and double, double doors with a fanlight transom window with panels. The doors are metal. There is a decorative panel below the crest of the arch.

Stylistically, the structure has elements of the Beaux Arts Style, popular between 1885 and 1930. It would fall under the more common flat roof subtype that was modeled after Italian Renaissance homes. The symmetrical facade and entry porch roof supported with classical columns are typical Beaux Arts features (McAlester and McAlester 1996:379-380). Overall, decorative elements are limited to the window lintels and one panel underneath the crest of the arch.

P3b. Resource Attributes: (List attributes and codes) HP - 9 - Public Utility Building

P4. Resources Present: Building X Structure ☐ Object Site ☐ District ☐ Element of a District ☐ Other (Isolates etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects)

P5b. Description of Photo: (View, date, accession #) View looking southwest from. 2nd Street. 2-4-09

P6. Date Construction Age and Sources: 1919-22
Historic X Prehistoric Both ☐

P7. Owner and Address:
City of Modesto

P8. Recorded By: (Name, affiliation, and address) Kenneth Horrillo, City of Modesto
Recreation and Neighborhood Services Division
P.O. Box 642
Modesto, California 95363

P9. Date Recorded: 2/4/09

P10. Survey Type: (Describe) N/A; Building evaluation

P11. Report Citation: (Cite Survey report and other resources, or enter "none") An Evaluation of FOld Pump Station Number 5, City of Modesto,California. Peak & Associates, Inc. 2009

ATTACHMENTS: NONE x Location Map x Sketch Map x Continuation Sheet x Building, Structure, and Object Record
Archaeological Record ☐ District Record ☐ Linear Feature Record Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other: ____

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary #: P-50-002018
HRI #:

Page 2 of 6 *NRHP Status Code: 6Z

B1. Historic Name: Modesto Pump Station Number 5
B2. Common Name: Same
B3. Original Use: To enclose a water pump B4. Present Use: Same, pump not used since 1982
B5. Architectural Style: Beaux Arts
B6. Construction History: (Construction date, alterations, and date of alterations.). The pump station was built during 1sometime between 1919 and 1922.

B7. Moved? X No ☐ Yes x Unknown Date: _____ Original Location: _____
B8. Related Features: None

B9a. Architect: Unknown b. Builder: Unkown
B10. Significance: Theme N/A **Area** N/A
Period of Significance N/A **Property Type** N/A **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The pump station is not associated with events important in our past or that have made a significant contribution to the broad patterns of California's history and cultural heritage [CRHR Criterion (B) 1]. It is simply a former part of the water supply system of the City of Modesto, and is representative of a period when the growth in population brought about a need for more service.

There is no single person of prominence that can be cited relative to the development and expansion of the water supply system of the City of Modesto. There are no other personalities associated with the building complex, so it can be concluded the building is not eligible under CRHR Criterion (B) 2 for an association with the lives of persons important in our past.

Modesto Pump Station No. 5 had a limited number of design elements added to an otherwise utilitarian design. It is somewhat unique, but does not exemplify or embody any outstanding architectural characteristics of a particular style or method of construction. Similarly, it does not represent the work of an important creative individual, or possesses high artistic values [CRHR Criterion (B) 3].

As a result, it can be concluded that the structure is not eligible for the California Register of Historical Resources.

B11. Additional Resource Attributes: (List attributes and codes)

(Sketch map with north arrow required)

See page 5/6 for sketch map

B12. References: Sanborn Fire Insurance Map 1919

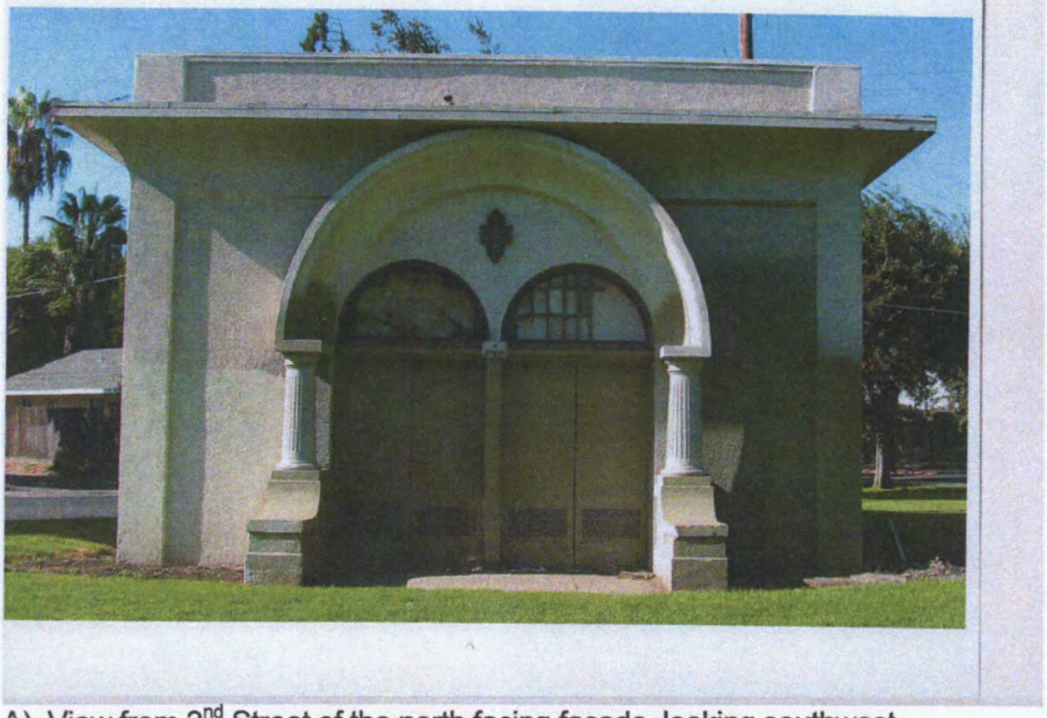
B13. Remarks:

B14. Evaluator: Melinda Peak

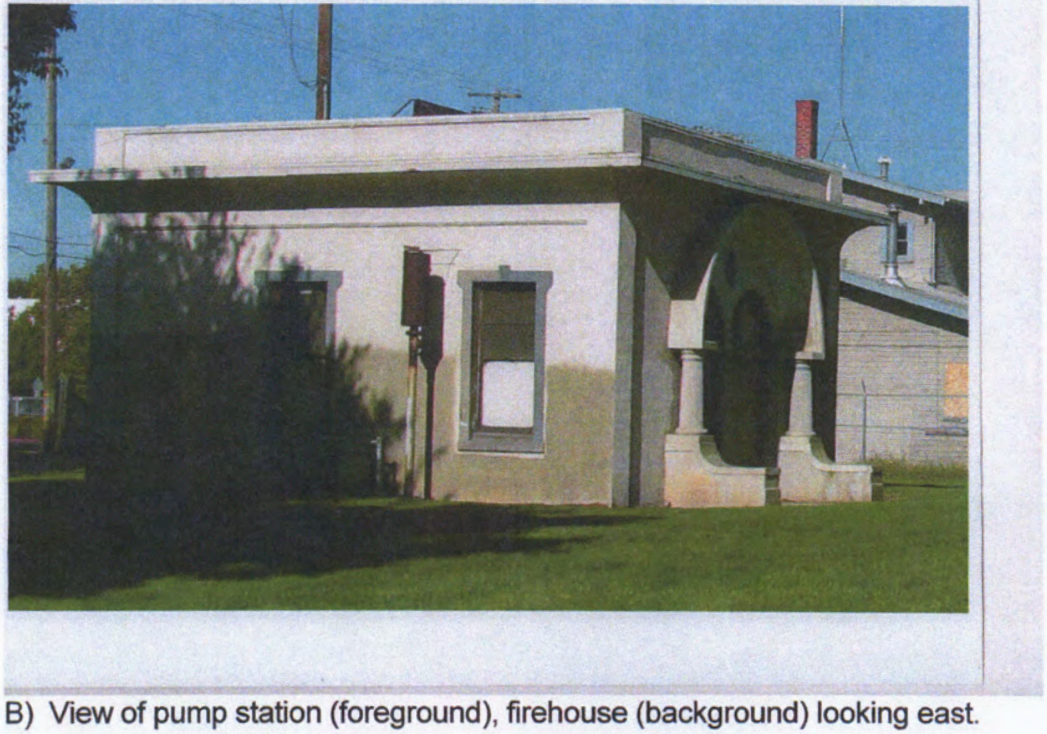
Date of Evaluation: 10/26/09

This space reserved for official comments.

P-50-002418



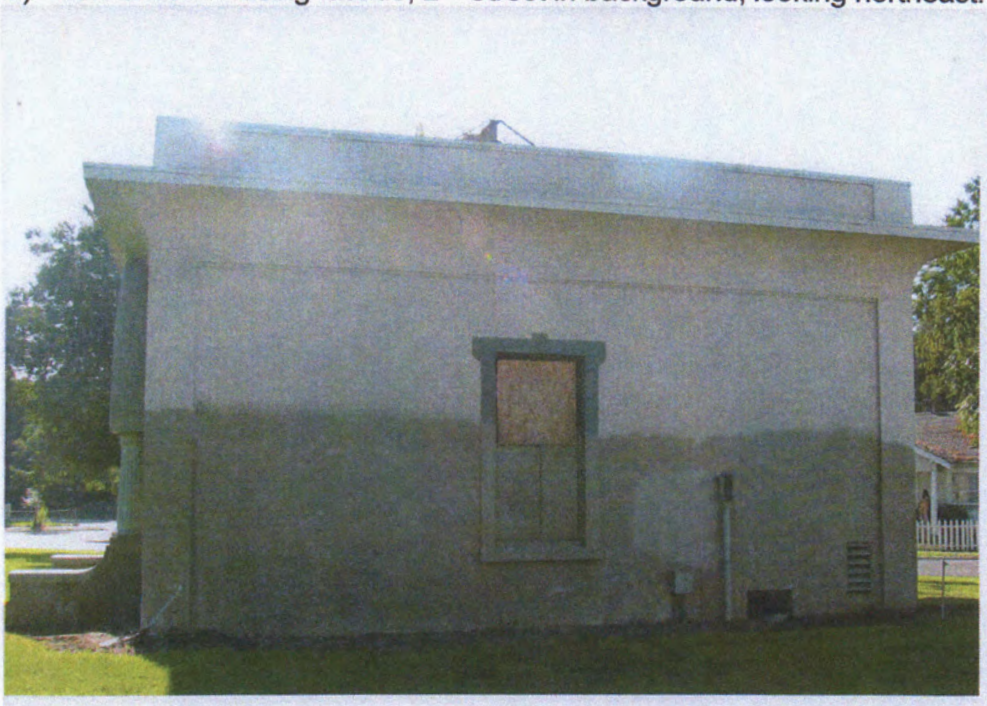
A) View from 2nd Street of the north facing facade, looking southwest.



B) View of pump station (foreground), firehouse (background) looking east.

P-50-002018

C) View of south facing facade, 2nd Street in background, looking northeast.



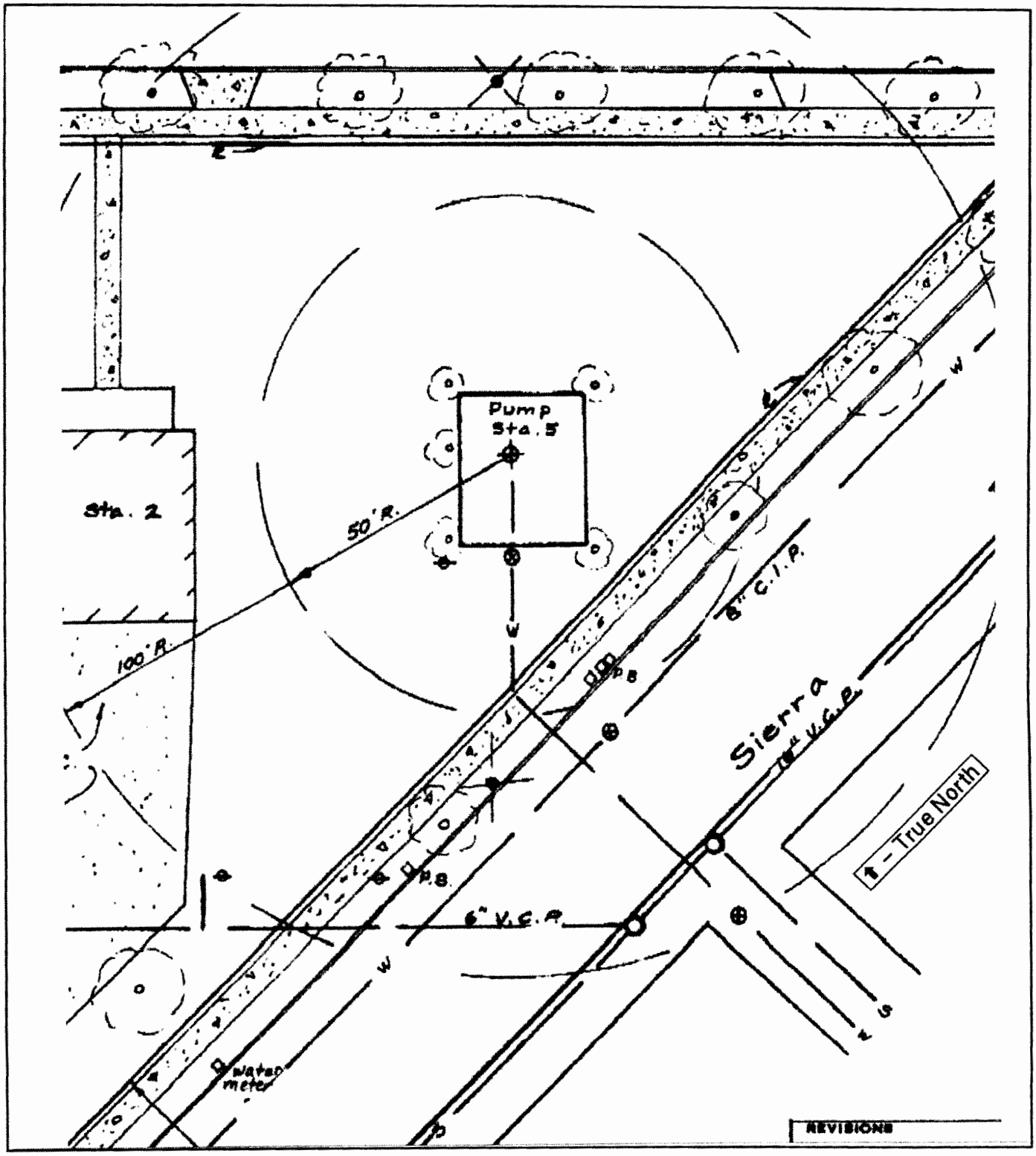
D) View of the west facing facade, Sierra Drive in background, looking southeast.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SKETCH MAP

Primary # P-50-002018
HRI#
Trinomial

*Resource Name or # (Assigned by recorder) Modesto Pump Station Number 5



*Drawn By: J. Wells, City of Modesto Department of Public Works

*Date: 8/6/81

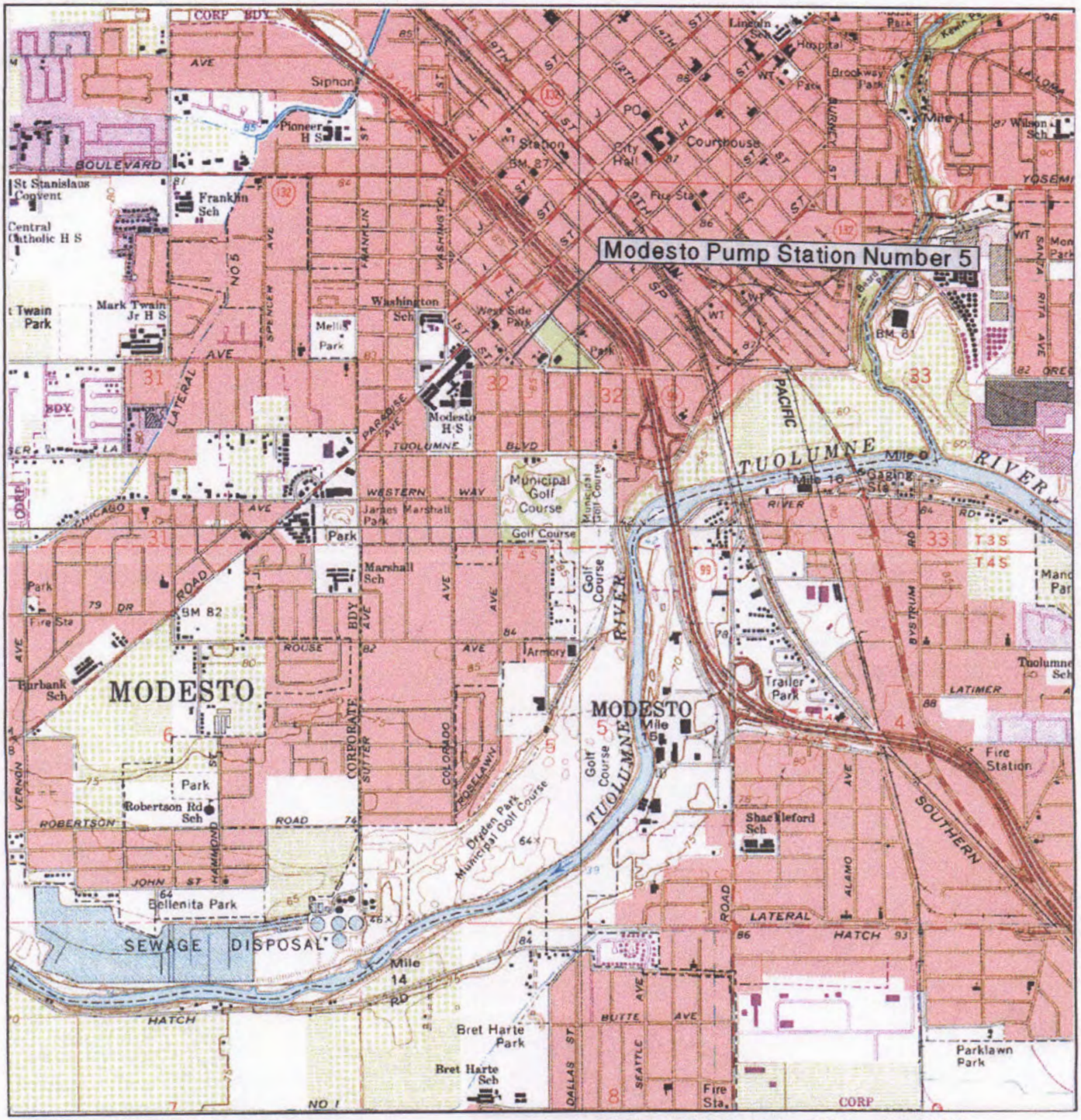
DPR 523K (1/95) Scale 1 inch = 26.6 feet

*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-50-002018
HRI#
Trinomial

*Resource Name or #: Modesto Pump Station Number 5



*Map Name: Brush Lake, Calif.
DPR 523J (1/95)

*Scale: 1:24,000 *Date of Map: 1969 (1976)
*Required information

(Revised 3/2011)

no revised map found

City of Modesto
Designated Landmark Preservation Sites

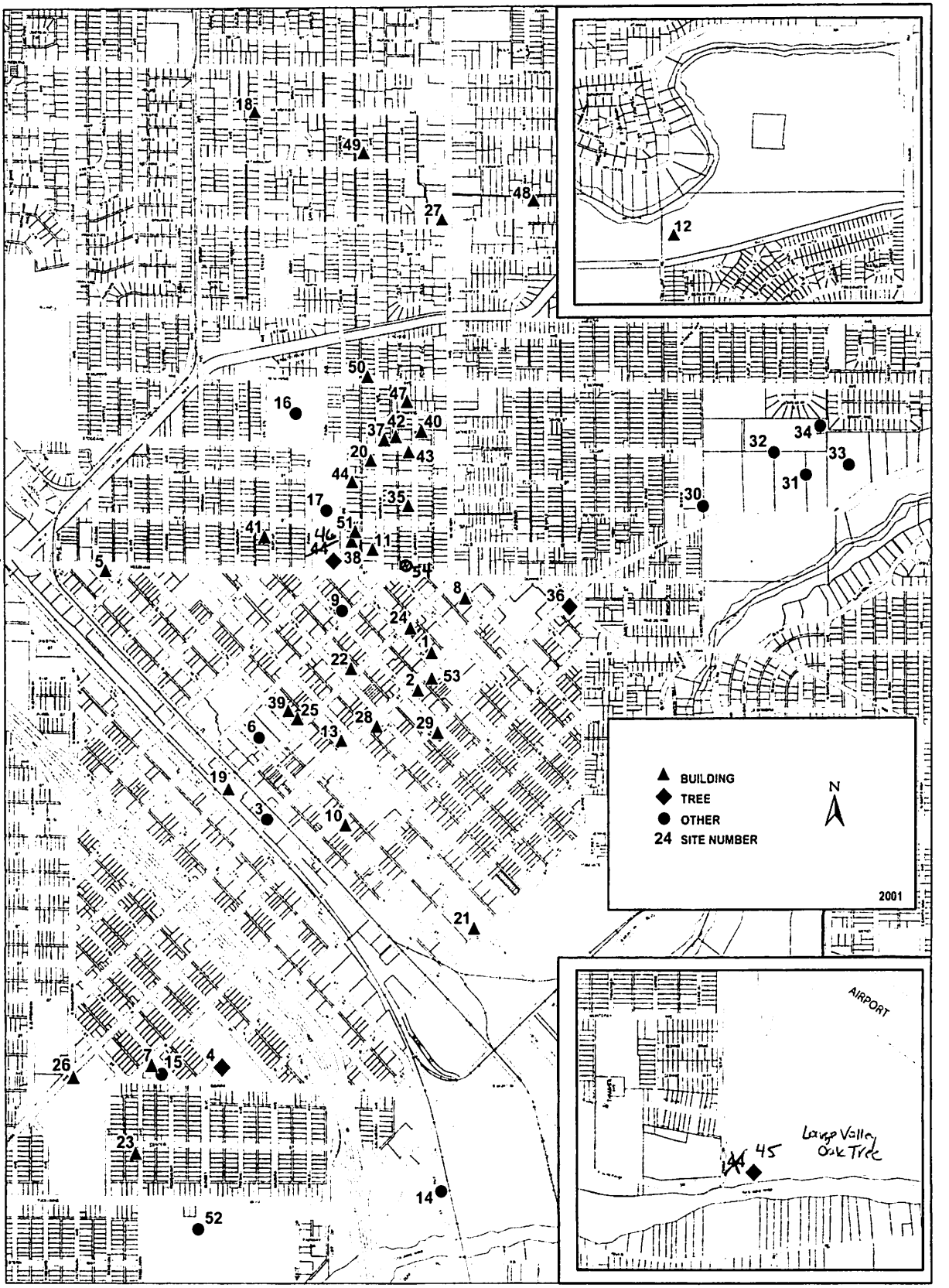
Site No.	Site	Address	Year Built	Date of City Council Designation
1	McHenry Mansion	906 15th Street	1883	12/5/89
2	McHenry Museum	1402 I Street	1912	12/5/89
3	Modesto Arch	9th and I Streets	1911-12	12/5/89
4	Modesto Ash Tree	Sierra & 3rd Streets	Planted before 1911	10/9/90
5	Pump Station No. 9	10th and Needham Streets	1930	10/9/90
6	Woolworth Company Sign	1014 10th Street	Installed 1949	10/9/90
7	Fire Station No. 2	629 2nd Street Demolished	1924	10/9/90
8	Cressey Manor	917 17th Street	1917	11/13/90
9	Turner Hitching Post	1104 14th Street	1871	4/23/91
10	Modesto News Herald Bldg.	726 10th Street	1894	4/23/91
11	Hawke Castle	115 Magnolia Avenue	1929	4/23/91
12	McClure Country Place	800 N. McClure Road	1881	11/26/91
13	U.S. Post Office and Federal Bldg.	1125 I Street	1932-33	11/26/91
14	7th Street Bridge "Lion" Bridge	7th Street	1916	4/28/92
15	Fire Bell	629 2nd Street moved to where?	1894	4/28/92
16	Enslen Park	Stoddard and Enslen Avenues	Purchased 1906	12/8/92
17	Graceada Park	Sycamore and Needham Avenues	Donated 1906	12/8/92
18	"Rammed Earth" House – Mrs. A. Bradley, owner	1027 N. Enslen Avenue	1934	7/13/93
19	Southern Pacific Transportation Center.	9th and J Streets	1915	12/7/93
20	Ralph M. Brown Home	309 Magnolia Avenue	1923	3/22/94
21	Gallo Founders Bldg.	401 11th Street	1928	3/22/94
22	The State Theatre	1307 J Street	1934	1/10/95
23	Graham Home	206 Roselawn Avenue	1921	7/25/95
24	Masonic Temple	1500 J Street	1917	7/25/95
25	Stockton Savings Bank	1101 J Street	c. 1935	7/25/95
26	H Street Facade of Modesto High School	18 H Street	1918	7/25/95
27	Wissner Medical Office Bldg.	901 McHenry Avenue	1937	11/14/95

City of Modesto
Designated Landmark Preservation Sites
Page 2

Site No.	Site	Address	Year Built	Date of City Council Designation
28	Elk's Lodge	1222 I Street	1927	4/2/96
29	First Church of Christ Scientist	1328 H Street	1922	10/8/96
30	Acacia Memorial Park	801 Scenic Drive	1872	12/3/96
31	Modesto Pioneer Cemetery	905 Scenic Drive	1856	12/3/96
32	Modesto Cemetery	1001 Scenic Drive	1855	12/3/96
33	St. Stanislaus Catholic Cemetery	1141 Scenic Drive	1870	12/3/96
34	Stanislaus County Cemetery (aka Potter's Field)	1001 Scenic Drive	1872	12/3/96
35	Dr. Donald Robertson Home	211 Elmwood Court	1929	12/3/96
36	City's Christmas Tree	19th/H/La Loma		3/25/97
37	The Stanley Home	225 Stoddard Avenue	1927	6/24/97
38	The John M. Walthall Home	118 Sycamore Ave.	1911	6/24/97
39	The Pacific Telephone	1012 11th Street	1922	10/14/97
40	The Gundlach Residence	410 Elmwood Avenue	1937	11/12/97
41	Lish Residence	125 Poplar Avenue	1890's	3/24/98
42	Guzman Residence	215 Stoddard Avenue	1927	3/24/98
43	Ayres Residence	319 Elmwood Avenue	1923	3/24/98
44	Harris Home	230 Sycamore Avenue	1934	5/19/98
45	Large Valley Oak Tree	Tuolumne River Regional Park	Planted about 1858	7/14/98
46	Bunya Bunya Tree City of Modesto	Graceada Park on Needham Street	Planted in 1916	11/10/98
47	Balmannos Residence	207 Elmwood Court	1927	5/4/99
48	Cadrett Residence	201 Hintze Avenue	1931	7/27/99
49	Montrie & Robinson Residence	1001 Magnolia Avenue	1930	7/27/99
50	Anderson Residence (removed from landmark status on 3/27/07)	501 Magnolia Avenue	1922	8/24/99
51	Scully Residence	124 Sycamore Avenue	1925	10/10/00
52	Municipal Golf Course	400 Tuolumne Boulevard	1930's	3/27/01

53	Apartments (historic name "Foy" Apartments)	1418 – 1430 I Street	1912	2/26/02
54	Centenary Methodist Church	201 Needham St.	1920	5/14/02
55	McDonald Residence (historic name "Johnson House")	503 W. Morris Ave.	1927	8/6/03
56	Draizen Residence (historic name "Dr. J.C. Robertson House")	215 Elmwood Ct.	1933	3/22/05
57	Lundgren Residence	218 Elmwood Ct.	1926	1/02/07
58	Garcia Residence (Historic name "William Silva House")	216 W. Morris Ave.	1925	6/12/07
59	Vickery Residence (Historic name "Ransom House")	305 Magnolia Ave.	1930	3/22/11

Revised 3/11



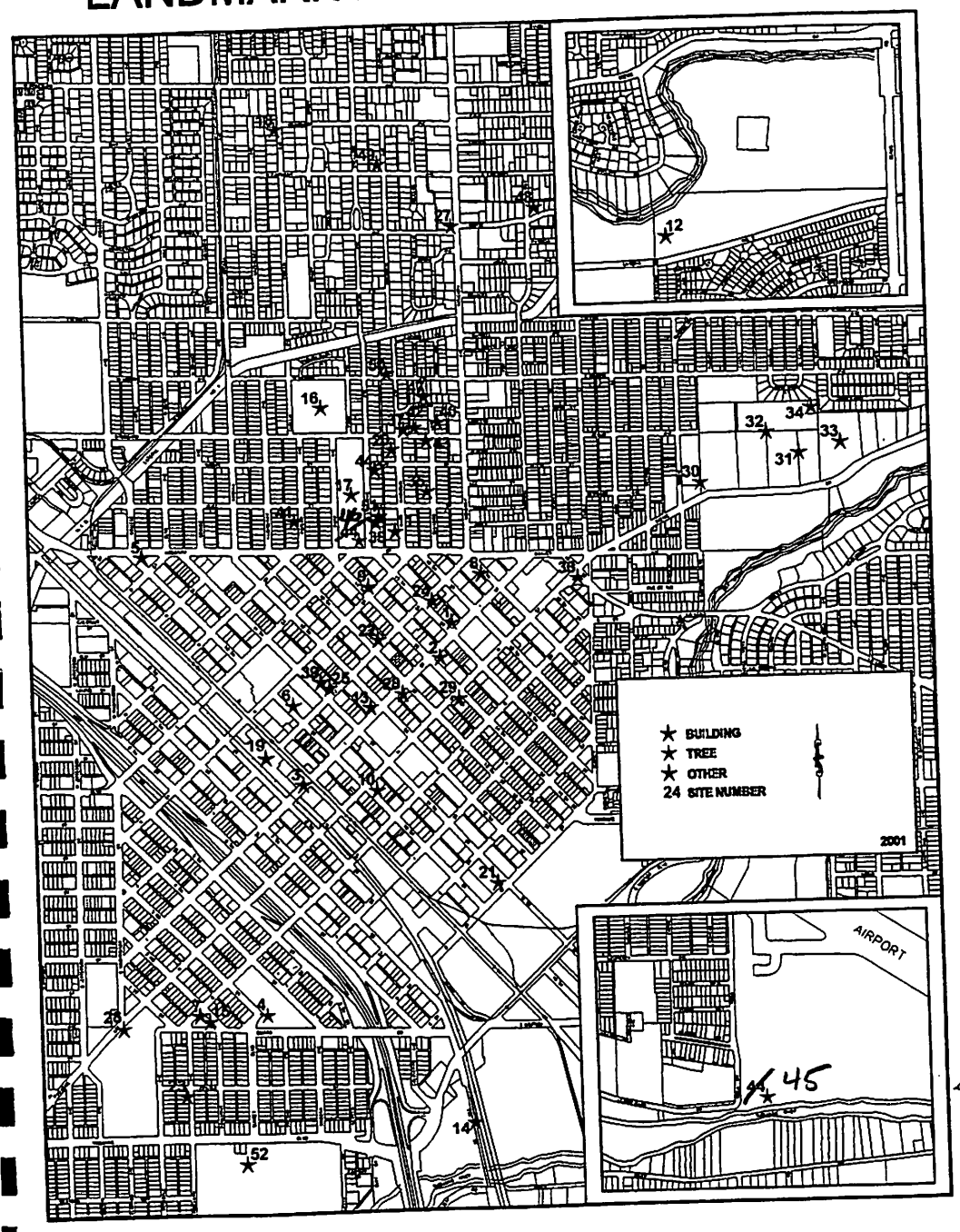
Jones & Stokes

Figure V-8-1
Landmark Preservation Sites

Appendix E

Cultural: Designated Landmark Preservation Sites

LANDMARK PRESERVATION SITES



COPY

City of Modesto Landmark Preservation Sites, as of 2002. (See ST-4834 in Riverbank Quad

OFFICE OF HISTORIC PRESERVATION * * * Directory of Properties in the Historic Property Data File for STANISLAUS County. Page 1 03-20-14

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
056109	50-000544	2928 5TH ST	DANIEL WHITMORE HOME	CERES	M	1870	HIST.RES.	NPS-89000230-0000	04/05/89	1S	BC
							NAT.REG.	50-0001	04/05/89	1S	
							ST.FND.PRG	619.0-HP-88-50-001	12/22/88	3	
							HIST.SURV.	5307-0001-0000	11/28/88	3S	
165911	1992	3213 6TH ST		CERES	P	1930	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
126314	50-001789	2307 CENTRAL AVE		CERES	P	1925	HIST.RES.	DOE-50-00-0002-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
126315	50-001790	2311 CENTRAL AVE		CERES	P	1940	HIST.RES.	DOE-50-00-0003-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
126316	50-001791	2313 CENTRAL AVE		CERES	P	1936	HIST.RES.	DOE-50-00-0004-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
165910	1991	2601 DON PEDRO RD		CERES		1946	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165909	1990	2624 DON PEDRO RD		CERES		1940	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165908		2630 DON PEDRO RD 1989		CERES		1949	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165907	1988	2632 DON PEDRO RD		CERES	P	1937	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165906	1987	3824 EL CAMINO AVE		CERES	P	1947	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165845	1986	3836 EL CAMINO AVE		CERES	P	1943	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165844	1985	3912 EL CAMINO AVE		CERES	P	1940	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165842	1984	3930 EL CAMINO AVE		CERES	P	1953	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
184606		2008 HOLLISTER ST		CERES	P	1949	PROJ.REVW.	HUD101208F	12/20/10	6Y	
165831	1974	4001 JOSEPH RD		CERES	P	1949	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165830	1973	4002 JOSEPH RD		CERES	P	1950	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165832	1975	4137 JOSEPH RD		CERES	P	1895	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165834	1977	4005 LUCAS RD		CERES	P	1920	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165822	1969	4385 LUCAS RD		CERES	P	1922	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
126313	50-001788	2079 MAGNOLIA ST		CERES	P	1947	HIST.RES.	DOE-50-00-0001-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
165833	1976	4112 MOFFETT RD		CERES	P	1920	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
091115	50-000554	7624 MONTEREY AVE		CERES	P	1912	PROJ.REVW.	HUD940721G	08/24/94	6Y	
091116	50-000555	7700 MONTEREY AVE		CERES	P	1915	PROJ.REVW.	HUD940721H	08/24/94	6Y	
165821	1968	2901 REDWOOD RD		CERES	P	1905	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165840	1983	2519 SERVICE RD		CERES	P	1950	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165839	1982	2524 SERVICE RD		CERES	P	1956	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165838	1981	2541 SERVICE RD		CERES	P	1925	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165837	1980	2601 SERVICE RD		CERES	P	1940	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165836	1979	2807 SERVICE RD		CERES	P	1928	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165827	1972	2812 SERVICE RD		CERES	P	1950	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165835	1978	2829 SERVICE RD		CERES	P	1945	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165829	1973	2830 SERVICE RD		CERES	P	1950	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165824	1971	2942 SERVICE RD		CERES	P	1953	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
165823	1970	2954 SERVICE RD		CERES	P	1952	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
126318	50-001793	2065 WHITMORE AVE		CERES	P	1938	HIST.RES.	DOE-50-00-0006-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
126317	50-001792	2071 WHITMORE AVE		CERES	P	1945	HIST.RES.	DOE-50-00-0005-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
126319	50-001794	2400 ~~WHITMORE~~ AVE Herndon		CERES	P	1947	HIST.RES.	DOE-50-00-0007-0000	07/25/00	6Y	
							PROJ.REVW.	FHWA000703A	07/25/00	6Y	
165913	50-000001		SOUTHERN PACIFIC SAN JOAQUIN MAINL	(VIC) CERES		1869	PROJ.REVW.	FHWA070117A	03/07/07	6Y	
176456	50-000073		CERES MAIN CANAL HATCH RD AT LATER	(VIC) CERES	D	1890	PROJ.REVW.	FHWA090810A	08/10/09	6Y	
102828	50-000556		METAL EQUIPMENT SHED-OAK FLAT RANC	CROWS LANDING		1950	PROJ.REVW.	COE960529A	07/28/96	6Y	
	50-000557		LARGE BARN-OAK FLAT RANCH	CROWS LANDING		1900	HIST.RES.	DOE-50-96-0001-0000	07/28/96	6Y	
							PROJ.REVW.	COE960529A	07/28/96	6Y	
	558		SHED-OAK FLAT RANCH	CROWS LANDING			HIST.RES.	DOE-50-96-0002-0000	07/28/96	6Y	
							PROJ.REVW.	COE960529A	07/28/96	6Y	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
							HIST.RES	SHL-0347-0000	08/08/39	7L	
182152			CASHMAN CREEK VALVE HOUSE	(VIC) KNIGHTS FER	M	1932	PROJ.REVW.	COE110103A	02/25/11	2S2	A
182154			WILLMS RANCH	(VIC) KNIGHTS FER	P	1852	PROJ.REVW.	COE110103A	02/25/11	2S2	ABC
069643	50-000588		BASSO FERRY BRIDGE #38-61	LA GRANGE	U		PROJ.REVW.	65000565	04/29/82	2S	
126601	50-001855	HWY 132	JOHN MUIR CORRIDOR	LA GRANGE			REG.UNIT	50-0012	11/29/00	7W	
056434	50-000532	LA GRANGE RD	SAINT LOUIS CATHOLIC CHURCH	LA GRANGE	P	1854	HIST.RES.	NPS-79003460-0000	08/24/79	1S	
							HIST.SURV.	5329-0005-0000	01/01/79	1S	
056435	50-000533	LA GRANGE RD	LA GRANGE SCHOOLHOUSE	LA GRANGE	C	1875	HIST.RES.	NPS-79003461-0000	08/24/79	1S	
							HIST.SURV.	5329-0006-0000	01/01/79	1S	
056446	50-001786	ROBERTS FERRY RD	BRIDGE #38C-5 / ROBERTS FERRY BRID	LA GRANGE	C	1915	HIST.SURV.	5329-0017-0000	01/01/85	2S2	
							PROJ.REVW.	FHWA850823A	12/24/85	2S	
							PROJ.REVW.	65000665	12/24/85	2S	
056442	50-000531	YOSEMITE BLVD	LA GRANGE; FRENCH BAR	LA GRANGE	D	1851	HIST.SURV.	5329-0013-0000		7N	
							HIST.RES.	SHL-0414-0000	11/15/48	7L	
056443	50-000528	YOSEMITE BLVD	GOLD DREDGING CAMP GHOST TOWN	LA GRANGE	C	1906	HIST.SURV.	5329-0014-0000		7N	
056445	50-000583	YOSEMITE BLVD	LA GRANGE CITY JAIL	LA GRANGE	C	1900	HIST.SURV.	5329-0016-0000		7N	
056436	50-000534	YOSEMITE BLVD	OLD ADOBE BARN/ADOBE POST OFFICE	LA GRANGE	C	1849	HIST.RES.	NPS-79003462-0000	08/24/79	1S	
							HIST.SURV.	5329-0007-0000	01/01/79	1S	
056437	50-000538	YOSEMITE BLVD	STAGE STOP/SAUNDERS STORE	LA GRANGE	C	1850	HIST.RES.	NPS-79003463-0000	08/24/79	1S	
							HIST.SURV.	5329-0008-0000	01/01/79	1S	
056438	50-000536	YOSEMITE BLVD	SHELL GAS STATION	LA GRANGE	P	1935	HIST.RES.	NPS-79003464-0000	08/24/79	1S	
							HIST.SURV.	5329-0009-0000	01/01/79	1S	
095957	50-000584	29948 YOSEMITE BLVD		LA GRANGE	P	1885	PROJ.REVW.	HUD950407F	05/26/95	6Y	
098585	50-000585	30000 YOSEMITE BLVD		LA GRANGE	P	1930	PROJ.REVW.	HUD951025C	12/04/95	6Y	
095498	50-000586	30024 YOSEMITE BLVD		LA GRANGE	P	1900	PROJ.REVW.	HUD950407E	05/26/95	6Y	
							PROJ.REVW.	HUD950223C	04/12/95	6Y	
056440	50-000539	30048 YOSEMITE BLVD	LOUIE'S PLACE/L LEVAGGI SALOON	LA GRANGE	P	1897	HIST.RES.	NPS-79003466-0000	08/24/79	1S	
							HIST.SURV.	5329-0011-0000	01/01/79	1S	
056439	50-000535	30054 YOSEMITE BLVD	KINGEN HOTEL	LA GRANGE	P	1915	HIST.RES.	NPS-79003465-0000	08/24/79	1S	A
							HIST.SURV.	5329-0010-0000	08/24/79	1S	A
056444	50-000587	30124 YOSEMITE BLVD	HAMMOND AND BATES STORE; SELIAS MA	LA GRANGE	P	1887	HIST.SURV.	5329-0015-0000		7N	
056441	50-000537	38018 YOSEMITE BLVD	ODD FELLOWS HALL/LA GRANGE IOOF HA	LA GRANGE	P	1855	NAT.REG.	50-0007	09/14/92	7K	
							HIST.RES.	NPS-79003467-0000	08/24/79	1S	
							HIST.SURV.	5329-0012-0000	01/01/79	1S	
091465	50-000550	LA GRANGE DAM RD	LA GRANGE DAM	(VIC) LA GRANGE	D	1891	HIST.RES.	SPHI-STA-003	07/31/79	7L	
056430	50-000528	LA GRANGE RD	GOLD DREDGE	(VIC) LA GRANGE	P	1937	HIST.SURV.	5329-0001-0001	12/01/73	1S	
							HIST.RES.	NPS-71000208-0000	12/16/71	1S	A
056431	50-000588	SR 132	BASSO'S FERRY BRIDGE, BRIDGE #38-6	(VIC) LA GRANGE	S	1911	HIST.SURV.	5329-0002-0000		3S	
							PROJ.REVW.	65000565	04/29/82		
056432	50-000589	SR 132	BRIDGE #38-62	(VIC) LA GRANGE	S	1918	HIST.RES.	DOE-50-86-0003-0000	10/19/86	2S2	C
							PROJ.REVW.	FHWA860919Z	10/19/86	2S2	C
							HIST.SURV.	5329-0003-0000		7N	
056433	50-000590	SR 132	BRIDGE #38-63	(VIC) LA GRANGE	S	1918	HIST.SURV.	5329-0004-0000		7N	
167906	P-50-2155		DR. MOORE CANAL	MODESTO	M	1911	PROJ.REVW.	FHWA070319E	04/23/07	6Y	
069648	50-001785		SOUTHERN PACIFIC RAILROAD DEPOT	MODESTO	U		PROJ.REVW.	65001057	02/24/83	2S	
175993	50-000006		SOUTHERN PACIFIC RAILROAD SAN JOAQ	MODESTO	P	1869	PROJ.REVW.	FHWA090603A	06/22/09	6Y	
175994	50-000075		MODESTO IRRIGATION DISTRICT LATERA	MODESTO #6	D		PROJ.REVW.	FHWA090603A	06/22/09	6Y	
183071			MID-LATERAL #3	MODESTO	M	1950	PROJ.REVW.	FHWA100707A	07/22/10	6Y	
079385	50-000523	1517 10TH ST	RAINBO BAKERY	MODESTO	P	1931	HIST.RES.	DOE-50-92-0010-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
* 079386	50-000524	110 11TH ST	BOOTH'S PACKING COMPANY	MODESTO	P	1960	HIST.RES.	DOE-50-92-0011-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	

ST-7586 area

Salida + Riverbank 7.5' T3S/R9E S – 30, 29, 28
(possibly eval'd where it crosses McHenry Ave (SR 132?))

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
057747	50-000591	1012 11TH ST	PACIFIC TELEPHONE BUILDING, OLD TE	MODESTO	P	1922	HIST.SURV.	5352-0072-0000		3S	
057965	50-000543	12TH ST	MODESTO UNITED STATES POST OFFICE	MODESTO	F	1932	HIST.RES.	NPS-83001246-0000	02/10/83	1S	
							HIST.SURV.	5352-0110-0000	01/01/83	1S	
137006		401 14TH ST		MODESTO	P	1951	HIST.RES.	DOE-50-02-0010-0000	12/12/02	6Y	
							PROJ.REVW.	FHWA021015B	12/12/02	6Y	
150932		618 14TH ST		MODESTO	P	1910	HIST.RES.	DOE-50-04-0023-0000	07/26/04	6Y	
							PROJ.REVW.	HUD040706C	07/26/04	6Y	
057748	50-000592	909 14TH ST	HATTON HOME, DAVIS HOME	MODESTO	P	1880	TAX.CERT.	537.9-50-0001	09/16/91	7J	
							HIST.SURV.	5352-0073-0000		3S	
057749	50-000593	915 14TH ST	DELAPPE HOUSE, SHALOM COUNSELING C	MODESTO	P	1909	HIST.SURV.	5352-0074-0000		5S2	
057750	50-000594	1015 14TH ST	SOL P ELIAS HOME, MARTIN RUDDY OFF	MODESTO	P	1909	HIST.SURV.	5352-0075-0000		5S2	
057751	50-000595	1022 14TH ST	HOWARD HOUSE, FAMILY SERVICE AGENC	MODESTO	P	1917	HIST.SURV.	5352-0076-0000		5S2	
057752	50-000596	1025 14TH ST	BLAKE HOUSE	MODESTO	P	1919	HIST.SURV.	5352-0077-0000		7N	
057753	50-000597	1104 14TH ST	TURNER HOME, DINOS HAIR STYLISTS	MODESTO	P	1917	HIST.SURV.	5352-0078-0000		5S2	
057754	50-000598	1116 14TH ST	FALK RESIDENCE, FLESORAS HOME	MODESTO	P	1917	HIST.SURV.	5352-0079-0000		5S2	
057755	50-000599	1126 14TH ST	MADDUX HOUSE, MORGAN HOME	MODESTO	P	1917	HIST.SURV.	5352-0080-0000		5S2	
096955	50-000600	403 15TH ST		MODESTO	P	1925	PROJ.REVW.	HUD950616E	07/28/95	6Y	
096957	50-000601	405 15TH ST		MODESTO	P	1920	PROJ.REVW.	HUD060608B	11/14/06	6Y	
							PROJ.REVW.	HUD950616F	07/28/95	6Y	
057756	50-000602	825 15TH ST	THE BOONE HOME, JAMES APARTMENTS	MODESTO	P	1917	HIST.SURV.	5352-0081-0000		5S2	
057556	50-000530	906 15TH ST	McHENRY MANSION	MODESTO	M	1883	ST.FND.PRG	619.0-84-HP-50-006	12/23/88	3	
							ST.FND.PRG	619.0-84-HP-50-001	09/30/86	3	
							HIST.RES.	SPHI-STA-004	07/31/79	7L	
							HIST.RES.	NPS-78000805-0000	04/04/78	1S	
							HIST.SURV.	5352-0001-0000	01/01/78	1S	
							ST.FND.PRG	619.0-HP-88-50-002		3	
057758	50-000603	921 15TH ST	MOORE HOME, OFFICE OF DR. EASTIN	MODESTO	P	1936	HIST.SURV.	5352-0083-0000		7R	
136805		523 16TH ST		MODESTO	P	1922	HIST.RES.	DOE-50-03-0003-0000	01/15/03	6Y	
							PROJ.REVW.	HUD030109G	01/15/03	6Y	
057964	50-000604	612 16TH ST	BISHOP HOUSE	MODESTO	P	1882	HIST.SURV.	5352-0109-0000		7R	
057759	50-000605	850 16TH ST	FIRST METHODIST EPISCOPAL CHURCH,	MODESTO	P	1931	HIST.SURV.	5352-0084-0000		5S2	
057760	50-000606	1015 16TH ST	BROUGHTON HOME, BAIRDS PHOTOGRAPHI	MODESTO	P	1914	HIST.SURV.	5352-0085-0000		5S2	
057761	50-000607	1025 16TH ST	W. D. THOMAS HOUSE, LAW OFFICES OF	MODESTO	P	1934	HIST.SURV.	5352-0086-0000		5S2	
057762	50-000608	821 17TH ST	STEVENS HOME	MODESTO	P	1914	HIST.SURV.	5352-0087-0000		5S2	
057763	50-000609	823 17TH ST		MODESTO	P	1917	HIST.SURV.	5352-0088-0000		7R	
057764	50-000610	915 17TH ST	CRESSEY HOME, HUSLAND HOUSE	MODESTO	P	1917	HIST.SURV.	5352-0089-0000		5S2	
066360	50-000611	822 1ST ST	REAHBILITATION OF HOUSE	MODESTO	U		PROJ.REVW.	HUD871109L	12/15/87	6Y	
067075	50-000612	707 3RD ST		MODESTO	U		PROJ.REVW.	HUD900102H	02/01/90	6Y	
139206		811 3RD ST		MODESTO	P	1918	HIST.RES.	DOE-50-03-0009-0000	04/16/03	6Y	
							PROJ.REVW.	HUD030404D	04/16/03	6Y	
068072	50-000613	430 4TH ST		MODESTO	U		PROJ.REVW.	HUD881209H	01/04/89	6Y	
057757	50-000614	1024 4TH ST	CLINTON CHAPEL AFRICAN METHODIST C	MODESTO	P	1902	HIST.SURV.	5352-0082-0000		7R	
065619	50-000615	625 5TH ST		MODESTO	U		PROJ.REVW.	HUD890109H	02/07/89	6Y	
							PROJ.REVW.	HUD881209G	01/04/89	6Y	
163406		821 5TH ST	MODESTO MOOSE LODGE CHAPTER #1608	MODESTO	P	1925	PROJ.REVW.	FCC060724AA	08/31/06	6Y	
095985	50-000616	308 6TH ST	08	MODESTO	P	1935	PROJ.REVW.	HUD950531J	07/03/95	6Y	
							PROJ.REVW.	HUD950526P	05/30/95	6Y	
114971	50-000617	7TH ST	BRIDGE #38C-23 / SEVENTH STREET BR	MODESTO	C	1916	HIST.RES.	DOE-50-86-0001-0000	10/19/86	2S2	AC
							PROJ.REVW.	FHWA860919Z	10/19/86	2S2	AC
066449	50-000618	930 7TH ST	MODESTO HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880115C	02/09/88	6Y	
137008	83	9TH ST	TIDEWATER BRANCH UNION PACIFIC RAI	MODESTO	P	1912	HIST.RES.	DOE-50-02-0012-0000	12/12/02	6Y	
							PROJ.REVW.	FHWA021015B	12/12/02	6Y	
057963	50-000619	9TH ST	SOUTHERN PACIFIC RAILROAD DEPOT, S	MODESTO	C		HIST.SURV.	5352-0108-0000	01/01/83	2S2	
079380	50-000620	0 9TH ST	NINTH & NEEDHAM STREET COMMERCIAL	MODESTO	P	1950	HIST.RES.	DOE-50-92-0005-9999	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
079379	50-000621	102 9TH ST	ASSOCIATED OIL COMPANY	MODESTO	P	1910	HIST.RES.	DOE-50-92-0004-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
137007		402 9TH ST	UNION PACIFIC RAILWAY OFFICE/ TIDE	MODESTO	P	1935	HIST.RES.	DOE-50-02-0011-0000	12/12/02	6Y	
							PROJ.REVW.	FHWA021015B	12/12/02	6Y	
073073	50-000622	1029 9TH ST burned/gone→	RAILWAY EXPRESS AGENCY, R. J. SWEE	MODESTO	P	1919	NAT.REG.	50-0004	08/31/89	7J	
079384	50-000623	1518 9TH ST	MODESTO VETERINARY HOSPITAL	MODESTO	P	0	HIST.RES.	DOE-50-92-0009-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
079382	50-000624	1602 9TH ST torn down→	OLD MILL CAFE	MODESTO	P	1935	HIST.RES.	DOE-50-92-0007-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
057745	50-000625	117 ACHOR CT		MODESTO	P	1927	HIST.SURV.	5352-0070-0000		7R	
057746	50-000626	119 ACHOR CT		MODESTO	P	1926	HIST.SURV.	5352-0071-0000		7R	
057559	50-000627	203 ACHOR CT		MODESTO	P	1925	HIST.SURV.	5352-0004-0000		7R	
057560	50-000628	522 ADAM AVE		MODESTO	P	1922	HIST.SURV.	5352-0005-0000		5S2	
057561	50-000629	529 ADAM AVE		MODESTO	P	1924	HIST.SURV.	5352-0006-0000		7R	
181523		ALAMO AVE		MODESTO	P	1945	PROJ.REVW.	HUD110204J	02/07/11	6Y	
182243		1310 ALAMO AVE		MODESTO	P	1940	PROJ.REVW.	HUD110401D	04/13/11	6Y	
183066		1432 ALBANY AVE		MODESTO	P	1951	PROJ.REVW.	HUD100728O	08/28/10	6Y	
169782		201 ALGEN AVE		MODESTO	P	1981	PROJ.REVW.	HUD071206D	12/12/07	6Y	
057775	50-000630	815 ALICE AVE		MODESTO	P	1940	HIST.SURV.	5352-0098-0003		7R	
057776	50-000631	816 ALICE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0004		5D2	
057774	50-000632	823 ALICE AVE		MODESTO	P	1918	HIST.SURV.	5352-0098-0002		5D2	
057773	50-000633	915 ALICE AVE *		MODESTO	P	1941	HIST.SURV.	5352-0098-0001		7R	
057859	50-000634	ALICE ST	NORTH ADDITION WISECARVER TRACT	MODESTO	P	1912	HIST.SURV.	5352-0098-9999		5D2	
057937	50-000635	616 ALICE ST		MODESTO	P	1920	HIST.SURV.	5352-0099-0078		5D2	
057938	50-000636	717 ALICE ST		MODESTO	P	1920	HIST.SURV.	5352-0099-0079		5D2	
057588	50-000646	ALMOND AVE		MODESTO	P	1914	HIST.SURV.	5352-0025-9999		5D2	
057580	50-000638	112 ALMOND AVE		MODESTO	P	1925	HIST.SURV.	5352-0025-0001		5D2	
057581	50-000639	114 ALMOND AVE		MODESTO	P	1926	HIST.SURV.	5352-0025-0002		5D2	
057582	50-000640	117 ALMOND AVE		MODESTO	P	1922	HIST.SURV.	5352-0025-0003		5D2	
057583	50-000641	124 ALMOND AVE		MODESTO	P	1919	HIST.SURV.	5352-0025-0004		5D2	
057584	50-000642	125 ALMOND AVE		MODESTO	P	1917	HIST.SURV.	5352-0025-0005		5D2	
057585	50-000643	131 ALMOND AVE		MODESTO	P	1924	HIST.SURV.	5352-0025-0006		5D2	
057586	50-000644	139 ALMOND AVE		MODESTO	P	1924	HIST.SURV.	5352-0025-0007		5D2	
057587	50-000645	140 ALMOND AVE		MODESTO	P	1914	HIST.SURV.	5352-0025-0008		5D2	
082343	50-000646	302 ALTURAS AVE		MODESTO	P	1930	PROJ.REVW.	HUD930603J	06/11/93	6Y	
066279	50-000647	318 ALTURAS AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870930D	10/28/87	6Y	
066249	50-000648	322 ALTURAS AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870921U	10/21/87	6Y	
067001	50-000649	323 ALTURAS AVE		MODESTO	U		PROJ.REVW.	HUD891018L	11/22/89	6Y	
065512	50-000650	330 ALTURAS AVE		MODESTO	U		PROJ.REVW.	HUD881020M	11/14/88	6Y	
066477	50-000651	341 ALTURAS AVE	HOUSING REHABILITATION	MODESTO	P	1928	PROJ.REVW.	HUD930603bb	06/11/93	6Y	
							PROJ.REVW.	HUD880209B	03/07/88		
080879	50-000652	345 ALTURAS AVE		MODESTO	U	1928	PROJ.REVW.	HUD930311W	04/21/93	6Y	
066471	50-000653	405 ALTURAS AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880209C	03/07/88	6Y	
066064	50-000654	429 ALTURAS AVE		MODESTO	U		PROJ.REVW.	HUD890727F	08/25/89	6Y	
140420		5043 AMERICAN AVE		MODESTO	P	1916	HIST.RES.	DOE-50-00-0033-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
057777	50-000655	1104 ARC AVE		MODESTO	P	1923	HIST.SURV.	5352-0098-0005		5D2	
057778	50-000656	1112 ARC AVE		MODESTO	P	1940	HIST.SURV.	5352-0098-0006		7R	
057779	50-000657	1116 ARC AVE		MODESTO	P	1940	HIST.SURV.	5352-0098-0007		7R	
057780	50-000658	1120 ARC AVE		MODESTO	P	1940	HIST.SURV.	5352-0098-0008		7R	
057781	50-000659	1130 ARC AVE		MODESTO	P	1940	HIST.SURV.	5352-0098-0009		7R	
175031		1529 ARDMORE AVE		MODESTO	P	1951	PROJ.REVW.	HUD090225F	03/25/09	6Y	
183216		1605 ARDMORE AVE		MODESTO	P	1955	PROJ.REVW.	HUD100630J	07/21/10	6Y	
177512		1632 BEDFORD AVE		MODESTO	P	1951	PROJ.REVW.	HUD091221H	01/20/10	6Y	
102824	50-000660	608 BENSON AVE		MODESTO	P	1940	PROJ.REVW.	HUD960624D	07/30/96	6Y	
096386	50-000661	620 BENSON AVE		MODESTO	P	1939	PROJ.REVW.	HUD950627A	07/03/95	6Y	

* includes P-50-630-633, 655-659, 671-682, 959-961, 971-1013, 1014-1017, 1195-1197, 1200, 1206, 1209-1213, 1223-1229

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
180176		625 BENSON AVE		MODESTO	P	1937	PROJ.REVW.	HUD100621L	07/16/10	6Y	
092889	50-000662	701 BENSON AVE		MODESTO	P	1935	PROJ.REVW.	HUD940908B	11/16/94	6Y	
101327	50-000663	803 BENSON AVE		MODESTO	P	1920	PROJ.REVW.	HUD960208H	03/19/96	6Y	
099935	50-000664	805 BENSON AVE		MODESTO	P	1943	PROJ.REVW.	HUD951215C	01/09/96	6Y	
092897	50-000665	821 BENSON AVE		MODESTO	P	1945	PROJ.REVW.	HUD940930A	11/16/94	6Y	
150628		505 BODEM ST		MODESTO	P	1920	HIST.RES.	DOE-50-04-0021-0000	03/17/04	6Y	
							PROJ.REVW.	HUD040225D	03/17/04	6Y	
093935	50-000666	525 BODEM ST		MODESTO	P	1916	PROJ.REVW.	HUD941208F	12/27/94	6Y	
169783		1601 BOISE AVE		MODESTO	P	1981	PROJ.REVW.	HUD071206D	12/12/07	6Y	
185002		124 BONITA CR		MODESTO	P	1954	PROJ.REVW.	HUD101018U	11/01/10	6Y	
167339		505 BRIGGS AVE		MODESTO	P	1950	PROJ.REVW.	HUD070521G	05/25/07	6Y	
167340		513 BRIGGS AVE		MODESTO	P	1940	PROJ.REVW.	HUD070521H	05/25/07	6Y	
167341		519 BRIGGS AVE		MODESTO	P	1935	PROJ.REVW.	HUD070521I	05/25/07	6Y	
167342		529 BRIGGS AVE		MODESTO	P	1934	PROJ.REVW.	HUD070521J	05/25/07	6Y	
167343		617 BRIGGS AVE		MODESTO	P	1989	PROJ.REVW.	HUD070521K	05/25/07	6Y	
167344		628 BRIGGS AVE		MODESTO	P	1921	PROJ.REVW.	HUD070521L	05/25/07	6Y	
167345		708 BRIGGS AVE		MODESTO	P	1990	PROJ.REVW.	HUD070521M	05/25/07	6Y	
167346		709 BRIGGS AVE		MODESTO	P	1946	PROJ.REVW.	HUD070521N	05/25/07	6Y	
167347		717 BRIGGS AVE		MODESTO	P	1946	PROJ.REVW.	HUD070521O	05/25/07	6Y	
167348		809 BRIGGS AVE		MODESTO	P	1946	PROJ.REVW.	HUD070521P	05/25/07	6Y	
167349		811 BRIGGS AVE		MODESTO	P	1946	PROJ.REVW.	HUD070521Q	05/25/07	6Y	
167350		819 BRIGGS AVE		MODESTO	P	1918	PROJ.REVW.	HUD070521R	05/25/07	6Y	
167351		914 BRIGGS AVE		MODESTO	P	1961	PROJ.REVW.	HUD070521S	05/25/07	6Y	
167352		920 BRIGGS AVE		MODESTO	P	1951	PROJ.REVW.	HUD070521T	05/25/07	6Y	
167353		1000 BRIGGS AVE		MODESTO	P	1984	PROJ.REVW.	HUD070521U	05/25/07	6Y	
183064		408 BRODERICK AVE		MODESTO	P	1958	PROJ.REVW.	HUD100728M	08/02/10	6Y	
183248		2605 BUDD ST		MODESTO	P	1955	PROJ.REVW.	HUD100630F	07/21/10	6Y	
183086		620 CALIFORNIA AVE		MODESTO	P	1925	PROJ.REVW.	HUD100628O		6Y	
183092		202 CAMELLIA WY		MODESTO	P	1947	PROJ.REVW.	HUD100701E	07/21/10	6Y	
183995		1511 CARLTON AVE		MODESTO	P	1953	PROJ.REVW.	HUD101007B	10/18/10	6Y	
183059		2243 CAROL ST		MODESTO	P	1950	PROJ.REVW.	HUD100727A	08/02/10	6Y	
090656	50-000667	533 CASTLE ST		MODESTO	P	1924	PROJ.REVW.	HUD940701F	08/11/94	6Y	
082360	50-000668	513 CENTER ST		MODESTO	P	1925	PROJ.REVW.	HUD930603b	06/11/93	6Y	
082348	50-000669	706 CENTER ST		MODESTO	P	1926	PROJ.REVW.	HUD930603P	06/11/93	6Y	
066067	50-000670	711 CENTER ST		MODESTO	P	1920	PROJ.REVW.	HUD930603h	06/11/93	6Y	
							PROJ.REVW.	HUD890727I	08/25/89	6Y	
176958		1505 CLAUD AVE		MODESTO	P	1946	PROJ.REVW.	HUD090929E	10/23/09	6Y	
153736		2217 COFFEE RD		MODESTO	P	1924	PROJ.REVW.	HUD050404Z	04/18/05	6Y	
183250		1409 COLIN LANE		MODESTO	P	1960	PROJ.REVW.	HUD100630G	07/21/10	6Y	
057782	50-000671	110 COLLEGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0010		5D2	
057783	50-000672	116 COLLEGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0011		5D2	
057784	50-000673	126 COLLEGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0012		5D2	
057785	50-000674	130 COLLEGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0013		5D2	
057786	50-000675	133 COLLEGE AVE		MODESTO	P	1919	HIST.SURV.	5352-0098-0014		5D2	
057787	50-000676	136 COLLEGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0015		5D2	
057788	50-000677	201 COLLEGE AVE		MODESTO	P	1931	HIST.SURV.	5352-0098-0016		5D2	
057789	50-000678	208 COLLEGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0017		5D2	
057790	50-000679	210 COLLEGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0018		5D2	
057791	50-000680	310 COLLEGE AVE		MODESTO	P	1931	HIST.SURV.	5352-0098-0019		5D2	
057792	50-000681	314 COLLEGE AVE		MODESTO	P	1927	HIST.SURV.	5352-0098-0020		5D2	
057795	50-000682	318 COLLEGE AVE		MODESTO	P	1941	HIST.SURV.	5352-0098-0023		7R	
180177		458 COLLEGE AVE		MODESTO	P	1939	PROJ.REVW.	HUD100621M	07/16/10	6Y	
065806	50-000683	311 COLORADO AVE	HOUSING REHABILITATION	MODESTO	P		PROJ.REVW.	HUD930603r	06/11/93	6Y	
							PROJ.REVW.	HUD890417E	05/18/89	6Y	
082377	50-000684	323 COLORADO AVE		MODESTO	P	1940	PROJ.REVW.	HUD930603u	06/11/93	6Y	

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PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
065807	50-000685	326 COLORADO AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD900102A	02/01/90	6Y	
							PROJ.REVW.	HUD890417F	05/18/89	6Y	
082376	50-000686	333 COLORADO AVE		MODESTO	P	1923	PROJ.REVW.	HUD930603t	06/11/93	6Y	
082375	50-000687	335 COLORADO AVE		MODESTO	P	1923	PROJ.REVW.	HUD930603s	06/11/93	6Y	
066816	50-000688	339 COLORADO AVE		MODESTO	U		PROJ.REVW.	HUD880726L	08/26/88	6Y	
067229	50-000689	342 COLORADO AVE		MODESTO	U	1920	PROJ.REVW.	HUD930311Q	04/21/93	6Y	
							PROJ.REVW.	USFS900321B	04/16/90	6Y	
065623	50-000690	402 COLORADO AVE		MODESTO	U	1926	PROJ.REVW.	HUD100628Q	07/21/10	6Y	
							PROJ.REVW.	HUD930311T	04/21/93	6Y	
							PROJ.REVW.	HUD881209M	01/04/89	6Y	
082381	50-000691	406 COLORADO AVE		MODESTO	P	1932	PROJ.REVW.	HUD930603y	06/11/93	6Y	
065624	50-000692	418 COLORADO AVE		MODESTO	U		PROJ.REVW.	HUD881209N	01/04/89	6Y	
082374	50-000693	421 COLORADO AVE		MODESTO	P	1928	PROJ.REVW.	HUD930603q	06/11/93	6Y	
066668	50-000694	426 COLORADO AVE		MODESTO	U		PROJ.REVW.	HUD880513E	06/13/88	6Y	
065656	50-000695	429 COLORADO AVE	REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890109E	02/07/89	6Y	
066758	50-000696	430 COLORADO AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880629E	07/26/88	6Y	
080877	50-000697	438 COLORADO AVE		MODESTO	U	1930	PROJ.REVW.	HUD930311S	04/21/93		
065808	50-000698	442 COLORADO AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890417G	05/18/89	6Y	
080876	50-000699	446 COLORADO AVE		MODESTO	U	1923	PROJ.REVW.	HUD930311R	04/21/93	6Y	
097489	50-000700	634 CONEJO AVE		MODESTO	P	1940	PROJ.REVW.	HUD950801A	09/28/95	6Y	
101965	50-000701	720 CONEJO AVE		MODESTO	P	1942	PROJ.REVW.	HUD960328K	04/25/96	6Y	
096289	50-000702	1741 CONNIE WY		MODESTO	P	1941	PROJ.REVW.	HUD950505A	06/20/95	6Y	
188105		1749 CONNIE WY		MODESTO	P	1946	PROJ.REVW.	HUD120213G	03/05/12	6Y	
183007		309 COVENA AVE		MODESTO	P	1946	PROJ.REVW.	HUD100617G	07/07/10	6Y	
169933		1113 CRIMSON CT		MODESTO	P	1954	PROJ.REVW.	HUD080227A	02/28/08	6Y	
092896	50-000703	2301 CROMMELIN AVE		MODESTO	P	1941	PROJ.REVW.	HUD940829A	11/16/94	6Y	
150626		2319 CROMMELIN AVE		MODESTO	P	1950	HIST.RES.	DOE-50-04-0020-0000	03/23/04	6Y	
							PROJ.REVW.	HUD040226D	03/23/04	6Y	
096959	50-000704	1417 D ST		MODESTO	P	1925	PROJ.REVW.	HUD950616G	07/28/95	6Y	
173461		3724 DALE RD → demo'd in 2013 or 2014		MODESTO	P	1922	PROJ.REVW.	HUD080905E	10/06/08	6Y	
183023		1028 DARTMOUTH AVE		MODESTO	P	1954	PROJ.REVW.	HUD100625F	07/19/10	6Y	
167220		11324 DEL MAR AVE		MODESTO	P	1947	PROJ.REVW.	HUD070801C	08/06/07	6Y	
129255	50-001856	1155 DEL MAR CT		MODESTO	P	1949	HIST.RES.	DOE-50-01-0001-0000	10/17/01	6Y	
							PROJ.REVW.	HUD010913P	10/17/01	6Y	
177431		1309 DEL MONTE AVE		MODESTO	P	1947	PROJ.REVW.	HUD091020E	11/05/09	6Y	
146648		1412 DEL MONTE AVE		MODESTO	P	1947	HIST.RES.	DOE-50-04-0002-0000	05/06/04	6Y	
							PROJ.REVW.	HUD040414F	05/06/04	6Y	
155364		1417 DEL MONTE AVE		MODESTO	P	1947	PROJ.REVW.	HUD050808Y	08/22/05	6Y	
186017		1118 DEL VERDE AVE		MODESTO	P	1957	PROJ.REVW.	HUD110923B	10/17/11	6Y	
184050		1713 DOVER AVE		MODESTO	P	1948	PROJ.REVW.	HUD100927R	10/11/10	6Y	
057599	50-000705	133 DOWNEY AVE		MODESTO	P	1922	HIST.SURV.	5352-0027-0000		5S2	
057600	50-000706	137 DOWNEY AVE		MODESTO	P	1922	HIST.SURV.	5352-0028-0000		5S2	
170091		412 DOWNEY AVE		MODESTO	M	1920	PROJ.REVW.	HUD060605O	03/06/08	6Y	
170090		416 DOWNEY AVE		MODESTO	M	1920	PROJ.REVW.	HUD060605O	03/06/08	6Y	
186618		133 DOWNEY ST		MODESTO	P	1915	PROJ.REVW.	HUD100517D	06/15/10	6Y	
067462	50-000707	416 DOWNEY ST		MODESTO	M	0	PROJ.REVW.	HUD900508E	06/18/90	7J	
183063		1117 E FAIRMONT AVE		MODESTO	P	1954	PROJ.REVW.	HUD100728L	08/02/10	6Y	
066063	50-000708	119 E MORRIS AVE		MODESTO	U		PROJ.REVW.	HUD890727E	08/25/89	6Y	
057601	50-000709	129 E MORRIS AVE		MODESTO	P	1922	HIST.SURV.	5352-0029-0000		5S2	
057602	50-000710	136 E MORRIS AVE		MODESTO	P	1924	HIST.SURV.	5352-0030-0000		5S2	
057603	50-000711	140 E MORRIS AVE		MODESTO	P	1924	HIST.SURV.	5352-0031-0000		5S2	
177438		1148 E MORRIS AVE		MODESTO	P	1953	PROJ.REVW.	HUD091020R		6Y	
170811		321 E ST	FIRE STATION #34	MODESTO	M	1947	PROJ.REVW.	DHS070109A	02/14/07	6Y	
167959		602 EL CAMINO AVE		MODESTO	P	1948	PROJ.REVW.	HUD070904D	09/12/07	6Y	
066760	50-000712	717 EL TERINO AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880629G	07/26/88	6Y	
067230	50-000713	628 EL VISTA AVE		MODESTO	U		PROJ.REVW.	HUD900402F	04/26/90	6Y	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
101641	50-000714	109 ELM ST		MODESTO	P	1920	PROJ.REVW.	HUD960412Z	04/16/96	6Y	
066990	50-000715	736 ELM ST	REHABILITATION RESI	MODESTO	U		PROJ.REVW.	HUD891018A	11/22/89	6Y	
160497		1912 ELMHURST DR		MODESTO	P	1954	PROJ.REVW.	HUD060203H	02/07/06	6Y	
057700	50-000716	ELMWOOD AVE		MODESTO	P	1911	HIST.SURV.	5352-0061-9999		5D2	
057712	50-000717	ELMWOOD AVE		MODESTO	P	1922	HIST.SURV.	5352-0067-9999		5D2	
057668	50-000718	107 ELMWOOD AVE		MODESTO	P	1915	HIST.SURV.	5352-0061-0001		5D2	
057669	50-000719	108 ELMWOOD AVE		MODESTO	P	1920	HIST.SURV.	5352-0061-0002		5D2	
057670	50-000720	111 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0003		5D2	
057671	50-000721	112 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0004		5D2	
057566	50-000722	115 ELMWOOD AVE		MODESTO	P	1940	HIST.SURV.	5352-0011-0000		5S2	
057672	50-000723	116 ELMWOOD AVE		MODESTO	P	1918	HIST.SURV.	5352-0061-0005		5D2	
057673	50-000724	120 ELMWOOD AVE		MODESTO	P	1934	HIST.SURV.	5352-0061-0006		5D2	
057674	50-000725	121 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0007		5D2	
057675	50-000726	123 ELMWOOD AVE		MODESTO	P	1914	HIST.SURV.	5352-0061-0008		5D2	
057676	50-000727	124 ELMWOOD AVE		MODESTO	P	1918	HIST.SURV.	5352-0061-0009		5D2	
057677	50-000728	127 ELMWOOD AVE		MODESTO	P	1919	HIST.SURV.	5352-0061-0010		5D2	
057678	50-000729	128 ELMWOOD AVE	S S LATZ HOME	MODESTO	P	1912	HIST.SURV.	5352-0061-0011		5D2	
057679	50-000730	129 ELMWOOD AVE	W H CAVILL HOME	MODESTO	P	1916	HIST.SURV.	5352-0061-0012		5D2	
057567	50-000731	201 ELMWOOD AVE		MODESTO	P	1931	HIST.SURV.	5352-0012-0000		5S2	
057680	50-000732	202 ELMWOOD AVE		MODESTO	P	1920	HIST.SURV.	5352-0061-0013		5D2	
057681	50-000733	203 ELMWOOD AVE		MODESTO	P	1928	HIST.SURV.	5352-0061-0014		5D2	
057682	50-000734	205 ELMWOOD AVE		MODESTO	P	1931	HIST.SURV.	5352-0061-0015		5D2	
057568	50-000735	207 ELMWOOD AVE		MODESTO	P	1927	HIST.SURV.	5352-0013-0000		5S2	
057683	50-000736	208 ELMWOOD AVE		MODESTO	P	1915	HIST.SURV.	5352-0061-0016		5D2	
057569	50-000737	211 ELMWOOD AVE		MODESTO	P	1929	HIST.SURV.	5352-0014-0000		5S2	
057684	50-000738	212 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0017		5D2	
057685	50-000739	214 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0018		5D2	
057686	50-000740	215 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0019		5D2	
057687	50-000741	216 ELMWOOD AVE		MODESTO	P	1913	HIST.SURV.	5352-0061-0020		5D2	
057688	50-000742	217 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0021		5D2	
057689	50-000743	218 ELMWOOD AVE		MODESTO	P	1918	HIST.SURV.	5352-0061-0022		5D2	
057690	50-000744	226 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0023		5D2	
057691	50-000745	229 ELMWOOD AVE	H J DOWNEY HOME	MODESTO	P	1912	HIST.SURV.	5352-0061-0024		5D2	
057692	50-000746	231 ELMWOOD AVE		MODESTO	P	1918	HIST.SURV.	5352-0061-0025		5D2	
057693	50-000747	302 ELMWOOD AVE		MODESTO	P	1912	HIST.SURV.	5352-0061-0026		5D2	
057701	50-000748	305 ELMWOOD AVE	FERLIN HOUSE	MODESTO	P	1914	HIST.SURV.	5352-0062-0000		5S2	
057694	50-000749	306 ELMWOOD AVE	H W WILBUR HOME	MODESTO	P	1911	HIST.SURV.	5352-0061-0027		5D2	
057695	50-000750	310 ELMWOOD AVE		MODESTO	P	1920	HIST.SURV.	5352-0061-0028		5D2	
057696	50-000751	314 ELMWOOD AVE		MODESTO	P	1915	HIST.SURV.	5352-0061-0029		5D2	
057697	50-000752	317 ELMWOOD AVE		MODESTO	P	1916	HIST.SURV.	5352-0061-0030		5D2	
057698	50-000753	318 ELMWOOD AVE		MODESTO	P	1939	HIST.SURV.	5352-0061-0031		5D2	
057699	50-000754	319 ELMWOOD AVE		MODESTO	P	1923	HIST.SURV.	5352-0061-0032		5D2	
057562	50-000755	402 ELMWOOD AVE		MODESTO	P	1922	HIST.SURV.	5352-0007-0000		7R	
057563	50-000756	405 ELMWOOD AVE		MODESTO	P	1929	HIST.SURV.	5352-0008-0000		7R	
057564	50-000757	406 ELMWOOD AVE		MODESTO	P	1937	HIST.SURV.	5352-0009-0000		7R	
057706	50-000758	410 ELMWOOD AVE		MODESTO	P	1937	HIST.SURV.	5352-0067-0001		5D2	
057707	50-000759	414 ELMWOOD AVE		MODESTO	P	1927	HIST.SURV.	5352-0067-0002		5D2	
057565	50-000760	415 ELMWOOD AVE		MODESTO	P	1925	HIST.SURV.	5352-0010-0000		7R	
057708	50-000761	417 ELMWOOD AVE		MODESTO	P	1931	HIST.SURV.	5352-0067-0003		5D2	
057710	50-000762	418 ELMWOOD AVE		MODESTO	P	1929	HIST.SURV.	5352-0067-0005		5D2	
057709	50-000763	422 ELMWOOD AVE		MODESTO	P	1937	HIST.SURV.	5352-0067-0004		5D2	
057711	50-000764	423 ELMWOOD AVE		MODESTO	P	1922	HIST.SURV.	5352-0067-0006		5D2	
057570	50-000740	215 ELMWOOD CT		MODESTO	P	1932	HIST.SURV.	5352-0015-0000		5S2	
057571	50-000743	218 ELMWOOD CT		MODESTO	P	1926	HIST.SURV.	5352-0016-0000		5S2	
175981		324 EMERSON AVE		MODESTO	P	1950	PROJ.REVW.	HUD090512A	06/02/09	6Y	
092894	50-000767	611 EMPIRE AVE		MODESTO	P	1938	PROJ.REVW.	HUD940901C	11/16/94	6Y	

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099958	50-000768	620 EMPIRE AVE		MODESTO	P	1930	PROJ.REVW.	HUD951208I	01/05/96	6Y	
097866	50-000769	1013 EMPIRE AVE		MODESTO	P	1944	PROJ.REVW.	HUD950928B	11/07/95	6Y	
094311	50-000770	1021 EMPIRE AVE		MODESTO	P	1944	PROJ.REVW.	HUD941230A	01/26/95	6Y	
167354		1035 FLORENCE AVE		MODESTO	P	1925	PROJ.REVW.	HUD070521V	05/25/07	6Y	
057604	50-000771	112 FLOTO WY	BESSIE EUBANKS HOME	MODESTO	P	1943	HIST.SURV.	5352-0032-0000		7R	
184595		1330 FORDHAM AVE		MODESTO	P		PROJ.REVW.	HUD100903G	09/23/10	6Y	
082339	50-000772	120 FRESNO AVE		MODESTO	P	1920	PROJ.REVW.	HUD930603C	06/11/93	6Y	
066065	50-000773	124 FRESNO AVE		MODESTO	P	1920	PROJ.REVW.	HUD930603mm	07/15/93	6Y	
							PROJ.REVW.	HUD890727G	08/25/89	6Y	
082341	50-000774	129 FRESNO AVE		MODESTO	P	1925	PROJ.REVW.	HUD930603F	06/11/93	6Y	
082355	50-000775	136 FRESNO AVE		MODESTO	P	1921	PROJ.REVW.	HUD930603W	06/11/93	6Y	
089560	50-000776	142 FRESNO AVE		MODESTO	P	1921	PROJ.REVW.	HUD940927L	11/16/94	6Y	
							PROJ.REVW.	HUD940506C	06/09/94	6Y	
082353	50-000777	205 FRESNO AVE		MODESTO	P	1915	PROJ.REVW.	HUD930603U	06/11/93	6Y	
066429	50-000778	208 FRESNO AVE		MODESTO	U		PROJ.REVW.	HUD871222A	01/21/88	6Y	
067070	50-000779	214 FRESNO AVE		MODESTO	U		PROJ.REVW.	HUD900102B	02/01/90	6Y	
066996	50-000780	215 FRESNO AVE		MODESTO	U		PROJ.REVW.	HUD891018G	11/22/89	6Y	
067231	50-000781	220 FRESNO AVE		MODESTO	U		PROJ.REVW.	HUD900402G	04/16/90	6Y	
067232	50-000782	221 FRESNO AVE		MODESTO	U		PROJ.REVW.	HUD900402H	04/16/90	6Y	
148441		700 GLENN AVE		MODESTO	P	1947	HIST.RES.	DOE-50-04-0009-0000	05/11/04	6Y	
							PROJ.REVW.	FHWA040414A	05/11/04	6Y	
057605	50-000783	115 GRANT ST		MODESTO	P	1919	HIST.SURV.	5352-0033-0000		5S2	
057606	50-000784	117 GRANT ST		MODESTO	P	1929	HIST.SURV.	5352-0034-0000		5S2	
057607	50-000785	119 GRANT ST		MODESTO	P	1929	HIST.SURV.	5352-0035-0000		5S2	
057608	50-000786	131 GRANT ST		MODESTO	P	1927	HIST.SURV.	5352-0036-0000		5S2	
057609	50-000787	132 GRANT ST		MODESTO	P	1929	HIST.SURV.	5352-0037-0000		5S2	
057610	50-000788	138 GRANT ST		MODESTO	P	1927	HIST.SURV.	5352-0038-0000		5S2	
127869	50-001799	GRAYSON RD	GRAYSON RIVER RANCH LEVEE	MODESTO	P	1930	HIST.RES.	DOE-50-00-0018-0000	08/15/00	6Y	
							PROJ.REVW.	NRCS000721A	08/15/00	6Y	
170093		1310 GREENWOOD DR		MODESTO	P	1953	PROJ.REVW.	HUD080305C	03/06/08	6Y	
057895	50-000789	102 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0036		5D2	
057896	50-000790	106 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0037		5D2	
057897	50-000791	107 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0038		5D2	
057898	50-000792	111 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0039		5D2	
057899	50-000793	112 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0040		5D2	
057900	50-000794	114 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0041		5D2	
057901	50-000795	115 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0042		5D2	
057902	50-000796	118 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0043		5D2	
057903	50-000797	119 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0044		5D2	
057904	50-000798	122 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0045		5D2	
057905	50-000799	125 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0046		5D2	
057906	50-000800	126 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0047		5D2	
057907	50-000801	130 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0048		5D2	
057908	50-000802	132 HACKBERRY AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0049		5D2	
057909	50-000803	135 HACKBERRY AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0050		5D2	
057910	50-000804	202 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0051		5D2	
057911	50-000805	203 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0052		5D2	
057912	50-000806	205 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0053		5D2	
057913	50-000807	206 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0054		5D2	
057914	50-000808	209 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0055		5D2	
057915	50-000809	210 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0056		5D2	
057916	50-000810	215 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0057		5D2	
057917	50-000811	216 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0058		5D2	
057918	50-000812	219 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0059		5D2	
057919	50-000813	220 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0060		5D2	
057953	50-000814	223 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0012		5D2	

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057920	50-000815	228 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0061		5D2	
057921	50-000816	229 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0062		5D2	
057954	50-000817	301 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0013		5D2	
057922	50-000818	302 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0063		5D2	
057923	50-000819	305 HACKBERRY AVE	REHABILITATION OF HOUSE	MODESTO	P	1924	PROJ.REVW.	HUD871109J	12/15/87	6Y	
							HIST.SURV.	5352-0099-0064		5D2	
057924	50-000820	306 HACKBERRY AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0065		5D2	
057925	50-000821	309 HACKBERRY AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0066		5D2	
057926	50-000822	310 HACKBERRY AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0067		5D2	
057927	50-000823	317 HACKBERRY AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0068		5D2	
185320		411 HACKBERRY AVE		MODESTO	P	1920	PROJ.REVW.	HUD110826B	09/27/11	6Y	
150931		2333 HADDON AVE		MODESTO	P	1951	HIST.RES.	DOE-50-04-0022-0000	07/23/04	6Y	
							PROJ.REVW.	HUD040630B	07/23/04	6Y	
066669	50-000824	323 HIGH ST		MODESTO	U		PROJ.REVW.	HUD880513F	06/13/88	6Y	
161944	50-1959	417 HOGUE DR	WALTON, DR. ROBERT AND MARY, HOUSE	MODESTO	P	1961	HIST.RES.	NPS-06001133-0000	12/14/06	1S	C
							NAT.REG.	50-0016	08/04/06	3S	C
164565		417 HOGUE DR	UNGATED ENTRY WALLS/ WALTON, DR RO	MODESTO	P		HIST.RES.	NPS-06001133-0001	12/14/06	6X	
164566		417 HOGUE DR	SWIMMING POOL/ WALTON, DR ROBERT A	MODESTO	P	1966	HIST.RES.	NPS-06001133-0002	12/14/06	6X	
066756	50-000825	213 I ST	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880629C	07/26/88	6Y	
057765	50-000826	1402 I ST	McHENRY LIBRARY, McHENRY MUSEUM	MODESTO	M	1912	HIST.SURV.	5352-0090-0000		3S	
057766	50-000827	1418 I ST	FAY APARTMENTS, MILLER APARTMENTS	MODESTO	P	1912	HIST.SURV.	5352-0091-0000		5S2	
057767	50-000828	1605 I ST	SHANNON FUNERAL HOME, WHITEHURST S	MODESTO	P	1936	HIST.SURV.	5352-0092-0000		7N	
057768	50-000829	1630 I ST	THE McMALLON PLACE, LAW OFFICES OF	MODESTO	P	1926	HIST.SURV.	5352-0093-0000		7R	
073072	50-000830	1009 J ST	HOTEL HUGHSON	MODESTO	P	1914	NAT.REG.	50-0003	10/22/86	7J	
087498	50-000062	1023 J ST	HOTEL COVELL	MODESTO	P	1924	HIST.RES.	NPS-94001501-0000	12/29/94	1S	C
							NAT.REG.	50-0009	12/29/94	1S	C
							TAX.CERT.	537.9-50-0002	02/22/94		
057769	50-000831	1500 J ST	MASONIC TEMPLE, MARTIN BUILDING	MODESTO	P	1917	HIST.SURV.	5352-0094-0000		5S2	
057770	50-000832	1608 J ST	PIGGLY WIGGLEY MARKET / COVERLY'S,	MODESTO	P	1929	HIST.SURV.	5352-0095-0000		5S2	
057611	50-000833	205 JOHNSON ST		MODESTO	P	1919	HIST.SURV.	5352-0039-0000		5S2	
185234		405 JOHNSON ST		MODESTO	P	1923	PROJ.REVW.	HUD100607T	06/28/10	6Y	
057612	50-000834	415 JOHNSON ST		MODESTO	P	1924	HIST.SURV.	5352-0040-0000		5S2	
057613	50-000835	527 JOHNSON ST		MODESTO	P	1931	HIST.SURV.	5352-0041-0000		5S2	
057614	50-000836	111 JONES ST		MODESTO	P	1919	HIST.SURV.	5352-0042-0000		5S2	
057615	50-000837	121 JONES ST		MODESTO	P	1922	HIST.SURV.	5352-0043-0000		5S2	
057616	50-000838	129 JONES ST		MODESTO	P	1922	HIST.SURV.	5352-0044-0000		5S2	
057617	50-000839	134 JONES ST		MODESTO	P	1941	HIST.SURV.	5352-0045-0000		5S2	
057618	50-000840	138 JONES ST		MODESTO	P	1942	HIST.SURV.	5352-0046-0000		5S2	
057771	50-000841	1518 K ST	MUSCIO HOME, SCHMITZ HOME	MODESTO	P	1939	HIST.SURV.	5352-0096-0000		7N	
079378	50-000517	301 KANSAS AVE	COLOR MASTERS AUTO PAINTING	MODESTO	P	1935	HIST.RES.	DOE-50-92-0003-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
079377	50-000516	315 KANSAS AVE	CHEMICAL/STEAM CLEANER	MODESTO	P		HIST.RES.	DOE-50-92-0002-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
079375	50-000515	415 KANSAS AVE	KANSAS/BEECH STREET INDUSTRIAL ARE	MODESTO	P	1960	HIST.RES.	DOE-50-92-0001-9999	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
066268	50-000842	1001 KANSAS AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870930C	10/28/87	6Y	
065888	50-000843	131 KELLY ST	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516L	06/13/89	6Y	
097450	50-000844	628 KERR AVE		MODESTO	P	1925	PROJ.REVW.	HUD950801B	09/28/95	6Y	
183139		628 KERR AVE		MODESTO	P	1948	PROJ.REVW.	HUD100629F	07/23/10	6Y	
183028		802 KERR AVE		MODESTO	P	1948	PROJ.REVW.	HUD100625K	07/19/10	6Y	
101324	50-000845	811 KERR AVE		MODESTO	P	1946	PROJ.REVW.	HUD960213D	03/18/96	6Y	
067233	50-000846	721 KERR ST		MODESTO	U		PROJ.REVW.	HUD900402I	04/16/90	6Y	
140429	50-1925	KIERNAN AVE	LATERAL OF THE MODESTO IRRIGATION	MODESTO	P	1935	HIST.RES.	DOE-50-00-0040-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	

(Chappell Ditch, Salida 7.5')

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
140438		KIERNAN AVE	UNION PACIFIC RAILROAD TRACK	MODESTO	P	1913	HIST.RES.	DOE-50-00-0049-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140470		501 KIERNAN AVE		MODESTO	P	1945	HIST.RES.	DOE-50-00-0053-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140440		513 KIERNAN AVE		MODESTO	P	1910	HIST.RES.	DOE-50-00-0051-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140439		625 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0050-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140437		824 KIERNAN AVE		MODESTO	P	1948	HIST.RES.	DOE-50-00-0048-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140436	-2026	907 KIERNAN AVE	— demolished	MODESTO	P	1940	HIST.RES.	DOE-50-00-0047-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140433		1348 KIERNAN AVE		MODESTO	P	1905	HIST.RES.	DOE-50-00-0044-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140432		1420 KIERNAN AVE		MODESTO	P	1915	HIST.RES.	DOE-50-00-0043-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140431		1443 KIERNAN AVE		MODESTO	P	1910	HIST.RES.	DOE-50-00-0042-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140430		1540 KIERNAN AVE		MODESTO	P	1910	HIST.RES.	DOE-50-00-0041-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140428		1601 KIERNAN AVE		MODESTO	P	1947	HIST.RES.	DOE-50-00-0039-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140427		1643 KIERNAN AVE		MODESTO	P	1920	HIST.RES.	DOE-50-00-0038-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140426		1737 KIERNAN AVE		MODESTO	P	1920	HIST.RES.	DOE-50-00-0037-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140469		1931 KIERNAN AVE	STANISLAUS UNION SCHOOL	MODESTO	D	1950	HIST.RES.	DOE-50-00-0052-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140424		2206 KIERNAN AVE		MODESTO	P	1912	HIST.RES.	DOE-50-00-0036-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140423		2224 KIERNAN AVE		MODESTO	P	1930	HIST.RES.	DOE-50-00-0035-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140422		2248 KIERNAN AVE		MODESTO	P	1925	HIST.RES.	DOE-50-00-0034-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140421		2349 KIERNAN AVE		MODESTO	P	1932	HIST.RES.	DOE-50-00-0033-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140419		2706 KIERNAN AVE		MODESTO	P	1911	HIST.RES.	DOE-50-00-0032-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140417		2819 KIERNAN AVE		MODESTO	P	1938	HIST.RES.	DOE-50-00-0031-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140416		2866 KIERNAN AVE		MODESTO	P	1915	HIST.RES.	DOE-50-00-0030-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140414		3237 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0028-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140415		3243 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0029-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140413		3342 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0027-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140412		3406 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0026-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140411		3513 KIERNAN AVE		MODESTO	P	1915	HIST.RES.	DOE-50-00-0025-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140410		3612 KIERNAN AVE		MODESTO	P	1920	HIST.RES.	DOE-50-00-0024-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140409		3812 KIERNAN AVE		MODESTO	P	1926	HIST.RES.	DOE-50-00-0023-0000	11/16/00	6Y	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140378		4101 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0022-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140377		4107 KIERNAN AVE		MODESTO	P		HIST.RES.	DOE-50-00-0021-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140376		4124 KIERNAN AVE		MODESTO	P	1952	HIST.RES.	DOE-50-00-0020-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
140375		4337 KIERNAN AVE		MODESTO	P	1912	HIST.RES.	DOE-50-00-0019-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
132705		141 KIMBLE ST		MODESTO	P	1920	HIST.RES.	DOE-50-02-0003-0000	07/31/02	6Y	
							PROJ.REVW.	HUD020718Q	07/31/02	6Y	
137743		1519 LARKIN AVE		MODESTO	P	1940	HIST.RES.	DOE-50-03-0006-0000	02/11/03	6Y	
							PROJ.REVW.	HUD030211A	02/11/03	6Y	
065658	50-000847	1626 LARKIN ST	REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890109G	02/07/89	6Y	
148440		1830 LAS VEGAS ST		MODESTO	P	1948	HIST.RES.	DOE-50-04-0008-0000	05/11/04	6Y	
							PROJ.REVW.	FHWA040414A	05/11/04	6Y	
137745		419 LAUREL AVE		MODESTO	P	1930	HIST.RES.	DOE-50-03-0007-0000	02/18/03	6Y	
							PROJ.REVW.	HUD030206H	02/18/03	6Y	
066991	50-000848	428 LAUREL ST		MODESTO	U		PROJ.REVW.	HUD891018B	11/22/89	6Y	
057619	50-000849	114 LEE ST		MODESTO	P	1919	HIST.SURV.	5352-0047-0000		5S2	
057620	50-000850	117 LEE ST		MODESTO	P	1911	HIST.SURV.	5352-0048-0000		5S2	
057621	50-000851	121 LEE ST		MODESTO	P	1911	HIST.SURV.	5352-0049-0000		5S2	
057622	50-000852	125 LEE ST		MODESTO	P	1942	HIST.SURV.	5352-0050-0000		7R	
057623	50-000853	126 LEE ST	PEDERSON HOME	MODESTO	P	1942	HIST.SURV.	5352-0051-0000		7R	
057624	50-000854	129 LEE ST		MODESTO	P	1941	HIST.SURV.	5352-0052-0000		7R	
057625	50-000855	130 LEE ST		MODESTO	P	1919	HIST.SURV.	5352-0053-0000		5S2	
057626	50-000856	134 LEE ST		MODESTO	P	1922	HIST.SURV.	5352-0054-0000		5S2	
057627	50-000857	135 LEE ST		MODESTO	P	1911	HIST.SURV.	5352-0055-0000		5S2	
057628	50-000858	144 LEE ST		MODESTO	P	1920	HIST.SURV.	5352-0056-0000		5S2	
082385	50-000859	203 LEON AVE		MODESTO	P	1920	PROJ.REVW.	HUD930603ff	06/11/93	6Y	
066994	50-000860	207 LEON AVE		MODESTO	U		PROJ.REVW.	HUD891018E	11/22/89	6Y	
082380	50-000861	208 LEON AVE		MODESTO	P	1922	PROJ.REVW.	HUD930603x	06/11/93	6Y	
066999	50-000862	223 LEON AVE		MODESTO	U		PROJ.REVW.	HUD891018J	11/22/89	6Y	
080868	50-000863	317 LEON AVE		MODESTO	U	1925	PROJ.REVW.	HUD930311O	04/21/93	6Y	
082379	50-000864	319 LEON AVE		MODESTO	P	1918	PROJ.REVW.	HUD930603w	06/11/93	6Y	
082367	50-000865	331 LEON AVE		MODESTO	P	1930	PROJ.REVW.	HUD930603j	06/11/93	6Y	
082362	50-000866	337 LEON AVE		MODESTO	P	1920	PROJ.REVW.	HUD930603d	06/11/93	6Y	
098684	50-000867	345 LEON AVE		MODESTO	P	1922	PROJ.REVW.	HUD951107A	12/14/95	6Y	
065882	50-000868	409 LEON AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516F	06/13/89	6Y	
080865	50-000869	410 LEON AVE		MODESTO	U	1922	PROJ.REVW.	HUD930311N	04/21/93	6Y	
080861	50-000870	413 LEON AVE		MODESTO	U	1922	PROJ.REVW.	HUD930311M	04/21/93	6Y	
080860	50-000871	417 LEON AVE		MODESTO	U	1922	PROJ.REVW.	HUD930311L	04/21/93	6Y	
183251		422 LEON AVE		MODESTO	P	1955	PROJ.REVW.	HUD100630H	07/21/10	6Y	
080869	50-000872	430 LEON AVE		MODESTO	U	1927	PROJ.REVW.	HUD930311P	04/21/93	6Y	
065883	50-000873	443 LEON AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516G	06/13/89	6Y	
148447		3350 LESTER RD	GATEWAY COMMUNITY CHURCH	MODESTO	P	1950	HIST.RES.	DOE-50-04-0013-0000	05/11/04	6Y	
							PROJ.REVW.	FHWA040414A	05/11/04	6Y	
148446		3440 LESTER RD	GATEWAY COMMUNITY CHURCH PARSONAGE	MODESTO	P	1930	HIST.RES.	DOE-50-04-0012-0000	05/11/04	6Y	
							PROJ.REVW.	FHWA040414A	05/11/04	6Y	
148444		3448 LESTER RD		MODESTO	P	1946	HIST.RES.	DOE-50-04-0011-0000	05/11/04	6Y	
							PROJ.REVW.	FHWA040414A	05/11/04	6Y	
148442		3460 LESTER RD		MODESTO	P		HIST.RES.	DOE-50-04-0010-0000	05/11/04	6Y	
							PROJ.REVW.	FHWA040414A	05/11/04	6Y	
176957		209 LOCUST ST		MODESTO	P	1960	PROJ.REVW.	HUD090930A	10/23/09	6Y	
066424	50-000874	306 LOCUST ST	RESIDENTIAL REHABILITATION	MODESTO	U		PROJ.REVW.	HUD871221E	01/21/88	6Y	
177546		321 LOCUST ST		MODESTO	P	1921	PROJ.REVW.	HUD091028D	11/19/09	6Y	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
057717	50-000875	LOTTIE AVE		MODESTO	P	1927	HIST.SURV.	5352-0068-9999		5D2	
057713	50-000876	508 LOTTIE AVE		MODESTO	P	1929	HIST.SURV.	5352-0068-0001		5D2	
057714	50-000877	514 LOTTIE AVE		MODESTO	P	1927	HIST.SURV.	5352-0068-0002		5D2	
057715	50-000878	518 LOTTIE AVE		MODESTO	P	1927	HIST.SURV.	5352-0068-0003		5D2	
057716	50-000881	522 LOTTIE AVE		MODESTO	P	1929	HIST.SURV.	5352-0068-0004		5D2	
082359	50-000880	119 MADERA AVE		MODESTO	P	1925	PROJ.REVW.	HUD930603a	06/11/93	6Y	
067436	50-000881	122 MADERA AVE	122	MODESTO	P	0	PROJ.REVW.	HUD900508C	06/11/90	6Y	
065622	50-000882	127 MADERA AVE		MODESTO	U		PROJ.REVW.	HUD881209L	01/04/89	6Y	
080887	50-000883	132 MADERA AVE		MODESTO	U	1925	PROJ.REVW.	HUD930311e	04/21/93	6Y	
082370	50-000884	134 MADERA AVE		MODESTO	P	1921	PROJ.REVW.	HUD930603m	06/11/93	6Y	
080886	50-000885	138 MADERA AVE		MODESTO	U	1920	PROJ.REVW.	HUD930311d	04/21/93	6Y	
090665	50-000885	138 MADERA AVE		MODESTO	P	1920	PROJ.REVW.	HUD940701J	08/11/94	6Y	
080888	50-000887	142 MADERA AVE		MODESTO	U	1920	PROJ.REVW.	HUD930311f	04/21/93	6Y	
080885	50-000888	206 MADERA AVE		MODESTO	U	1921	PROJ.REVW.	HUD930311c	04/21/93	6Y	
080884	50-000889	210 MADERA AVE		MODESTO	U	1925	PROJ.REVW.	HUD930311b	04/21/93	6Y	
080883	50-000890	215 MADERA AVE		MODESTO	U	1939	PROJ.REVW.	HUD930311a	04/21/93	6Y	
066997	50-000891	222 MADERA AVE		MODESTO	U		PROJ.REVW.	HUD891018H	11/22/89	6Y	
057772	50-000892	MADONIA AVE	~~GRANGE COMPANY~~, GRANGE COMPANY	MODESTO	P	1939	HIST.SURV.	5352-0097-0000		7N	
057667	50-000893	MAGNOLIA AVE		MODESTO	P	1911	HIST.SURV.	5352-0060-9999		5D2	
057744	50-000894	MAGNOLIA AVE		MODESTO	P	1918	HIST.SURV.	5352-0069-9999		5D2	
057641	50-000895	102 MAGNOLIA AVE		MODESTO	P	1917	HIST.SURV.	5352-0060-0001		5D2	
057642	50-000896	112 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0002		5D2	
057702	50-000897	115 MAGNOLIA AVE	HAWKE CASTLE	MODESTO	P	1929	HIST.SURV.	5352-0063-0000		3S	
057643	50-000898	118 MAGNOLIA AVE		MODESTO	P	1913	HIST.SURV.	5352-0060-0003		5D2	
057644	50-000899	122 MAGNOLIA AVE		MODESTO	P	1918	HIST.SURV.	5352-0060-0004		5D2	
057645	50-000900	125 MAGNOLIA AVE		MODESTO	P	1918	HIST.SURV.	5352-0060-0005		5D2	
057646	50-000901	128 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0006		5D2	
057647	50-000902	134 MAGNOLIA AVE		MODESTO	P	1915	HIST.SURV.	5352-0060-0007		5D2	
057648	50-000903	200 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0008		5D2	
057649	50-000904	203 MAGNOLIA AVE	C O LEE HOME	MODESTO	P	1913	HIST.SURV.	5352-0060-0009		5D2	
057650	50-000905	205 MAGNOLIA AVE	GARRISON HOME	MODESTO	P	1912	HIST.SURV.	5352-0060-0010		5D2	
057651	50-000906	212 MAGNOLIA AVE		MODESTO	P	1913	HIST.SURV.	5352-0060-0011		5D2	
057652	50-000907	213 MAGNOLIA AVE	H P BOOTHE HOME	MODESTO	P	1930	HIST.SURV.	5352-0060-0012		5D2	
057653	50-000908	214 MAGNOLIA AVE	DR GOULD HOME	MODESTO	P	1918	HIST.SURV.	5352-0060-0013		5D2	
057654	50-000909	217 MAGNOLIA AVE		MODESTO	P	1918	HIST.SURV.	5352-0060-0014		5D2	
057655	50-000910	218 MAGNOLIA AVE		MODESTO	P	1913	HIST.SURV.	5352-0060-0015		5D2	
057656	50-000911	222 MAGNOLIA AVE		MODESTO	P	1918	HIST.SURV.	5352-0060-0016		5D2	
057657	50-000912	224 MAGNOLIA AVE		MODESTO	P	1915	HIST.SURV.	5352-0060-0017		5D2	
057658	50-000913	225 MAGNOLIA AVE	L M MORRIS HOME	MODESTO	P	1920	HIST.SURV.	5352-0060-0018		5D2	
057659	50-000914	231 MAGNOLIA AVE	DR REAMER HOME	MODESTO	P	1920	HIST.SURV.	5352-0060-0019		5D2	
057660	50-000915	301 MAGNOLIA AVE		MODESTO	P	1918	HIST.SURV.	5352-0060-0020		5D2	
057661	50-000916	302 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0021		5D2	
057662	50-000917	305 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0022		5D2	
057663	50-000918	309 MAGNOLIA AVE	W G BROWN HOME	MODESTO	P	1923	HIST.SURV.	5352-0060-0023		5D2	
057664	50-000919	310 MAGNOLIA AVE	E H ZION HOME	MODESTO	P	1914	HIST.SURV.	5352-0060-0024		5D2	
057665	50-000920	314 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0025		5D2	
057666	50-000921	318 MAGNOLIA AVE		MODESTO	P	1912	HIST.SURV.	5352-0060-0026		5D2	
057572	50-000922	409 MAGNOLIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0017-0000		7R	
057718	50-000923	410 MAGNOLIA AVE		MODESTO	P	1921	HIST.SURV.	5352-0069-0001		5D2	
057719	50-000924	412 MAGNOLIA AVE		MODESTO	P	1919	HIST.SURV.	5352-0069-0002		5D2	
057573	50-000925	417 MAGNOLIA AVE		MODESTO	P	1926	HIST.SURV.	5352-0018-0000		7R	
057720	50-000926	421 MAGNOLIA AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0003		5D2	
057721	50-000927	512 MAGNOLIA AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0004		5D2	
057722	50-000928	515 MAGNOLIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0069-0005		5D2	
057723	50-000929	522 MAGNOLIA AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0006		5D2	
057724	50-000930	530 MAGNOLIA AVE		MODESTO	P	1919	HIST.SURV.	5352-0069-0007		5D2	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
098772	50-000931	217 MAPLE ST		MODESTO	P	1941	PROJ.REVW.	HUD951211Z	12/14/95	6Y	
093934	50-000932	302 MAPLE ST		MODESTO	P	1928	PROJ.REVW.	HUD941208E	12/27/94	6Y	
066993	50-000933	321 MAPLE ST		MODESTO	U		PROJ.REVW.	HUD891018D	11/22/89	6Y	
149649		416 MAPLE ST		MODESTO	P	1946	HIST.RES.	DOE-50-04-0014-0000	12/03/04	6Y	
							PROJ.REVW.	HUD041012C	12/03/04	6Y	
183089		608 MAZE BLVD		MODESTO	P	1925	PROJ.REVW.	HUD100701D	07/21/10	6Y	
067435	50-000934	121 MAZE CT		MODESTO	P	0	PROJ.REVW.	HUD900508A	06/11/90	6Y	
057574	50-000935	425 MCHENRY AVE	THE IMAGE MAKER	MODESTO	P	1917	HIST.SURV.	5352-0019-0000		7R	
057629	50-000936	520 MCHENRY AVE		MODESTO	P	1926	HIST.SURV.	5352-0057-0000		5S2	
057575	50-000937	521 MCHENRY AVE	CAFE DECANDENCE	MODESTO	P	1919	HIST.SURV.	5352-0020-0000		7R	
080882	50-000938	116 MERCED AVE		MODESTO	U	1920	PROJ.REVW.	HUD930311Z	04/21/93	6Y	
080881	50-000939	123 MERCED AVE		MODESTO	U	1925	PROJ.REVW.	HUD930311Y	04/21/93	6Y	
082357	50-000940	124 MERCED AVE		MODESTO	P	1925	PROJ.REVW.	HUD930603Y	06/11/93	6Y	
082351	50-000941	129 MERCED AVE		MODESTO	P	1942	PROJ.REVW.	HUD930603S	06/11/93	6Y	
080880	50-000942	142 MERCED AVE		MODESTO	U	1920	PROJ.REVW.	HUD930311X	04/21/93	6Y	
080891	50-000943	219 MERCED AVE		MODESTO	P	1939	HIST.RES.	DOE-50-04-0003-0000	01/13/04	6Y	
							PROJ.REVW.	HUD031215C	01/13/04	6Y	
							PROJ.REVW.	HUD930311J	04/21/93	6Y	
057598	50-000944	MODESTO AVE		MODESTO	P	1919	HIST.SURV.	5352-0026-9999		5D2	
057630	50-000945	114 MODESTO AVE		MODESTO	P	1929	HIST.SURV.	5352-0058-0000		5S2	
057589	50-000946	119 MODESTO AVE		MODESTO	P	1919	HIST.SURV.	5352-0026-0001		5D2	
057590	50-000947	123 MODESTO AVE		MODESTO	P	1919	HIST.SURV.	5352-0026-0002		5D2	
057591	50-000948	124 MODESTO AVE		MODESTO	P	1922	HIST.SURV.	5352-0026-0003		5D2	
057592	50-000949	127 MODESTO AVE		MODESTO	P	1919	HIST.SURV.	5352-0026-0004		5D2	
057593	50-000950	129 MODESTO AVE		MODESTO	P	1919	HIST.SURV.	5352-0026-0005		5D2	
057594	50-000951	130 MODESTO AVE		MODESTO	P	1922	HIST.SURV.	5352-0026-0006		5D2	
057595	50-000952	138 MODESTO AVE		MODESTO	P	1924	HIST.SURV.	5352-0026-0007		5D2	
057596	50-000953	143 MODESTO AVE		MODESTO	P	1922	HIST.SURV.	5352-0026-0008		5D2	
057597	50-000954	146 MODESTO AVE		MODESTO	P	1922	HIST.SURV.	5352-0026-0009		5D2	
066757	50-000955	1634 MONTEREY AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880629D	07/26/88	6Y	
096288	50-000956	1734 MONTEREY AVE		MODESTO	P	1938	PROJ.REVW.	HUD950515Q	06/20/95	6Y	
184038		834 MUIR RD		MODESTO	P	1948	PROJ.REVW.	HUD100915C	10/01/10	6Y	
066992	50-000957	100 N EMERALD ST		MODESTO	U		PROJ.REVW.	HUD891018C	11/22/89	6Y	
146097		601 N M L KING DR	KING-KENNEDY MEMORIAL CENTER	MODESTO		1968	HIST.RES.	DOE-50-04-0001-0000	02/03/04	6Y	
							PROJ.REVW.	HUD040122D	02/03/04	6Y	
167363		1015 N M L KING JR DR		MODESTO	P	1917	PROJ.REVW.	HUD070521DD	05/25/07	6Y	
183027		123 N SANTA ANA AVE		MODESTO	P	1930	PROJ.REVW.	HUD100625J	07/19/10	6Y	
137742		325 N SANTA ANA AVE		MODESTO	P		HIST.RES.	DOE-50-03-0004-0000	02/20/03	6Y	
							PROJ.REVW.	HUD030218C	02/20/03	6Y	
057956	50-000958	611 NEEDHAM ST		MODESTO	P	1940	HIST.SURV.	5352-0101-0000		7R	
079383	50-000521	1122 NEEDHAM ST	QUIK SERVE MARKET	MODESTO	P	1935	HIST.RES.	DOE-50-92-0008-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
079381	50-000519	1137 NEEDHAM ST	FRED L. HILL PLUMBING	MODESTO	P	1915	HIST.RES.	DOE-50-92-0006-0000	11/13/92	6Y	
							PROJ.REVW.	FHWA920923B	11/13/92	6Y	
057796	50-000959	122 NELLIE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0024		5D2	
057793	50-000960	126 NELLIE AVE		MODESTO	P	1919	HIST.SURV.	5352-0098-0021		5D2	
057794	50-000961	130 NELLIE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0022		5D2	
167355		128 OAK ST		MODESTO	P	1960	PROJ.REVW.	HUD070521W	05/25/07	6Y	
065809	50-000962	210 OAK ST		MODESTO	U		PROJ.REVW.	HUD890417H	05/18/89	6Y	
090666	50-000963	212 OAK ST		MODESTO	P	1910	PROJ.REVW.	HUD940701K	08/11/94	6Y	
099937	50-000964	402 OAK ST		MODESTO	P	1942	PROJ.REVW.	HUD951218B	01/09/96	6Y	
099941	50-000965	403 OAK ST		MODESTO	P	1946	PROJ.REVW.	HUD951218E	01/09/96	6Y	
099939	50-000966	408 OAK ST		MODESTO	P	1941	PROJ.REVW.	HUD951218C	01/09/96	6Y	
099940	50-000967	422 OAK ST		MODESTO	P	1941	HIST.RES.	DOE-50-03-0005-0000	02/20/03	6Y	
							PROJ.REVW.	HUD030218D	02/20/03	6Y	

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							PROJ.REVW.	HUD951218D	01/09/96	6Y	
099936	50-000968	429 OAK ST		MODESTO	P	1941	PROJ.REVW.	HUD951218A	01/09/96	6Y	
092895	50-000969	437 OAK ST		MODESTO	P	1941	PROJ.REVW.	HUD940829B	11/16/94	6Y	
098719	50-000970	438 OAK ST		MODESTO	P	1941	PROJ.REVW.	HUD951214Z	12/18/95	6Y	
057797	50-000971	118 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0025		5D2	
057798	50-000972	119 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0026		5D2	
057799	50-000973	121 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0027		5D2	
057800	50-000974	124 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0028		5D2	
057801	50-000975	127 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0029		5D2	
057802	50-000976	128 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0030		5D2	
057803	50-000977	136 OLIVE AVE		MODESTO	P	1938	HIST.SURV.	5352-0098-0031		5D2	
057804	50-000978	202 OLIVE AVE		MODESTO	P	1924	HIST.SURV.	5352-0098-0032		5D2	
057807	50-000979	203 OLIVE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0035		5D2	
057808	50-000980	207 OLIVE AVE		MODESTO	P	1924	HIST.SURV.	5352-0098-0036		5D2	
057805	50-000981	210 OLIVE AVE		MODESTO	P	1911	HIST.SURV.	5352-0098-0033		5D2	
057806	50-000982	211 OLIVE AVE		MODESTO	P	1925	HIST.SURV.	5352-0098-0034		5D2	
057809	50-000983	214 OLIVE AVE		MODESTO	P	1937	HIST.SURV.	5352-0098-0037		5D2	
065810	50-000984	222 OLIVE AVE		MODESTO	U		PROJ.REVW.	HUD890417I	05/18/89	6Y	
057810	50-000985	223 OLIVE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0038		5D2	
057811	50-000986	230 OLIVE AVE		MODESTO	P	1927	HIST.SURV.	5352-0098-0039		5D2	
057812	50-000987	108 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0040		5D2	
057813	50-000988	109 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0041		5D2	
057814	50-000989	114 ORANGE AVE		MODESTO	P	1937	HIST.SURV.	5352-0098-0042		5D2	
057815	50-000990	115 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0043		5D2	
057816	50-000991	117 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0044		5D2	
057819	50-000992	118 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0047		5D2	
057820	50-000993	122 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0048		5D2	
057817	50-000994	124 ORANGE AVE		MODESTO	P	1924	HIST.SURV.	5352-0098-0045		5D2	
057818	50-000995	125 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0046		5D2	
057821	50-000996	128 ORANGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0049		5D2	
057822	50-000997	130 ORANGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0050		5D2	
057823	50-000998	133 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0051		5D2	
057824	50-000999	201 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0052		5D2	
057825	50-001000	205 ORANGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0053		5D2	
057826	50-001001	206 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0054		5D2	
057827	50-001002	211 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0055		5D2	
057828	50-001003	212 ORANGE AVE		MODESTO	P	1927	HIST.SURV.	5352-0098-0056		5D2	
057829	50-001004	213 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0057		5D2	
057830	50-001005	217 ORANGE AVE		MODESTO	P	1918	HIST.SURV.	5352-0098-0058		5D2	
057831	50-001006	218 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0059		5D2	
057832	50-001007	220 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0060		5D2	
057833	50-001008	221 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0061		5D2	
057834	50-001009	225 ORANGE AVE		MODESTO	P	1911	HIST.SURV.	5352-0098-0062		5D2	
057835	50-001010	229 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0063		5D2	
057836	50-001011	232 ORANGE AVE		MODESTO	P	1938	HIST.SURV.	5352-0098-0064		5D2	
057837	50-001012	301 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0065		5D2	
057838	50-001013	305 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0066		5D2	
057839	50-001014	306 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0067		5D2	
057840	50-001015	308 ORANGE AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0068		5D2	
057841	50-001016	309 ORANGE AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0069		5D2	
057842	50-001017	314 ORANGE AVE		MODESTO	P	1919	HIST.SURV.	5352-0098-0070		5D2	
167356		1004 PANAMA DR		MODESTO	P	1925	PROJ.REVW.	HUD070521X	05/25/07	6Y	
167357		1008 PANAMA DR		MODESTO	P	1925	PROJ.REVW.	HUD070521Y	05/25/07	6Y	
057941	50-001018	PARK AVE	WEST HALF OF WISECARVER ADDITION	MODESTO	P	1917	HIST.SURV.	5352-0099-9999		5D2	
057955	50-001019	PARK AVE	WISECARVER ADDITION, 100 BLOCK PAR	MODESTO	P	1917	HIST.SURV.	5352-0100-9999		5D2	
057860	50-001020	103 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0001		5D2	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
057942	50-001021	107 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0001		5D2	
057943	50-001022	111 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0002		5D2	
057944	50-001023	115 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0003		5D2	
057861	50-001024	119 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0002		5D2	
057945	50-001025	123 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0004		5D2	
057957	50-001026	127 PARK AVE		MODESTO	P	1940	HIST.SURV.	5352-0102-0000		7R	
057862	50-001027	131 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0003		5D2	
057863	50-001028	203 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0004		5D2	
057864	50-001029	215 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0005		5D2	
057865	50-001030	219 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0006		5D2	
057866	50-001031	225 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0007		5D2	
057867	50-001032	303 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0008		5D2	
057868	50-001033	309 PARK AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0009		5D2	
057958	50-001034	317 PARK AVE		MODESTO	P	1937	HIST.SURV.	5352-0103-0000		7R	
167907	50-2156	221 PATTERSON RD		MODESTO	P	1925	PROJ.REVW.	FHWA070319E	04/23/07	6Y	
165867		1434 PEARL ST		MODESTO	P	1955	PROJ.REVW.	HUD070329I	03/30/07	6Y	
140343		1520 PEARL ST		MODESTO	P	1947	HIST.RES.	DOE-50-02-0015-0000	10/16/02	6Y	
							PROJ.REVW.	HUD021007B	10/16/02	6Y	
153732		1553 PEARL ST		MODESTO	P	1947	PROJ.REVW.	HUD100623H	07/19/10	6Y	
							PROJ.REVW.	HUD050404W	04/18/05	6Y	
153877		119 PINE ST		MODESTO	P	1924	PROJ.REVW.	HUD050429H	05/02/05	6Y	
066670	50-001035	302 PINE ST		MODESTO	U		PROJ.REVW.	HUD880513G	06/13/88	6Y	
146916		426 PINE ST		MODESTO	P	1941	HIST.RES.	DOE-50-04-0005-0000	05/18/04	6Y	
							PROJ.REVW.	HUD040421C	05/18/04	6Y	
147224		438 PINE ST		MODESTO	P	1945	HIST.RES.	DOE-50-04-0006-0000	04/20/04	6Y	
							PROJ.REVW.	HUD040322B	04/20/04	6Y	
181257		449 PINE ST		MODESTO	P	1948	PROJ.REVW.	HUD100812A	08/16/10	6Y	
057869	50-001036	101 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0010		5D2	
057870	50-001037	107 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0011		5D2	
057871	50-001038	111 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0012		5D2	
057872	50-001039	114 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0013		5D2	
057946	50-001040	115 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0005		5D2	
057873	50-001041	117 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0014		5D2	
057947	50-001042	118 POPLAR AVE		MODESTO	P	1925	HIST.SURV.	5352-0100-0006		5D2	
057874	50-001043	120 POPLAR AVE		MODESTO	P	1915	HIST.SURV.	5352-0099-0015		5D2	
057875	50-001044	124 POPLAR AVE		MODESTO	P	1918	HIST.SURV.	5352-0099-0016		5D2	
057876	50-001045	125 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0017		5D2	
057877	50-001046	127 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0018		5D2	
057878	50-001047	130 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0019		5D2	
057879	50-001048	133 POPLAR AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0020		5D2	
057948	50-001049	201 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0007		5D2	
057880	50-001050	205 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0021		5D2	
057881	50-001787	208 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0022		5D2	
057882	50-001051	209 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0023		5D2	
057883	50-001052	212 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0024		5D2	
057949	50-001053	215 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0008		5D2	
057884	50-001054	216 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0025		5D2	
057950	50-001055	217 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0009		5D2	
057951	50-001056	220 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0010		5D2	
057885	50-001057	221 POPLAR AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0026		5D2	
057886	50-001058	226 POPLAR AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0027		5D2	
057952	50-001059	227 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0100-0011		5D2	
057887	50-001060	230 POPLAR AVE		MODESTO	P	1938	HIST.SURV.	5352-0099-0028		5D2	
057888	50-001061	231 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0029		5D2	
057959	50-001062	303 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0104-0000		7R	
057889	50-001063	306 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0030		5D2	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
057890	50-001064	309 POPLAR AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0031		5D2	
057891	50-001065	314 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0032		5D2	
057892	50-001066	315 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0033		5D2	
057893	50-001067	317 POPLAR AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0034		5D2	
057894	50-001068	318 POPLAR AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0035		5D2	
183026		1924 RICKY AVE		MODESTO	P	1960	PROJ.REVW.	HUD100625I	07/19/10	6Y	
102097	50-001069	210 RIO GRANDE AVE		MODESTO	P	1940	PROJ.REVW.	HUD960319D	04/29/96	6Y	
164103		421 RIO GRANDE AVE	TEMPLO ROSA DE SARON	MODESTO	P	1942	PROJ.REVW.	HUD061103A	11/20/06	6Y	
164104		525 RIO GRANDE AVE	EL BUEN SAMARITANO	MODESTO	P	1944	PROJ.REVW.	HUD061103A	11/20/06	6Y	
143752		1701 ROBERTSON RD		MODESTO	P	1950	HIST.RES.	DOE-50-03-0020-0000	10/03/03	6Y	
							PROJ.REVW.	HUD030911D	10/03/03	6Y	
183025		2047 ROBLE AVE		MODESTO	P	1949	PROJ.REVW.	HUD100625H	07/19/10	6Y	
066817	50-001070	133 ROSEDALE AVE		MODESTO	U		PROJ.REVW.	HUD880726M	08/26/88	6Y	
066472	50-001071	219 ROSEDALE AVE	REHABILITATION HOUSING	MODESTO	U		PROJ.REVW.	HUD880209D	03/07/88	6Y	
065513	50-001072	223 ROSEDALE AVE		MODESTO	U		PROJ.REVW.	HUD881020N	11/14/88	6Y	
066473	50-001073	227 ROSEDALE AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880209E	03/07/88	6Y	
082366	50-001074	314 ROSEDALE AVE		MODESTO	P	1922	PROJ.REVW.	HUD930603i	06/11/93	6Y	
065811	50-001075	321 ROSEDALE AVE		MODESTO	U		PROJ.REVW.	HUD890417J	05/18/89	6Y	
080890	50-001076	325 ROSEDALE AVE		MODESTO	U	1921	PROJ.REVW.	HUD930311h	04/21/93	6Y	
066248	50-001077	329 ROSEDALE AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870921T	10/21/87	6Y	
065320	50-001078	337 ROSEDALE AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870806C	09/03/87	6Y	
082346	50-001079	338 ROSEDALE AVE		MODESTO	P	1926	PROJ.REVW.	HUD930603N	06/11/93	6Y	
065366	50-001080	407 ROSEDALE AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870827C	09/21/87	6Y	
093936	50-001081	418 ROSEDALE AVE		MODESTO	P	1926	PROJ.REVW.	HUD941212A	12/27/94	6Y	
082372	50-001082	419 ROSEDALE AVE		MODESTO	P	1915	PROJ.REVW.	HUD930603o	06/11/93	6Y	
066269	50-001083	426 ROSEDALE AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870930E	10/28/87	6Y	
065367	50-001084	433 ROSEDALE AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870827D	09/21/87	6Y	
066379	50-001085	444 ROSEDALE AVE		MODESTO	U		PROJ.REVW.	HUD871123P	12/24/87	6Y	
138440		445 ROSEDALE AVE		MODESTO	P	1950	HIST.RES.	DOE-50-03-0008-0000	03/27/03	6Y	
							PROJ.REVW.	HUD030321G	03/27/03	6Y	
080859	50-001086	114 ROSELAWN AVE		MODESTO	U	1925	PROJ.REVW.	HUD930311K	04/21/93	6Y	
066380	50-001087	132 ROSELAWN AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD871123P	12/24/87	6Y	
065319	50-001088	202 ROSELAWN AVE	RESIDENCE	MODESTO	U		PROJ.REVW.	HUD870806B	09/03/87	6Y	
065884	50-001089	207 ROSELAWN AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516H	06/13/89	6Y	
066425	50-001090	215 ROSELAWN AVE	RESIDENTIAL REHABILITATION	MODESTO	P		PROJ.REVW.	HUD930603I	06/11/93	6Y	
							PROJ.REVW.	HUD871221F	01/21/88	6Y	
066671	50-001091	227 ROSELAWN AVE		MODESTO	U		PROJ.REVW.	HUD880513H	06/13/88	6Y	
066476	50-001092	231 ROSELAWN AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880209H	03/07/88	6Y	
155073		314 ROSELAWN AVE		MODESTO	P	1925	PROJ.REVW.	HUD050808C	08/10/05	6Y	
082369	50-001093	322 ROSELAWN AVE		MODESTO	P	1926	PROJ.REVW.	HUD9306031	06/11/93	6Y	
066430	50-001094	418 ROSELAWN AVE		MODESTO	U		PROJ.REVW.	HUD871222C	01/21/88	6Y	
183033		26 ROSEMONT		MODESTO	P	1925	PROJ.REVW.	HUD100625M	07/19/10	6Y	
066475	50-001095	102 ROSEMONT AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880209G	03/07/88	6Y	
080858	50-001096	103 ROSEMONT AVE		MODESTO	U	1926	PROJ.REVW.	HUD930311J	04/21/93	6Y	
066759	50-001097	121 ROSEMONT AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880629F	07/26/88	6Y	
066066	50-001103	122 ROSEMONT AVE		MODESTO	U		PROJ.REVW.	HUD890727H	08/25/89	6Y	
066672	50-001099	125 ROSEMONT AVE		MODESTO	U		PROJ.REVW.	HUD880513I	06/13/88	6Y	
082354	50-001100	129 ROSEMONT AVE		MODESTO	P	1925	PROJ.REVW.	HUD930603V	06/11/93	6Y	
066818	50-001101	138 ROSEMONT AVE		MODESTO	U		PROJ.REVW.	HUD880726N	08/26/88	6Y	
066819	50-001102	140 ROSEMONT AVE		MODESTO	U		PROJ.REVW.	HUD880726N	08/26/88	6Y	
066068	50-001103	141 ROSEMONT AVE		MODESTO	U	1920	PROJ.REVW.	HUD9303111	04/21/93	6Y	
							PROJ.REVW.	HUD890727J	08/25/89	6Y	
183252		142 ROSEMONT AVE		MODESTO	P	1925	PROJ.REVW.	HUD100630I	07/21/10	6Y	
066755	50-001104	217 ROSEMONT AVE	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880629B	07/26/88	6Y	
066673	50-001105	222 ROSEMONT AVE		MODESTO	U		PROJ.REVW.	HUD880513J	06/13/88	6Y	
065514	50-001106	225 ROSEMONT AVE		MODESTO	U		PROJ.REVW.	HUD8810200	11/14/88	6Y	

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065659	50-001107	226 ROSEMONT AVE	DEMOLITION	MODESTO	P	1926	PROJ.REVW.	HUD930603H	06/11/93	6Y	
							PROJ.REVW.	HUD881209K	02/06/89	6Y	
183140		232 ROSEMONT AVE		MODESTO	P	1925	PROJ.REVW.	HUD100702A	07/23/10	6Y	
180178		135 ROSINA AVE		MODESTO	P	1950	PROJ.REVW.	HUD100621N	07/16/10	6Y	
093937	50-001108	605 S MADISON AVE		MODESTO	P	1918	PROJ.REVW.	HUD941213A	12/27/94	6Y	
185684		415 SAN JUAN DR		MODESTO	P	1950	PROJ.REVW.	HUD100222A	03/08/10	6Y	
066998	50-001109	322 SANTA BARBARA AVE		MODESTO	U		PROJ.REVW.	HUD891018I	11/22/89	6Y	
101966	50-001110	736 SANTA CRUZ AVE		MODESTO	P	1945	PROJ.REVW.	HUD960327B	04/25/96	6Y	
067071	50-001112	820 SANTA CRUZ AVE		MODESTO	U		PROJ.REVW.	HUD900102C	02/01/90	6Y	
097311	50-001113	305 SCHOOL ST		MODESTO	P	1940	PROJ.REVW.	HUD950803A	09/19/95	6Y	
183030		341 SEVERIN AVE		MODESTO	P	1948	PROJ.REVW.	HUD100625L	07/19/10	6Y	
167358		908 SEYBOLD AVE		MODESTO	P	1934	PROJ.REVW.	HUD070521Z	05/25/07	6Y	
167360		915 SEYBOLD AVE		MODESTO	P		PROJ.REVW.	HUD070521AA	05/25/07	6Y	
167361		919 SEYBOLD AVE		MODESTO	P	1953	PROJ.REVW.	HUD070521BB	05/25/07	6Y	
167362		934 SEYBOLD AVE		MODESTO	P	1918	PROJ.REVW.	HUD070521CC	05/25/07	6Y	
065812	50-001114	816 SIERRA AVE		MODESTO	U		PROJ.REVW.	HUD890417K	05/18/89	6Y	
082340	50-001115	502 SIERRA DR		MODESTO	P	1921	PROJ.REVW.	HUD930603D	06/11/93	6Y	
082345	50-001116	510 SIERRA DR		MODESTO	P	1940	PROJ.REVW.	HUD9409270	11/16/94	6Y	
							PROJ.REVW.	HUD930603M	06/11/93	6Y	
082344	50-001117	514 SIERRA DR		MODESTO	P	1940	PROJ.REVW.	HUD930603L	06/11/93	6Y	
082342	50-001118	518 SIERRA DR		MODESTO	P	1921	PROJ.REVW.	HUD930603G	06/11/93	6Y	
082338	50-001119	522 SIERRA DR		MODESTO	P	1921	PROJ.REVW.	HUD930603B	06/11/93	6Y	
065621	50-001120	618 SIERRA DR		MODESTO	U		PROJ.REVW.	HUD881209J	01/04/89	6Y	
066474	50-001121	810 SIERRA DR	SIERRA REHABILITATION	MODESTO	U		PROJ.REVW.	HUD880209F	03/07/88	6Y	
140503		2925 SNYDER AVE	RICKENBAUCH FARM COMPLEX	MODESTO	P	1940	HIST.RES.	DOE-50-03-0012-0000	06/04/03	6Y	
			↳ demolished				PROJ.REVW.	FCC030514B	06/04/03	6Y	
153737		2709 SPARKS WY		MODESTO	P	1958	PROJ.REVW.	HUD050404AA	04/18/05	6Y	
066820	50-001122	603 SPENCER AVE		MODESTO	U		PROJ.REVW.	HUD8807260	08/26/88	6Y	
163247		313 SPRUCE ST		MODESTO	P	1938	PROJ.REVW.	HUD060927E	09/27/06	6Y	
065889	50-001123	321 SPRUCE ST	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516M	06/13/89	6Y	
124798		SR 132	DETERMINATION OF ELIGIBILITY AND E	MODESTO	S		PROJ.REVW.	FHWA000608K	06/19/00	6Y	
057576	50-001125	215 STODDARD AVE	NORMAN S. WEST HOUSE	MODESTO	P	1927	HIST.SURV.	5352-0021-0000		7R	
057577	50-001126	225 STODDARD AVE		MODESTO	P	1927	HIST.SURV.	5352-0022-0000		7R	
160500		3808 STRANG AVE		MODESTO	P	1944	PROJ.REVW.	HUD060203I	02/06/06	6Y	
067072	50-001127	2202 STRIVENS AVE		MODESTO	U		PROJ.REVW.	HUD900102E	02/01/90	6Y	
153735		2220 STRIVENS AVE		MODESTO	P	1949	PROJ.REVW.	HUD050404Y	04/18/05	6Y	
153731		2322 STRIVENS AVE		MODESTO	P	1948	PROJ.REVW.	HUD050404V	04/18/05	6Y	
177476		2404 STRIVENS AVE		MODESTO	P	1959	PROJ.REVW.	HUD091027b	11/17/09	6Y	
066061	50-001128	117 SUNSET		MODESTO	U		PROJ.REVW.	HUD890727C	08/25/89	6Y	
066062	50-001129	121 SUNSET		MODESTO	U		PROJ.REVW.	HUD890727D	08/25/89	6Y	
065886	50-001130	127 SUNSET BLVD	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516J	06/13/89	6Y	
082349	50-001131	129 SUNSET BLVD		MODESTO	P	1925	PROJ.REVW.	HUD930603Q	06/11/93	6Y	
067073	50-001132	130 SUNSET BLVD		MODESTO	U		PROJ.REVW.	HUD900102F	02/01/90	6Y	
065887	50-001133	133 SUNSET BLVD	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516K	06/13/89	6Y	
065813	50-001134	138 SUNSET BLVD		MODESTO	U		PROJ.REVW.	HUD890417L	05/18/89	6Y	
090658	50-001135	144 SUNSET BLVD		MODESTO	P	1920	PROJ.REVW.	HUD940701H	08/11/94	6Y	
082347	50-001136	201 SUNSET BLVD		MODESTO	P	1925	PROJ.REVW.	HUD930603O	06/11/93	6Y	
066995	50-001137	202 SUNSET BLVD		MODESTO	P		PROJ.REVW.	HUD930603X	06/11/93	6Y	
							PROJ.REVW.	HUD891018F	11/22/89	6Y	
082361	50-001138	207 SUNSET BLVD		MODESTO	P	1925	PROJ.REVW.	HUD930603c	06/11/93	6Y	
082364	50-001139	211 SUNSET BLVD		MODESTO	P	1940	PROJ.REVW.	HUD930603f	06/11/93	6Y	
065885	50-001140	212 SUNSET BLVD	HOUSING REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890516I	06/13/89	6Y	
090654	50-001141	311 SUTTER AVE		MODESTO	P	1921	PROJ.REVW.	HUD940701D	08/11/94	6Y	
067074	50-001142	411 SUTTER AVE		MODESTO	U		PROJ.REVW.	HUD900102G	02/01/90	6Y	
082387	50-001143	419 SUTTER AVE		MODESTO	P	1925	PROJ.REVW.	HUD930603jj	06/11/93	6Y	
066359	50-001144	415 SUTTER ST	REHABILITATION OF HOUSE	MODESTO	U		PROJ.REVW.	HUD871109K	12/15/87	6Y	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
178434		1414 SUZANNE AVE		MODESTO	P	1957	PROJ.REVW.	HUD091209B	12/30/09	6Y	
057578	50-001145	415 SYCAMORE AAVE		MODESTO	P	1924	HIST.SURV.	5352-0023-0000		5S2	
057640	50-001146	SYCAMORE AVE		MODESTO	P	1911	HIST.SURV.	5352-0059-9999		5D2	
057703	50-001147	116 SYCAMORE AVE	SURRYLINE HOUSE	MODESTO	P	1913	HIST.SURV.	5352-0064-0000		5S2	
057704	50-001148	118 SYCAMORE AVE	J. M. WALTHALL HOME, DR. COPPERS H	MODESTO	P	1911	HIST.SURV.	5352-0065-0000		5S2	
057705	50-001149	124 SYCAMORE AVE	TILLSON HOUSE	MODESTO	P	1925	HIST.SURV.	5352-0066-0000		5S2	
057631	50-001150	132 SYCAMORE AVE		MODESTO	P	1918	HIST.SURV.	5352-0059-0001		5D2	
057632	50-001151	204 SYCAMORE AVE	E H MORRIS HOME	MODESTO	P	1912	HIST.SURV.	5352-0059-0002		5D2	
057633	50-001152	210 SYCAMORE AVE	PALMER HOUSE	MODESTO	P	1918	HIST.SURV.	5352-0059-0003		5D2	
057634	50-001153	216 SYCAMORE AVE	MILLIS HOME	MODESTO	P	1931	HIST.SURV.	5352-0059-0004		5D2	
057635	50-001154	222 SYCAMORE AVE		MODESTO	P	1918	HIST.SURV.	5352-0059-0005		5D2	
057636	50-001155	224 SYCAMORE AVE		MODESTO	P	1923	HIST.SURV.	5352-0059-0006		5D2	
057637	50-001156	230 SYCAMORE AVE	HARRIS HOME	MODESTO	P	1934	HIST.SURV.	5352-0059-0007		5D2	
057638	50-001157	302 SYCAMORE AVE		MODESTO	P	1912	HIST.SURV.	5352-0059-0008		5D2	
057639	50-001158	310 SYCAMORE AVE	L D THOMPSON HOME	MODESTO	P	1924	HIST.SURV.	5352-0059-0009		5D2	
057725	50-001159	402 SYCAMORE AVE		MODESTO	P	1918	HIST.SURV.	5352-0069-0008		5D2	
057726	50-001160	406 SYCAMORE AVE		MODESTO	P	1919	HIST.SURV.	5352-0069-0009		5D2	
057727	50-001161	412 SYCAMORE AVE		MODESTO	P	1918	HIST.SURV.	5352-0069-0010		5D2	
057728	50-001162	416 SYCAMORE AVE		MODESTO	P	1919	HIST.SURV.	5352-0069-0011		5D2	
057729	50-001163	418 SYCAMORE AVE		MODESTO	P	1918	HIST.SURV.	5352-0069-0012		5D2	
057730	50-001164	422 SYCAMORE AVE		MODESTO	P	1929	HIST.SURV.	5352-0069-0013		5D2	
057731	50-001165	436 SYCAMORE AVE		MODESTO	P	1929	HIST.SURV.	5352-0069-0014		5D2	
057732	50-001166	510 SYCAMORE AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0015		5D2	
057733	50-001167	515 SYCAMORE AVE		MODESTO	P	1924	HIST.SURV.	5352-0069-0016		5D2	
057734	50-001168	518 SYCAMORE AVE		MODESTO	P	1929	HIST.SURV.	5352-0069-0017		5D2	
057735	50-001169	522 SYCAMORE AVE		MODESTO	P	1924	HIST.SURV.	5352-0069-0018		5D2	
057736	50-001170	526 SYCAMORE AVE		MODESTO	P	1925	HIST.SURV.	5352-0069-0019		5D2	
057737	50-001171	530 SYCAMORE AVE		MODESTO	P	1924	HIST.SURV.	5352-0069-0020		5D2	
154796		1525 TERESA ST		MODESTO	P	1946	PROJ.REVW.	HUD050711P	07/21/05	6Y	
185138		325 THRASHER AVE		MODESTO	P	1948	PROJ.REVW.	HUD110829P	09/02/11	6Y	
153879		609 THRASHER AVE		MODESTO	P	1940	PROJ.REVW.	HUD050429I	05/02/05	6Y	
182927		1025 TIOGA DR		MODESTO	P	1951	PROJ.REVW.	HUD100623G	07/19/10	6Y	
175009	50-2165	4767 TULLY RD		MODESTO	P	1940	PROJ.REVW.	FHWA001020A	03/27/09	6Y	
175011	2166	5106 TULLY RD		MODESTO	P	1935	PROJ.REVW.	FHWA001020A	03/27/09	6Y	
175010	2167	5125 TULLY RD		MODESTO	P	1953	PROJ.REVW.	FHWA001020A	03/27/09	6Y	
082352	50-001174	411 TUOLUMNE BLVD		MODESTO	P		PROJ.REVW.	HUD930603T	06/11/93	6Y	
067076	50-001175	501 TUOLUMNE BLVD		MODESTO	U		PROJ.REVW.	HUD900102I	01/02/90	6Y	
082358	50-001176	601 TUOLUMNE BLVD		MODESTO	P	1942	PROJ.REVW.	HUD930603Z	06/11/93	6Y	
082350	50-001177	613 TUOLUMNE BLVD		MODESTO	P	1939	PROJ.REVW.	HUD930603R	06/11/93	6Y	
066674	50-001178	909 TUOLUMNE BLVD		MODESTO	U		PROJ.REVW.	HUD880513K	06/13/88	6Y	
066675	50-001179	914 TUOLUMNE BLVD		MODESTO	U		PROJ.REVW.	HUD880513L	06/13/88	6Y	
090664	50-001180	1002 TUOLUMNE BLVD		MODESTO	P	1941	PROJ.REVW.	HUD940701I	08/11/94	6Y	
082363	50-001181	1010 TUOLUMNE BLVD		MODESTO	P	1941	PROJ.REVW.	HUD930603e	06/11/93	6Y	
082383	50-001182	1018 TUOLUMNE BLVD		MODESTO	P	1928	PROJ.REVW.	HUD930603cc	06/11/93	6Y	
082378	50-001183	1106 TUOLUMNE BLVD		MODESTO	P	1922	PROJ.REVW.	HUD930603v	06/11/93	6Y	
080856	50-001172	1110 TUOLUMNE BLVD		MODESTO	U	1916	PROJ.REVW.	HUD930311I	04/21/93	6Y	
082365	50-001184	1201 TUOLUMNE BLVD		MODESTO	P	1925	PROJ.REVW.	HUD930603g	06/11/93	6Y	
082368	50-001185	1205 TUOLUMNE BLVD		MODESTO	P	1915	PROJ.REVW.	HUD930603k	06/11/93	6Y	
067000	50-001186	1213 TUOLUMNE BLVD		MODESTO	U		PROJ.REVW.	HUD891018K	11/22/89	6Y	
097249	50-001187	1214 TUOLUMNE BLVD		MODESTO	P	1920	PROJ.REVW.	HUD950630AV	08/30/95	6Y	
080855	50-001173	1217 TUOLUMNE BLVD		MODESTO	U	1922	PROJ.REVW.	HUD930311H	04/21/93	6Y	
067437	50-001188	1309 TUOLUMNE BLVD		MODESTO	P	0	PROJ.REVW.	HUD900508D	06/11/90	6Y	
066381	50-001189	1314 TUOLUMNE BLVD	RESIDENTIAL REHABILITATION	MODESTO	U		PROJ.REVW.	HUD871123R	12/24/87	6Y	
090655	50-001190	1418 TUOLUMNE BLVD		MODESTO	P	1921	PROJ.REVW.	HUD940701E	08/11/94	6Y	
140435	-2025	5024 ~~JUSTEN~~ AVE		MODESTO	P	1941	HIST.RES.	DOE-50-00-0046-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	

Salida 7.5

Tillson

demolished

verified by J. McDole, OHP

demolished

OFFICE OF HISTORIC PRESERVATION * * * Directory of Properties in the Historic Property Data File for STANISLAUS County. Page 21 03-20-14

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
140434	- 2024	5026 ~~TUSTEN AVE~~ Tunson	verified by J. McDole, OHP	MODESTO	P	1948	HIST.RES.	DOE-50-00-0045-0000	11/16/00	6Y	
							PROJ.REVW.	FHWA001020A	11/16/00	6Y	
177633		1518 VICTOR WY		MODESTO	P	1956	PROJ.REVW.	HUD091006A	10/19/09	6Y	
176959		1610 VICTOR WY		MODESTO	P	1956	PROJ.REVW.	HUD090929C	10/23/09	6Y	
090489	50-001191	318 VINE ST		MODESTO	P	1940	HIST.RES.	DOE-50-03-0010-0000	05/23/03	6Y	
							PROJ.REVW.	HUD030514D	05/23/03	6Y	
							PROJ.REVW.	HUD940616A	07/25/94	6Y	
065657	50-001192	511 VINE ST	REHABILITATION	MODESTO	U		PROJ.REVW.	HUD890109F	02/07/89	6Y	
057928	50-001193	108 VIRGINIA AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0069		5D2	
057929	50-001194	114 VIRGINIA AVE		MODESTO	P	1924	PROJ.REVW.	HUD100625G	07/19/10	6Y	
							HIST.SURV.	5352-0099-0070		5D2	
057843	50-001195	115 VIRGINIA AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0071		5D2	
057844	50-001196	117 VIRGINIA AVE		MODESTO	P	1919	HIST.SURV.	5352-0098-0072		5D2	
057845	50-001197	123 VIRGINIA AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0073		5D2	
057930	50-001198	134 VIRGINIA AVE		MODESTO	P	1925	HIST.SURV.	5352-0099-0071		5D2	
057960	50-001199	204 VIRGINIA AVE		MODESTO	P	1917	HIST.SURV.	5352-0105-0000		5S2	
057846	50-001200	207 VIRGINIA AVE		MODESTO	P	1922	HIST.SURV.	5352-0098-0074		5D2	
057931	50-001201	214 VIRGINIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0072		5D2	
057932	50-001202	220 VIRGINIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0073		5D2	
057961	50-001204	224 VIRGINIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0106-0000		7R	
057933	50-001205	226 VIRGINIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0099-0074		5D2	
057847	50-001206	227 VIRGINIA AVE		MODESTO	P	1924	HIST.SURV.	5352-0098-0075		5D2	
057934	50-001207	302 VIRGINIA AVE		MODESTO	P	1926	HIST.SURV.	5352-0099-0075		5D2	
057935	50-001208	306 VIRGINIA AVE		MODESTO	P	1930	HIST.SURV.	5352-0099-0076		5D2	
057848	50-001209	311 VIRGINIA AVE		MODESTO	P	1917	HIST.SURV.	5352-0098-0076		5D2	
057849	50-001210	313 VIRGINIA AVE		MODESTO	P	1914	HIST.SURV.	5352-0098-0077		5D2	
057936	50-001211	314 VIRGINIA AVE		MODESTO	P	1917	HIST.SURV.	5352-0099-0077		5D2	
057852	50-001212	315 VIRGINIA AVE		MODESTO	P	1917	HIST.SURV.	5352-0098-0080		5D2	
057853	50-001213	318 VIRGINIA AVE		MODESTO	P	1937	HIST.SURV.	5352-0098-0081		5D2	
							HIST.SURV.	5352-0107-0000		7R	
169784		1540 W HATCH RD		MODESTO	P	1981	PROJ.REVW.	HUD071206D	12/12/07	6Y	
057579	50-001214	117 W MORRIS AVE		MODESTO	P	1922	HIST.SURV.	5352-0024-0000		7R	
057738	50-001215	203 W MORRIS AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0021		5D2	
057739	50-001216	207 W MORRIS AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0022		5D2	
057740	50-001217	215 W MORRIS AVE		MODESTO	P	1922	HIST.SURV.	5352-0069-0023		5D2	
057741	50-001218	221 W MORRIS AVE		MODESTO	P	1926	HIST.SURV.	5352-0069-0024		5D2	
057742	50-001219	229 W MORRIS AVE		MODESTO	P	1926	HIST.SURV.	5352-0069-0025		5D2	
057743	50-001220	233 W MORRIS AVE		MODESTO	P	1926	HIST.SURV.	5352-0069-0026		5D2	
183065		1413 W ORANGEBURG AVE		MODESTO	P	1946	PROJ.REVW.	HUD100728N	08/02/10	6Y	
190253		1427 W ROSEBURG AVE		MODESTO	P	1954	PROJ.REVW.	HUD120910A	07/27/12	6Y	
150374		2312 WHITCOMB WY		MODESTO	P	1952	HIST.RES.	DOE-50-04-0015-0000	09/09/04	6Y	
							PROJ.REVW.	HUD040730F	09/09/04	6Y	
147225		2329 WHITCOMB WY		MODESTO	P	1953	HIST.RES.	DOE-50-04-0007-0000	04/20/04	6Y	
							PROJ.REVW.	HUD040322C	04/20/04	6Y	
155425		2604 WHITCOMB WY		MODESTO	P	1953	PROJ.REVW.	HUD050825E	09/21/05	6Y	
153733		2609 WHITCOMB WY		MODESTO	P	1954	PROJ.REVW.	HUD050404X	04/18/05	6Y	
057939	50-001221	717 WRIGHT ST		MODESTO	P	1920	HIST.SURV.	5352-0099-0080		5D2	
057940	50-001222	718 WRIGHT ST		MODESTO	P	1920	HIST.SURV.	5352-0099-0081		5D2	
057850	50-001223	810 WRIGHT ST		MODESTO	P	1937	HIST.SURV.	5352-0098-0078		5D2	
057851	50-001224	816 WRIGHT ST		MODESTO	P	1931	HIST.SURV.	5352-0098-0079		5D2	
057854	50-001225	820 WRIGHT ST		MODESTO	P	1931	HIST.SURV.	5352-0098-0082		5D2	
057855	50-001226	917 WRIGHT ST		MODESTO	P	1914	HIST.SURV.	5352-0098-0083		5D2	
057856	50-001227	921 WRIGHT ST		MODESTO	P	1914	HIST.SURV.	5352-0098-0084		5D2	
057857	50-001228	925 WRIGHT ST		MODESTO	P	1917	HIST.SURV.	5352-0098-0085		5D2	
177622		1001 WRIGHT ST		MODESTO	P		PROJ.REVW.	HUD090925C	10/19/09	6Y	
057858	50-001229	1007 WRIGHT ST		MODESTO	P	1917	HIST.SURV.	5352-0098-0086		5D2	

PROPERTY-NUMBER	PRIMARY-#	STREET.ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
065368	50-001230	406 YOSEMITE		MODESTO	U		PROJ.REVW.	HUD870827E	09/21/87	6Y	
082388	50-001231	224 YOSEMITE AVE		MODESTO	P	1916	PROJ.REVW.	HUD930603kk	06/11/93	6Y	
082373	50-001232	228 YOSEMITE AVE		MODESTO	P	1920	PROJ.REVW.	HUD930603p	06/11/93	6Y	
067003	50-001233	317 YOSEMITE AVE		MODESTO	U		PROJ.REVW.	HUD891018N	11/22/89	6Y	
065620	50-001234	318 YOSEMITE AVE		MODESTO	U		PROJ.REVW.	HUD881209I	01/04/89	6Y	
065814	50-001235	322 YOSEMITE AVE		MODESTO	U		PROJ.REVW.	HUD890417M	05/18/89	6Y	
067002	50-001236	325 YOSEMITE AVE		MODESTO	U	1911	PROJ.REVW.	HUD930311g	04/21/93	6Y	
							PROJ.REVW.	HUD891018M	11/22/89	6Y	
082386	50-001237	329 YOSEMITE AVE		MODESTO	P	1939	PROJ.REVW.	HUD930603gg	06/11/93	6Y	
082382	50-001238	330 YOSEMITE AVE		MODESTO	P	1920	PROJ.REVW.	HUD930603aa	06/11/93	6Y	
080850	50-001239	341 YOSEMITE AVE		MODESTO	U	1925	PROJ.REVW.	HUD930311C	04/21/93	6Y	
082384	50-001240	413 YOSEMITE AVE		MODESTO	P	1922	PROJ.REVW.	HUD930603ee	06/11/93	6Y	
080852	50-001241	414 YOSEMITE AVE		MODESTO	U	1920	PROJ.REVW.	HUD930311E	04/21/93	6Y	
090657	50-001242	426 YOSEMITE AVE		MODESTO	P	1930	PROJ.REVW.	HUD940701G	08/11/94	6Y	
080854	50-001243	429 YOSEMITE AVE		MODESTO	U	1922	PROJ.REVW.	HUD930311G	04/21/93	6Y	
080853	50-001244	433 YOSEMITE AVE		MODESTO	U	1922	PROJ.REVW.	HUD930311F	04/21/93	6Y	
080851	50-001245	437 YOSEMITE AVE		MODESTO	U	1926	PROJ.REVW.	HUD930311D	04/21/93	6Y	
137004		1316 YOSEMITE BLVD		MODESTO	P	1916	HIST.RES.	DOE-50-02-0008-0000	12/12/02	6Y	
							PROJ.REVW.	FHWA021015B	12/12/02	6Y	
137005		1915 YOSEMITE BLVD		MODESTO	P	1920	HIST.RES.	DOE-50-02-0009-0000	12/12/02	6Y	
							PROJ.REVW.	FHWA021015B	12/12/02	6Y	
132930		2741 YOSEMITE BLVD	WALTER FRANKLIN BEARD HOUSE ↳ 911 bldgs demolished	MODESTO	P	1906	HIST.RES.	DOE-50-01-0002-0000	11/06/01	2S2	
							PROJ.REVW.	FHWA010725A	11/06/01	2S2	
132931	P-50-1874	4525 YOSEMITE BLVD	WOOTTEN HOUSE	MODESTO	P	1890	HIST.RES.	DOE-50-01-0003-0000	11/06/01	6Y	
							PROJ.REVW.	FHWA010725A	11/06/01	6Y	
132932		4601 YOSEMITE BLVD	PALLESON HOUSE	MODESTO	P	1912	HIST.RES.	DOE-50-01-0004-0000	11/06/01	6Y	
							PROJ.REVW.	FHWA010725A	11/06/01	6Y	
170810		4845 YOSEMITE BLVD	FIRE STATION #32	MODESTO	M	1939	PROJ.REVW.	DHS070109A	02/14/07	6Y	
151334			UNION PACIFIC RAILROAD COMPANY	(VIC) MODESTO	U	1912	HIST.RES.	DOE-50-00-0054-0000	01/20/00	6Y	
							PROJ.REVW.	ICC991221A	01/20/00	6Y	
091464	50-000548		ADAMSVILLE	(VIC) MODESTO	U		HIST.RES.	SPHI-STA-001	07/31/79	7L	
091466	50-000551		PARADISE	(VIC) MODESTO	U	1867	HIST.RES.	SPHI-STA-005	07/31/79	7L	
175472			TUOLUMNE CITY BRIDGE APPROACH	(VIC) MODESTO	U	1903	PROJ.REVW.	FHWA010522C	06/25/01	6Y	
151336			UNION PACIFICE RAILROAD COMPANY	(VIC) MODESTO	U	1916	HIST.RES.	DOE-50-00-0055-0000	01/20/00	6Y	
							PROJ.REVW.	ICC771221A	01/20/00	6Y	
179909			SAN JOAQUIN PIPELINES 1 & 2	(VIC) MODESTO	M	1932	PROJ.REVW.	COE100830A	09/27/10	2S2	A
057557	50-001246	SR 132	BRIDGE #38-47	(VIC) MODESTO	S	1919	HIST.SURV.	5352-0002-0000		7R	
057558	50-001247	SR 132	BRIDGE #38-54	(VIC) MODESTO	S	1906	HIST.SURV.	5352-0003-0000		3S	
							PROJ.REVW.	65000739	02/24/82		
174959		919 FRESNO ST		NEWMAN	P	1957	PROJ.REVW.	FHWA090227A	03/27/09	6Y	
057983	50-001248	926 FRESNO ST	NEWMAN IOOF HALL / ODD FELLOWS BUI	NEWMAN	P	1928	HIST.SURV.	5360-0034-0000		7N	
174958		927 FRESNO ST		NEWMAN	P	1903	PROJ.REVW.	FHWA090227A	03/27/09	2S2	
057984	50-001249	929 FRESNO ST		NEWMAN	P	1920	HIST.SURV.	5360-0036-0000		7R	
174957		933 FRESNO ST		NEWMAN	P	1912	PROJ.REVW.	FHWA090227A	03/27/09	2S2	
174970		1200 MAIN ST	YANCY BUILDING pythias	NEWMAN	M	1870	PROJ.REVW.	FHWA090227A	03/27/09	6Y	
161724		1305 MAIN ST	KNIGHT OF ~~PYTHIOS~~ BUILDING	NEWMAN		1909	TAX.CERT.	537.9-50-0006	04/18/06	7J	
174955		1342 MAIN ST	ST. GEORGE HOTEL	NEWMAN	P	1907	PROJ.REVW.	FHWA090227A	03/27/09	2S2	
174956		1350 MAIN ST		NEWMAN	P	1900	PROJ.REVW.	FHWA090227A	03/27/09	6Y	
155876	50-1911	1528 MAIN ST		NEWMAN	P	1959	PROJ.REVW.	FCC050916I	10/14/05	6Y	
058128	50-001250	1243 MERCED ST		NEWMAN	P	1935	HIST.SURV.	5360-0264-0000		7R	
058131	50-001251	1246 MERCED ST		NEWMAN	P	1910	HIST.SURV.	5360-0268-0000		7R	
091113	50-001252	1037 N ST		NEWMAN	P	1900	PROJ.REVW.	HUD940721E	08/24/94	6Y	
057967	50-001253	1121 N ST	PATCHETTS FORD	NEWMAN	P	1925	HIST.SURV.	5360-0005-0000		7R	
057968	50-001254	1327 N ST	NEWMAN STEAM LAUNDRY / NEWMAN MOOS	NEWMAN	P	1908	PROJ.REVW.	FHWA090227A	03/27/09	2S2	

FOURTH EDITION

Historic Spots in CALIFORNIA

by
Mildred Brooke Hoover
Hero Eugene Rensch
Ethel Grace Rensch
William N. Abeloe

Revised by Douglas E. Kyle

(1990)

STANFORD UNIVERSITY PRESS · STANFORD, CALIFORNIA

until the building of the west side railroad in the middle 1880's. Grayson today is a small town two miles northwest of Westley.

Langworth and Burneyville, Oakdale and Riverbank

The present towns of Oakdale and Riverbank, which date from the 1870's, are the successors of Langworth and Burneyville, respectively, which had been established before the coming of the railroad. Langworth, plotted as a town in 1860 by Henry Langworthy, was located on the Mariposa Road on the hill above the ferry owned by James Burney. Burney was a former sheriff of Mariposa County and a member of the Mariposa Battalion under Major James D. Savage in 1851. He moved down the river to begin Burneyville in 1867. When the railroad was run east of this site in 1871, the post office moved to the new town of Oakdale, and Langworth was finished. A plaque commemorating the town was placed by E Clampus Vitus at the junction of Langworth Road and SR 108, about three miles west of Oakdale. Oakdale has been an agricultural processing and shipping center for many years, as well as a stopover for travelers on the way to Yosemite from the San Francisco Bay Area.

At the corner of First and High streets in Riverbank, an E Clampus Vitus plaque notes that Burneyville was founded on the riverbank below the bluff by Major James Burney in 1867. Burney operated a second ferry at this point for a few years. He then served with distinction, in the words of the plaque, as "public servant, school superintendent and justice of the peace; Burney lived a full life [and] died 1901 at the age of 87 years." The small community of Burneyville has been absorbed by the expanding town of Riverbank.

Modesto

Modesto is the offspring of the railroad. The Central Pacific reached the site in 1870, and it was two years before the next thrust down the San Joaquin Valley carried the line farther south and east. Although early accounts seem to agree that the railroad terminus was not an attractive spot, it was clear to many people that the future of Stanislaus County lay along this central route. Within a year the new community was chosen to be the county seat, even though accommodations were so few that the county offices were scattered among boarding houses, the back rooms of commercial buildings, and similar improvised quarters.

The explanation most often given for the distinctive name of the town—Modesto is Spanish for "modesty"—goes as follows. The directors of the Central Pacific named railroad stops for officials of the company or members of their families. The name of William C. Ralston was proposed for the new town, but the San Francisco banker declined the honor. The chosen name reflects his unusual modesty in so doing.

Modesto's early history is full of stories of Wild West hell-raising in saloons and dens of iniquity. Vigilantes frequently purged the undesirable elements, who returned after a short while. At the same time, the undeniable progress in agriculture and the prosperity brought by the railroad ensured that a more serious, permanent quality would eventually take over in the community. In 1912, the energetic Modesto Business Men's Association received permission to erect an ornamental iron arch at the intersection of Ninth and I streets in what was then the commercial heart of town. (Other Central Valley towns, such as Lodi and Orland, made the same kind of construction.) Although the slogan to be written on the arch was originally NOBODY'S GOT MODESTO'S GOAT, sanity mercifully prevailed and the runner-up in the competition for the slogan—MODESTO: WATER WEALTH CONTENTMENT HEALTH—was chosen. It can be seen to this day, smartly embellished with electric lights at night, as the planners intended.

The McHenry Museum at 1402 I Street is housed in what was once the city library building, given to the city in 1912 by the McHenry family. Among its treasures are reconstructed offices, a large collection of guns and cattle brands from Stanislaus County, and a research and archive center for Modesto and Stanislaus County history. The McHenry Mansion, in which this prominent family lived, is nearby at Fifteenth and I

McHenry Mansion, Modesto

streets. It has been restored to its Victorian grandeur, including the distinctive cupola on top, visible, it was said, for miles around when it was constructed in 1883. The mansion is open to the public on a regular basis.

Patterson

An interesting example of a planned community, Patterson was founded in 1909. Thomas W. Patterson, one of the heirs to his uncle's Rancho del Puerto, was impressed by the colonization projects in other parts of the Central Valley, which had brought many settlers into the region. His town was laid out in the shape of a wagon wheel, the streets converging on a plaza where the Hotel del Puerto stands. The hotel, built in 1910, was the first building in town, along with the office of the Patterson Ranch Company, which stands in the center of the plaza and is now the home of the Patterson City Museum. The handsome palm-lined thoroughfare of Las Palmas Avenue, leading into the town from the west, was planted by Patterson, it is thought in emulation of Kearney Avenue in Fresno.

Hotel del Puerto, Patterson

A complex irrigation project, bringing water from the San Joaquin River to the town, insured its success, and within a few months of its establishment, Patterson was on the way to becoming a principal town on the west side of the San Joaquin Valley.

OFFICIAL MAP OF THE COUNTY OF STANISLAUS CALIFORNIA 1906

FROM OFFICIAL RECORDS AND SURVEYS

COMPILED

AND PUBLISHED BY

STANISLAUS LAND & ABSTRACT CO.

MODESTO, CAL.

DRAWN BY D.C. CARLTON

MODESTO
T. & S. F. R.R.
T. & S. F. R.R.
EATCH
BEARD
BEARD
COFFEE
HAYMAN
SPENKER
JOHN ADAMS
R. C. BAILEY

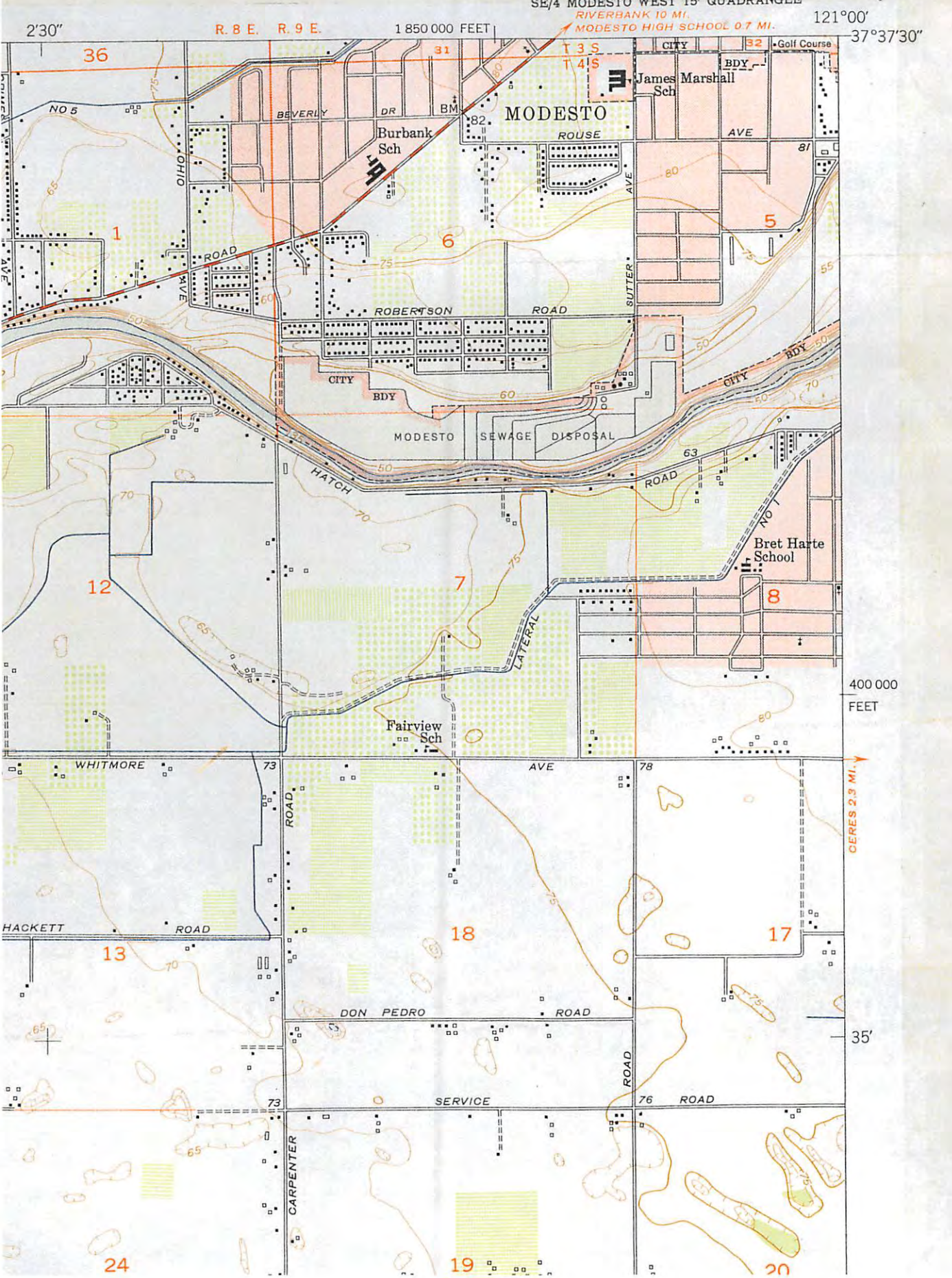
1953

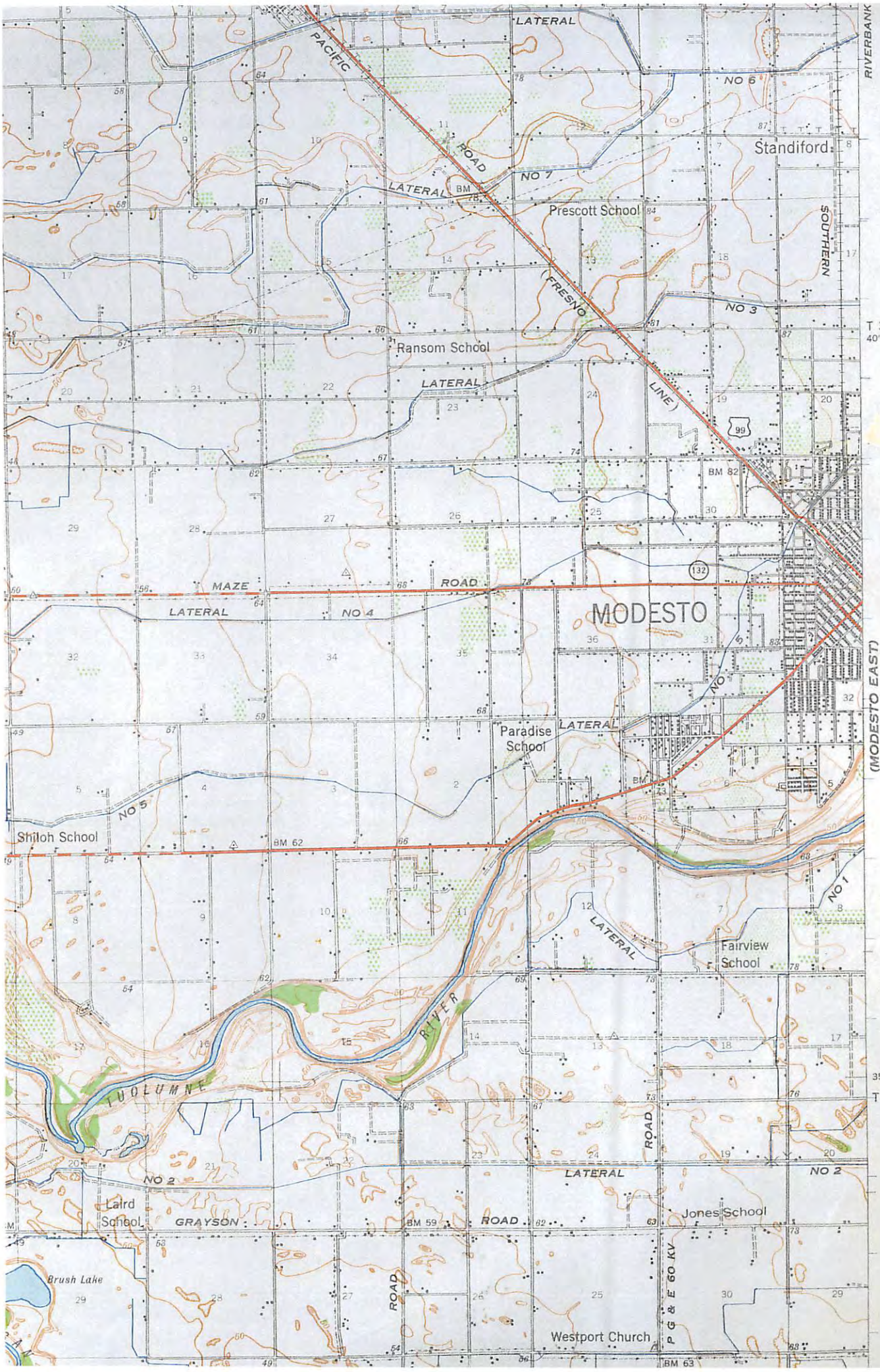
BRUSH LAKE QUADRANGLE

CALIFORNIA-STANISLAUS CO.

7.5 MINUTE SERIES (TOPOGRAPHIC)

SE/4 MODESTO WEST 15' QUADRANGLE

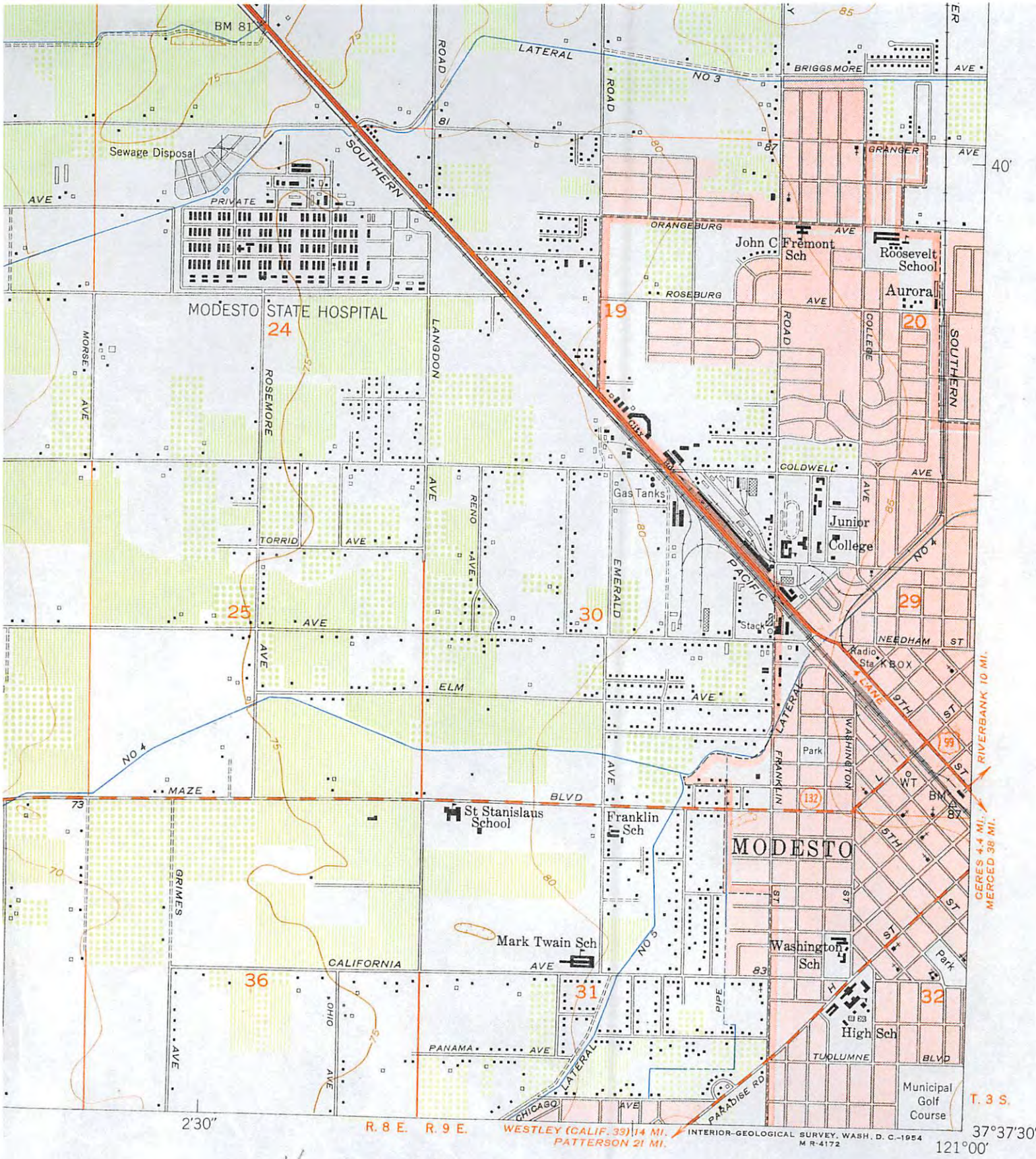




Modesto West

1:62500

1941



Historic map
Add no data

7.5 (1953)

SALIDA, CALIF.

NE/4 MODESTO WEST 15′ QUADRANGLE

Ceres 7.5'
1969

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

1759 II NE
(SALIDA)

121°00'
37°37'30"

STOCKTON 29 MI.
SALIDA 6 MI.

678 000m E.

679

680

57'30"

4165 000m N.

4164

4163

4162

4161

35'

MODESTO

CERES

RIVER

TUOLUMNE

SOUTHERN PACIFIC

Golf Course

Mile 15

Mile 17

Mancini Park

Legion Park

Trailer Park

Tuolumne Sch

Fire Station

Shackleford Sch

Parklawn Park

Fire Sta.

Modesto Union Academy

Substation

John F Kennedy Sch

Caswell Sch

County Memorial Hospital

Drive-in Theater

High Sch

Cem

Ceres Whitmore Park

Don Pedro Sch

Harp

Sewage Disposal Ponds

BYSTRUM

LATIMER AVE

NADINE AVE

HERNDON RD

RICHLAND AVE

CENTRAL AVE

ROAD 99

LATERAL NO 1

HATCH ROAD

BUTTE AVE

SEATTLE AVE

GLENN AVE

EVANS RD

CASWELL

WHITMORE AVE

LANDING

TIDEWATER

CROWS

KINSER ROAD

HACKETT RD

HACKETT ROAD

WALNUT AVE

SERVICE ROAD

LOWER

REDWOOD

ALAMO

3 LANE

4TH

6TH

ST

33 T3S T4S

34

3

4

5

8

9

10

15

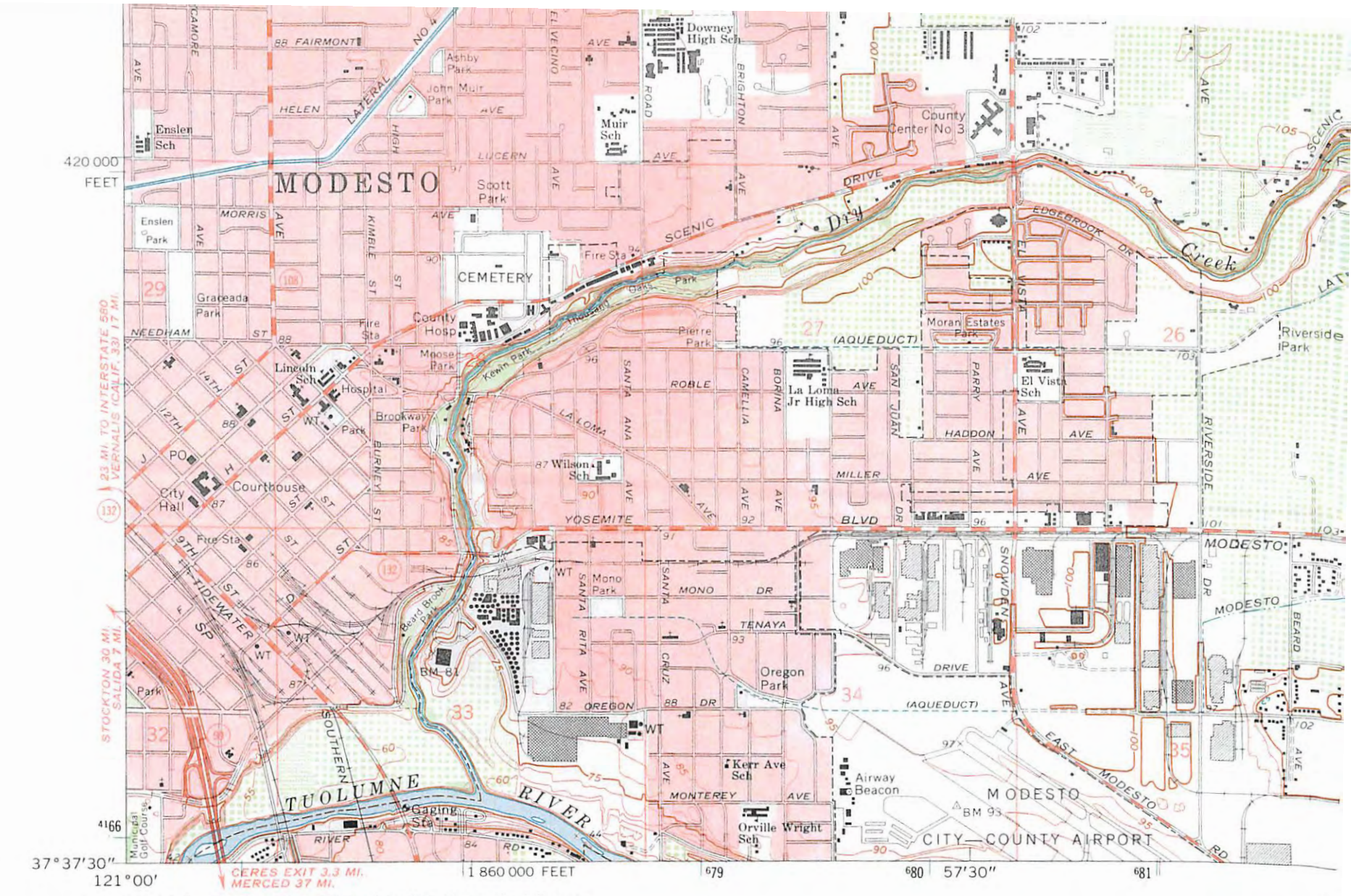
16

17

21

22

[705]



(BRUSH LAKE) 1759 II SE

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1967. Field checked 1969
Supersedes map dated 1914, revised 1953

Polyconic projection. 1927 North American datum
10,000-foot grid based on California coordinate system, zone 3
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

Red tint indicates areas in which only landmark buildings are shown

GN MN
1°16' 22 MILS
17° 302 MILS

UTM GRID AND 1969 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

1000 0 1000 2000

CONTOUR DATUM

Riverbank 7.5'
1969

Appendix E

Noise and Vibration Modeling Results

Noise Calculations for the River Trunk Project - Pipelines with Trenching

Construction Equipment 1 (Loaded Trucks)	88	dBA at 50 feet
Construction Equipment 2 (Excavator)	85	dBA at 50 feet

Combined Noise at 50 feet (Ltotal at 50 feet) 89.8 dBA
Ltotal=10 log(10^L1/10+10^L2/10)

City of Modesto Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	**Threshold Level - Leq (dBA)**	**Distance to Leq Threshold from Middle of Project Site (feet)**	Stanislaus Code - Property Line Standards don't apply to construction between 7am & 7pm
Residential Daytime Limit (7 am-7pm)	90	48.7	FTA Standard.
Nighttime Limit (7pm -7am)	45	8,653.4	Exemptions for public utilities
	75	273.6	City of Modesto Nighttime Residential, County General Plan Max Daytime

Source: Stanislaus County Code

Nearest Sensitive Receptors and Approximate Distances from Middle of Nearest Work Area

Sensitive Receptor	**Distance (feet)**
(See Figure 14-1)	

Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	**PPV at 25 feet**	**VBA**
Loaded Trucks	0.076	86

Vibration Calculations with Equations for Vibration-Causing Equipment (use of Loaded Trucks) for Pipeline Segments w/ Trenching

Threshold	**Distance (d) to Threshold from Project Site (feet)**	**Notes**
PPV=PPVref * (25/d)^1.5	7.1	Building damage threshold (for continuous/frequent intermittent sources)
Lvd=Lvref-30log(D/25)	125.3	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	58.2	Institutional threshold (75)
Lvd	73.2	Residences (72)
Lvd	39.6	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent

Noise Calculations for the River Trunk Project - Pipelines with HD and pits & Sutter

Construction Equipment 1 (pile driver)	101	dBA at 50 feet
Construction Equipment 2 (Loaded Trucks)	88	dBA at 50 feet

Combined Noise at 50 feet (Ltotal at 50 feet) 101.2 dBA

Ltotal=10 log(10^L1/10+10^L2/10)

Distance (feet) from Middle of Project Site to Sensitive Receptors	Noise level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
10	115.2	
25	107.2	
50	101.2	
100	95.2	
300	85.6	Nearest Residences - Calaveras Ave.
800	77.1	Nearest Residences - C St. (Using just "Pits")

City of Modesto Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	Threshold Level - Leq (dBA)	Distance to Leq Threshold from Middle of Project Site (feet)	
Residential Daytime Limit (7 am-7pm)	90	181.8	Stanislaus Code - Property Line Standards don't apply to construction between 7am & 7pm This is FTA standard.
Nighttime Limit (7pm -7am)	45	32,328.8	Exemptions for public utilities
	75	1,022.3	City of Modesto Nighttime Residential, County General Plan Max Daytime

Source: Stanislaus County Code

Nearest Sensitive Receptors and Approximate Distances from Middle of Nearest Work Area

Sensitive Receptor	Distance (feet)
Nearest Residences - C Ave.	800

Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	PPV at 25 feet	VBA
Pile Driver	1.518	112
Loaded Trucks	0.076	86

Vibration Calculations with Equations for Vibration-Causing Equipment (use of pile driver) for Pipelines with HD Pits & Sutter

Threshold	Distance (d) to Threshold from Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	52.4	Building damage threshold (for continuous/frequent intermittent sources)
Lvd=Lvref-30log(D/25)	921.7	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	427.8	Institutional threshold (75)
Lvd	538.6	Residences (72)
Lvd	291.5	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent

Vibration Calculations with Equations for Vibration-Causing Equipment (use of clam shovel drop) for Pipelines with HD Pits and Sutter

Threshold	Distance to Threshold from Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	7.1	Building damage threshold (for continuous/frequent intermittent sources)
Lvd=Lvref-30log(D/25)	125.3	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	58.2	Institutional threshold (75)
Lvd	73.2	Residences (72)
Lvd	39.6	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent intermittent sources include impact pile drivers, vibratory pile drivers, and vibratory compaction equipment. (CALTRANS 2013).

Noise Calculations for the Shackelford Pump Station

Construction Equipment 1 (Pile Driver)	101	dBA at 50 feet
Construction Equipment 2 (Paver)	89	dBA at 50 feet

Combined Noise at 50 feet (Ltotal at 50 feet) 101.3 dBA

Ltotal=10 log(10^L1/10+10^L2/10)

Distance (feet) from Middle of Project Site to Sensitive Receptors	Noise level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
10	115.2	
25	107.3	
50	101.3	
190	89.7	
1100	74.4	Nearest Residences - Pueblo Ave.

City of Modesto Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	Threshold Level - Leq (dBA)	Distance to Leq Threshold from Middle of Project Site (feet)	
			Stanislaus Code - Property Line Standards don't apply to construction between 7am & 7pm
Residential Daytime Limit (7 am-7pm)	90	182.9	FTA Standard
Nighttime Limit (7pm -7am)	45	32,527.9	Exemptions for public utilities
	75	1,028.6	City of Modesto Nighttime Residential, County General Plan Max Daytime

Source: Stanislaus County Code

Nearest Sensitive Receptors and Approximate Distances from Middle of Nearest Work Area

Sensitive Receptor	Distance (feet)
Nearest Residences - Pueblo Ave.	1,100

Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	PPV at 25 feet	VBA
Pile Driver	1.518	112
Loaded Trucks	0.076	86

Vibration Calculations with Equations for Vibration-Causing Equipment (use of pile driver) for Shackelford Pump Station Site

Threshold	Distance (d) to Threshold from Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	135.7	Building damage threshold (for continuous/frequent intermittent sources)
Lvd=Lvref-30log(D/25)	921.7	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	427.8	Institutional threshold (75)
Lvd	538.6	Residences (72)
Lvd	291.5	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent intermittent sources include impact pile drivers, vibratory pile drivers, and vibratory compaction equipment. (CALTRANS 2013).

Vibration Calculations with Equations for Vibration-Causing Equipment (use of loaded trucks) for Shackelford Pump Station Site

Threshold	Distance to Threshold from Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	18.4	Building damage threshold (for continuous/frequent intermittent sources)
Lvd=Lvref-30log(D/25)	125.3	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	58.2	Institutional threshold (75)
Lvd	73.2	Residences (72)
Lvd	39.6	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent intermittent sources include impact pile drivers, vibratory pile drivers, and vibratory compaction equipment. (CALTRANS 2013).

Noise Calculations for the River Trunk Project - River Trunk Pump Station

Construction Equipment 1 (pile driver)	101	dBA at 50 feet
Construction Equipment 2 (Crane w/ Clam Shovel)	93	dBA at 50 feet

Combined Noise at 50 feet (Ltotal at 50 feet) 101.6 dBA

Ltotal=10 log(10^L1/10+10^L2/10)

Distance (feet) from Middle of Project Site to Sensitive Receptors	Noise level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
10	115.6	
25	107.7	
100	95.6	
250	87.7	
800	77.6	C St.

City of Modesto Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	Threshold Level - Leq (dBA)	Distance to Leq Threshold from Middle of Project Site (feet)	
Residential Daytime Limit (7 am-7pm)	90	190.9	Stanislaus Code - Property Line Standards don't apply to construction between 7am & 7pm
Nighttime Limit (7pm -7am)	45	33,956.0	Exemptions for public utilities
	75	1,073.8	City of Modesto Nighttime Residential, County General Plan Max Daytime
	90	190.9	FTA Standard

Source: Stanislaus County Code

Nearest Sensitive Receptors and Approximate Distances from Middle of Nearest Work Area

Sensitive Receptor	Distance (feet)
Nearest Residences - C St.	800

Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	PPV at 25 feet	VBA
Pile Driver	1.518	112
Clam shovel drop	0.202	94

Vibration Calculations with Equations for Vibration-Causing Equipment (use of pile driver) for River Trunk Pump Station Site

Threshold	Distance (d) to Threshold from Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	135.7	Building damage threshold (0.12 in/sec)
Lvd=Lvref-30log(D/25)	921.7	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	427.8	Institutional threshold (75)
Lvd	538.6	Residences (72)
Lvd	291.5	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent

Vibration Calculations with Equations for Vibration-Causing Equipment (use of clam shovel drop) for River Trunk Pump Station Site

Threshold	Distance to Threshold from Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	35.4	Building damage threshold (for continuous/frequent intermittent sources)
Lvd=Lvref-30log(D/25)	231.5	Buildings w/ Sensitive Operations, residential, human perception threshold (65)
Lvd	107.5	Institutional threshold (75)
Lvd	135.3	Residences (72)
Lvd	73.2	Theaters/Residences Infrequent Events (80)

Note: Transient sources create a single isolated vibration event, such as blasting. Continuous/frequent intermittent sources include impact pile drivers, vibratory pile drivers, and vibratory compaction equipment. (CALTRANS 2013).

Name	dBA at 50'	PPV at 25	Lv at 25	Alt-Name/Type
Loader	85			
Excavator	85			
Dumptruck	84			
Crane w/ Clam Shell	93	0.202	94	Clam Shovel (Dropping)
Pile driver	101	1.518	112	Pile Drive (Impact)
Scraper	89			
Pickup trucks	75			
Paver	89			
Microtunneling machine	82			Horizontal Boring Hydraulic Jack
Trucks (Loaded)	88	0.076	86	loaded trucks
Scissor lift	85			Man lift
Concrete truck	85			concrete mixer
Compactor	82			plate compactor
Secant pile wall drill rig	84			Drill rig truck

Values from FHWA 2017 or FTA 2006

Appendix F

Tribal Cultural Resources Communication

June 8, 2016

Lois Martin, Chairperson
Southern Sierra Miwuk Nation
P.O. Box 186
Mariposa, CA 95338

Subject: City of Modesto Utilities Department Wastewater Master Plan Update Environmental Impact Report

Dear Chairperson Martin,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan (WWMP) Update (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its wastewater service system through development of a wastewater master plan, which reviews existing and planned sanitary sewer infrastructure relative to the projected urban growth of the City. The City has made a number of improvements that were identified in the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

The Program would consist of numerous Capital Improvement Projects (CIPs) collectively intended for system-wide implementation needed to ensure adequate wastewater infrastructure and services are available to meet wastewater demand requirements under both existing and future developed conditions. The Program all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, and unincorporated "islands" in Stanislaus County that are served by agreement with the City (Figure 1). The Sutter Avenue Primary Treatment Plant (Primary Plant or Sutter Plant) is in the southwestern portion of Modesto adjacent to the north bank of the Tuolumne River. The Jennings Road Secondary Treatment Plant (Secondary Plant or Jennings Plant) is approximately 6.5 miles southwest of the Modesto urban area and located on City-owned land on the eastern side of the San Joaquin River. These areas are shown in Figure 2.

The Program involves several improvements to the City's collection system, such as replacement or construction of new trunk sewers or pump stations, construction of new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include, but are not limited to, upgrading the influent pump station to increase its hydraulic capacity to convey peak wet weather flows, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes outfall pipeline improvements, such as replacement of

existing pipe crossings under the Tuolumne River and construction of a new third outfall pipeline from the Sutter Plant to the Jennings Plant. At the Jennings Plant, the Program includes upgrades to the secondary and Cannery Segregation treatment facilities, and construction of new primary treatment and solids handling facilities.

Most of the proposed CIPs would be implemented within the City's sewer service area, the Sutter Plant, and the Jennings Plant. The Program also proposes a third outfall pipeline connecting the Sutter and Jennings Plants (Figure 3). The exact locations of some of the proposed new facilities (e.g., collection system improvements and outfall pipeline) have yet to be finalized; where tentative sites have been identified, these locations will be identified in the Draft EIR.

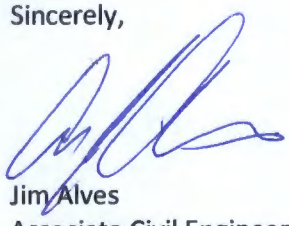
Pursuant to Public Resources Code Section 21080.3.1 *et seq.*, the City of Modesto Utilities Department is notifying you of our intent to consider the Proposed Project. To initiate formal consultation with the City regarding any potential impacts of this Proposed Project on tribal cultural resources, Public Resources Code Section 21080.3.1(e) requires that you contact us within 30 days from your receipt of this letter. If you wish to request the consultation, or if you have any questions, please contact:

Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95353
Phone: (209) 571-5557
Email: jalves@modestogov.com

If you do not contact us within 30 days following receipt of this letter, the City of Modesto Utilities Department will proceed with processing the above referenced application with the assumption that the project will not have a potential effect on tribal cultural resources. If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The City will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request.

More detailed information about this project is available, at your request. Thank you for giving this matter your prompt attention.

Sincerely,



Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
2647248.1

Attachments

2667716.1

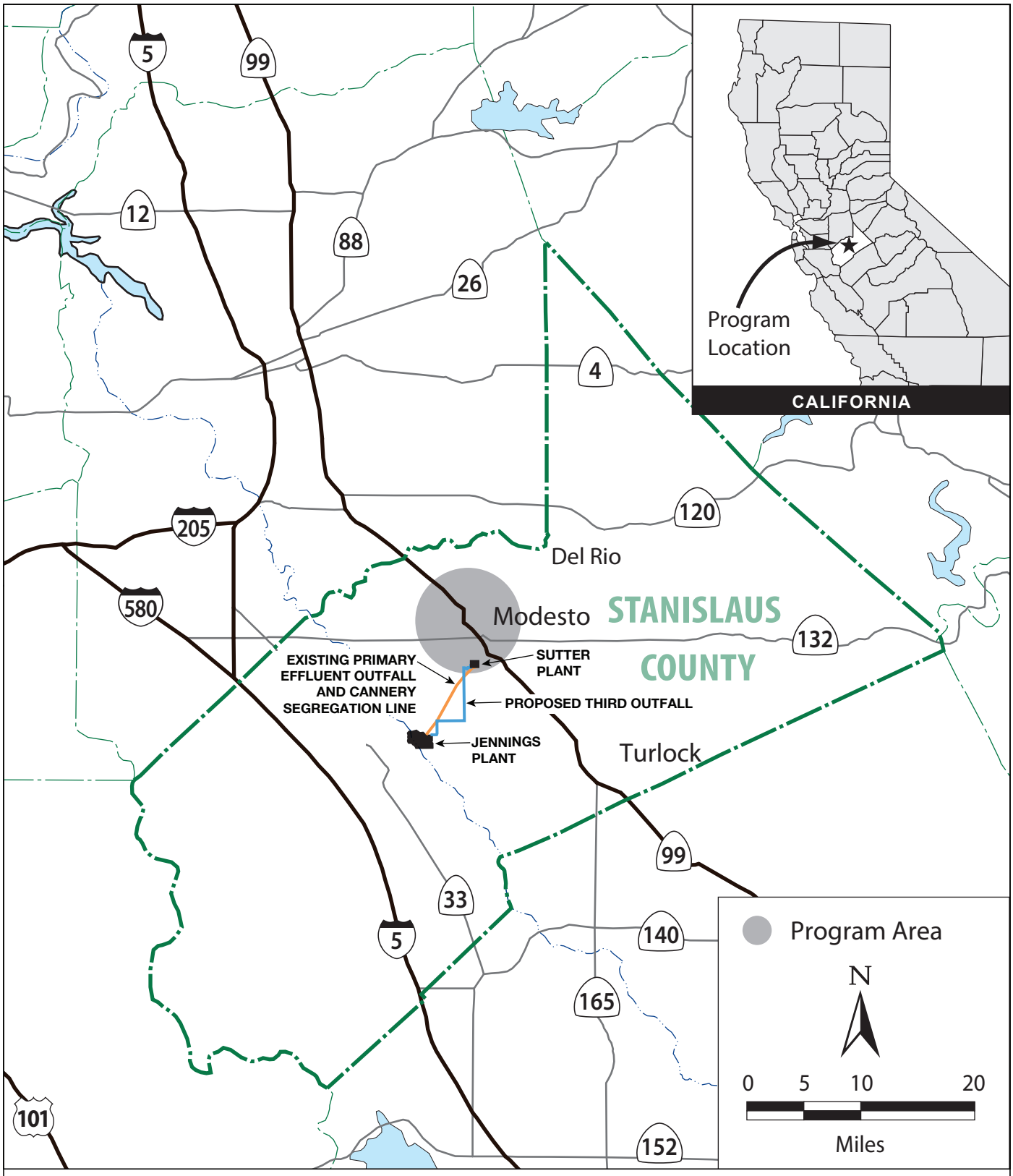


Figure 1
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

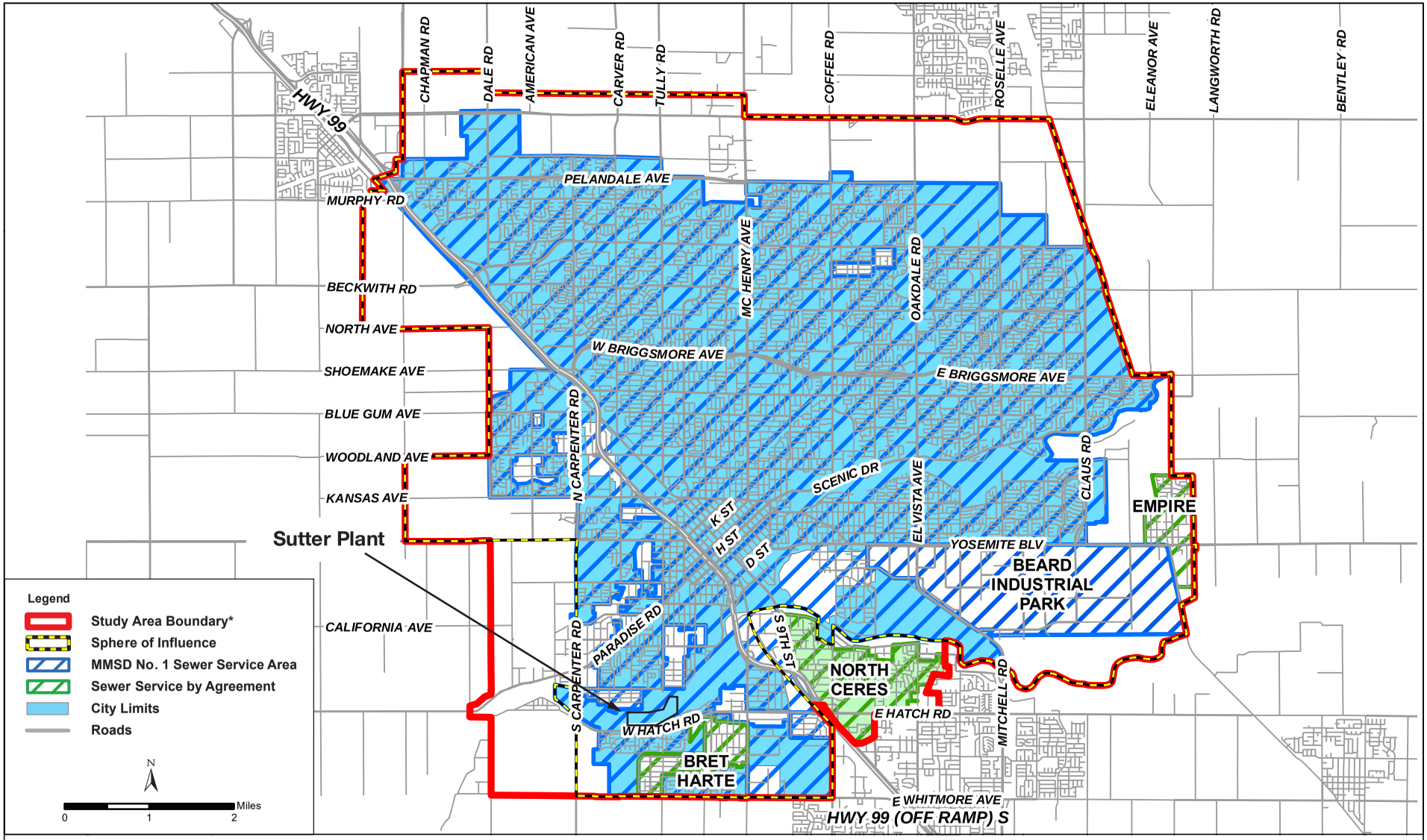


Figure 2
Wastewater Master Plan Sewer Service Study Area

Source: City of Modesto, 2016

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

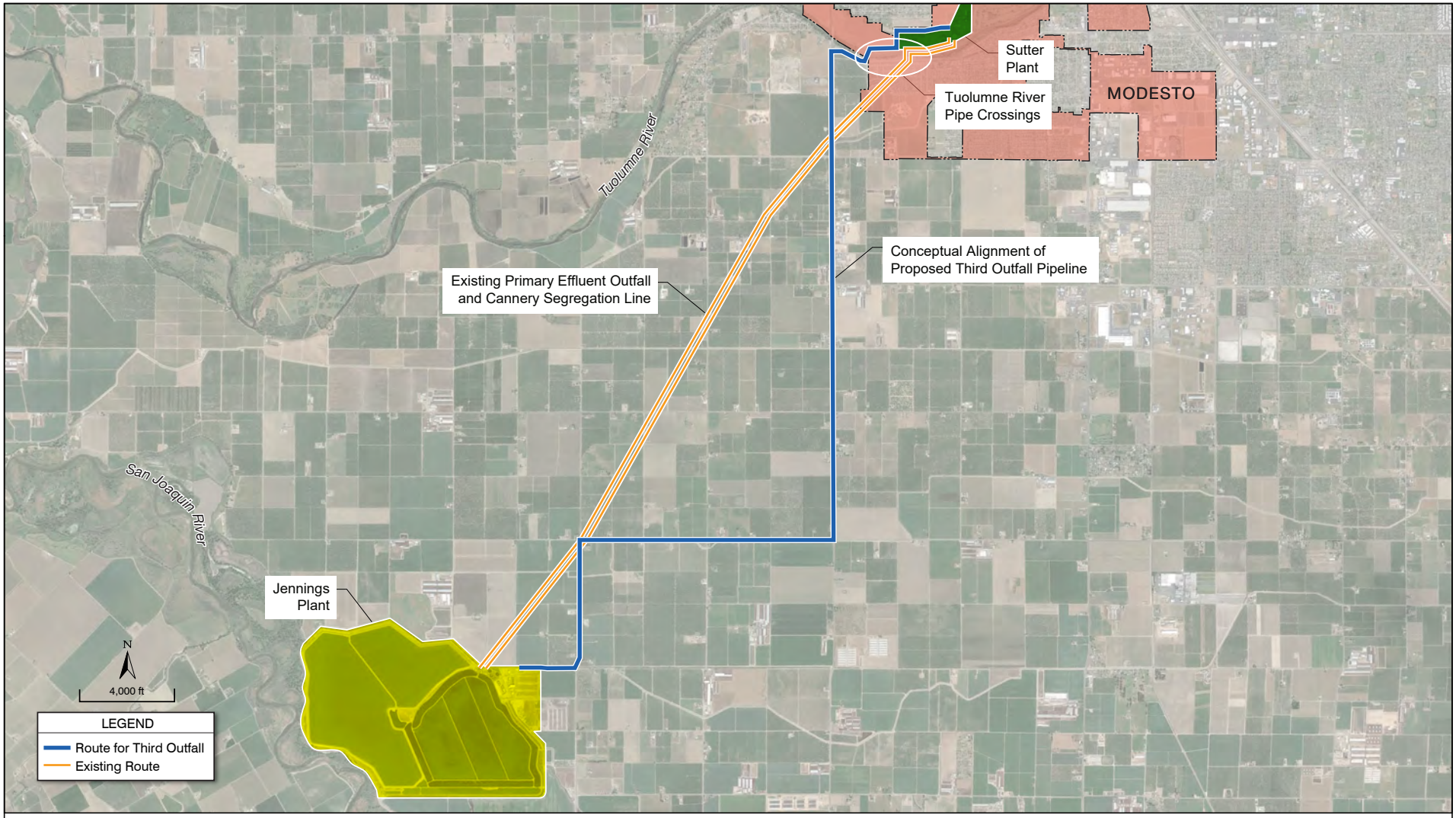


Figure 3
Location of Wastewater Treatment Plants

Source: Carollo, 2016

Prepared by:

Horizon
WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

June 8, 2016

Katherine Erolinda Perez, MLD
North Valley Yokuts Tribe
990 North Fine Road
Linden, CA 95236

Subject: City of Modesto Utilities Department Wastewater Master Plan Update Environmental Impact Report

Dear Ms. Perez,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan (WWMP) Update (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its wastewater service system through development of a wastewater master plan, which reviews existing and planned sanitary sewer infrastructure relative to the projected urban growth of the City. The City has made a number of improvements that were identified in the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

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Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95353
Phone: (209) 571-5557
Email: jalves@modestogov.com

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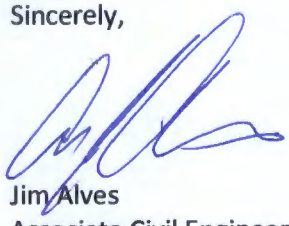
More detailed information about this project is available, at your request. Thank you for giving this matter your prompt attention.

Sincerely,



Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
2647248.1

Attachments

2667716.1

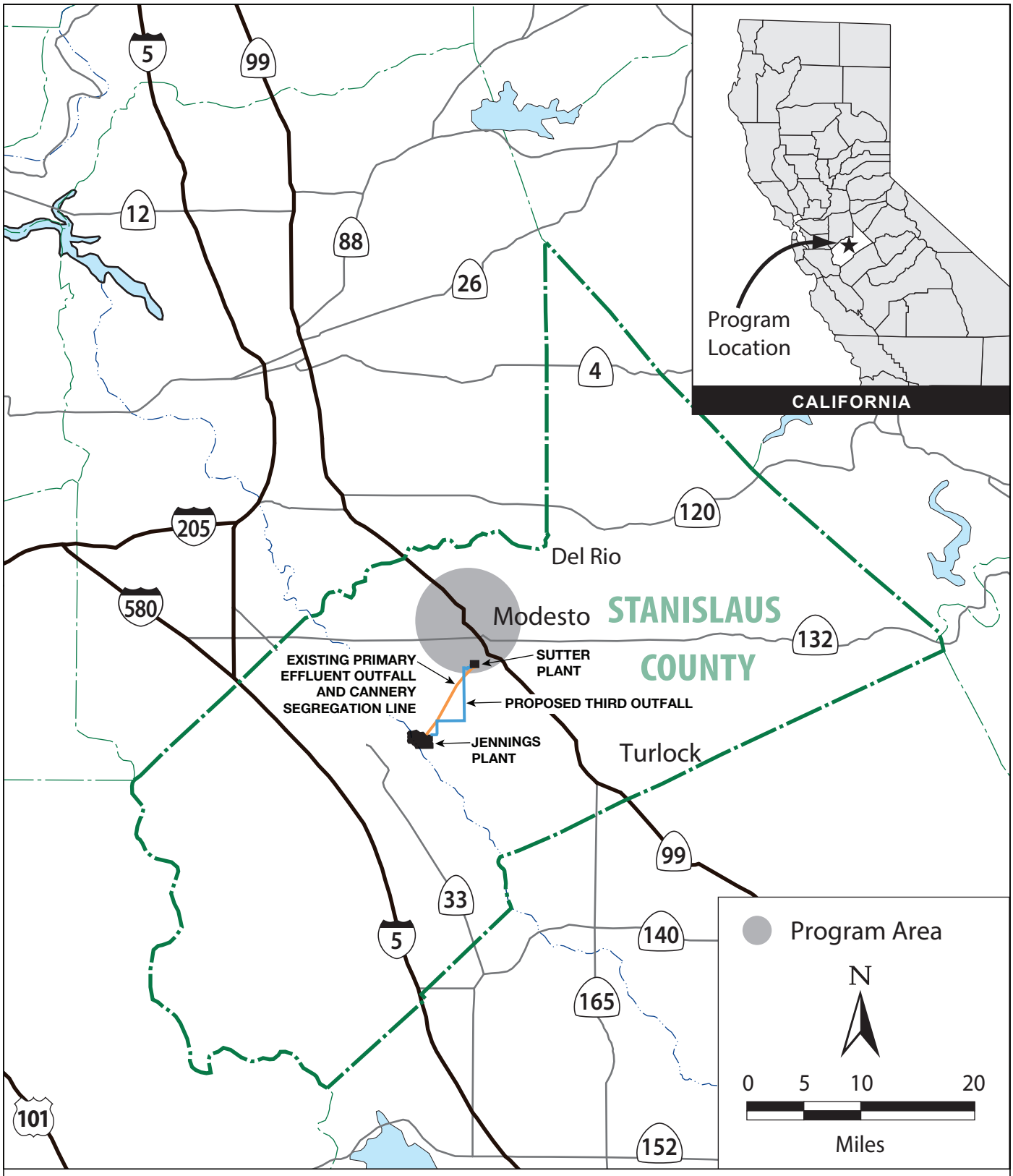


Figure 1
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

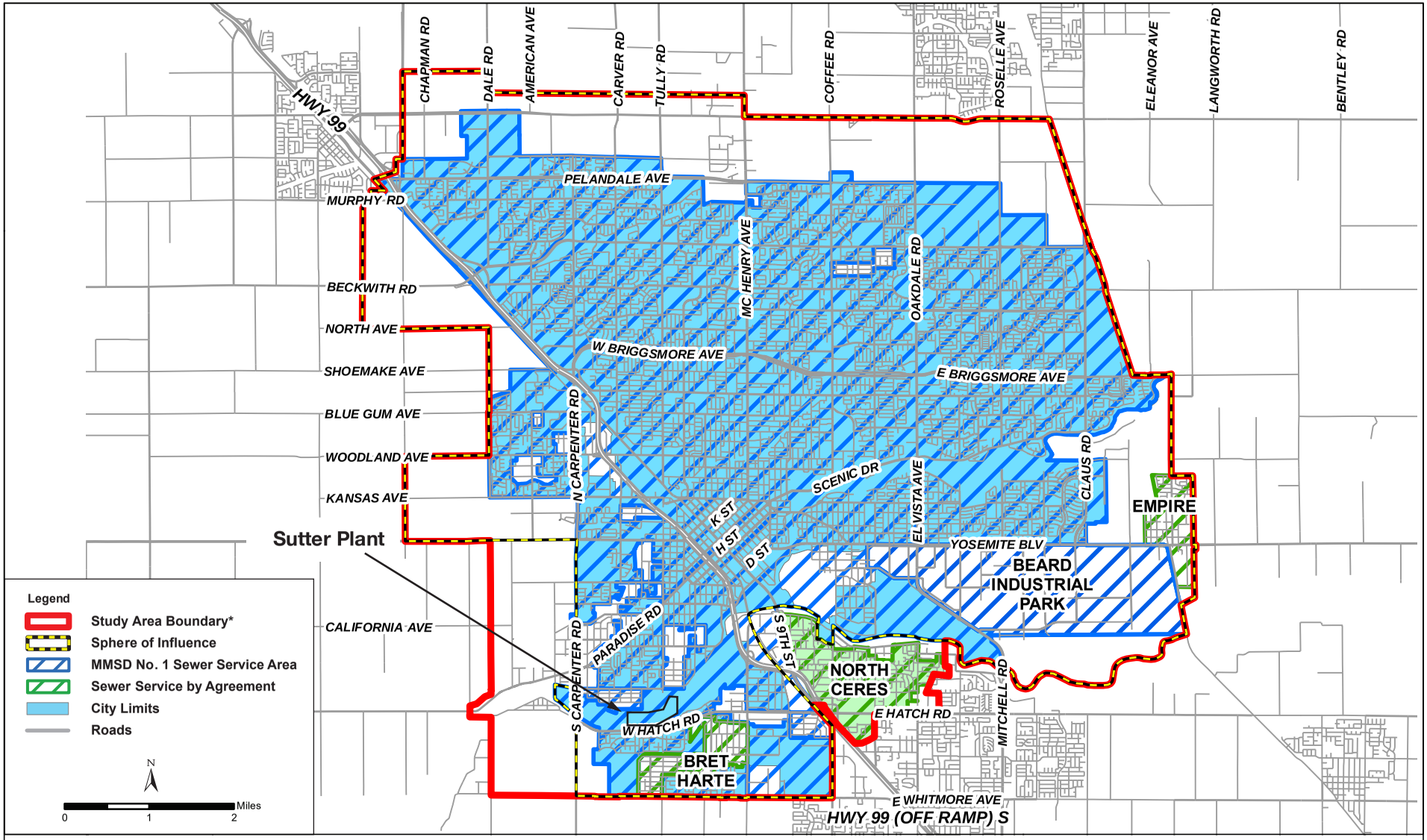


Figure 2
Wastewater Master Plan Sewer Service Study Area

Source: City of Modesto, 2016

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

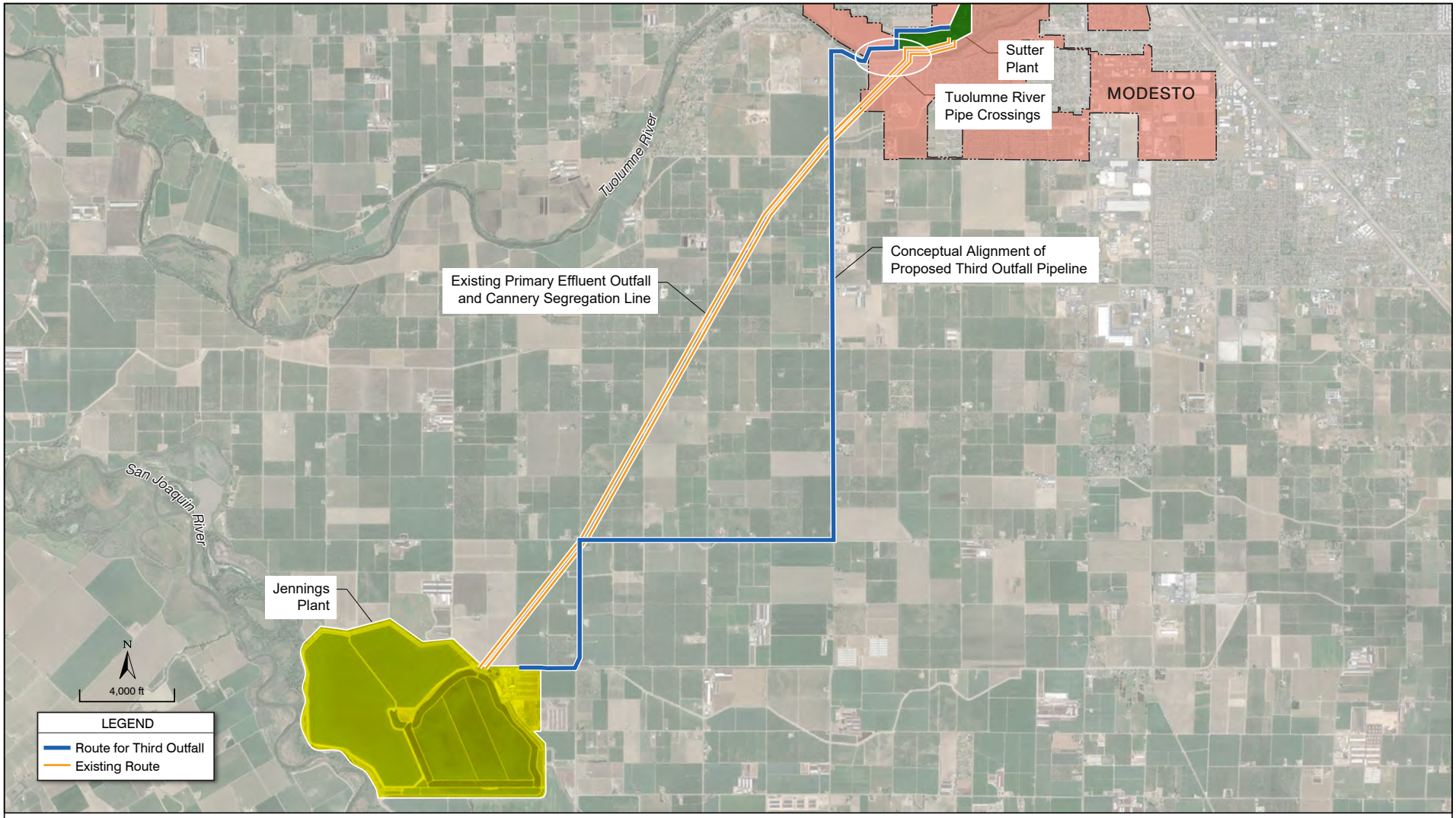


Figure 3
Location of Wastewater Treatment Plants

Source: Carollo, 2016

Prepared by:

Horizon
WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

June 8, 2016

Neil Peyron, Chairperson
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

Subject: City of Modesto Utilities Department Wastewater Master Plan Update Environmental Impact Report

Dear Chairperson Peyron,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Wastewater Master Plan (WWMP) Update (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its wastewater service system through development of a wastewater master plan, which reviews existing and planned sanitary sewer infrastructure relative to the projected urban growth of the City. The City has made a number of improvements that were identified in the 2007 Wastewater Master Plan but still faces challenges associated with aging infrastructure, providing reliability of critical facilities and, for future growth, providing increased capacity and extending infrastructure when it is needed.

The Program would consist of numerous Capital Improvement Projects (CIPs) collectively intended for system-wide implementation needed to ensure adequate wastewater infrastructure and services are available to meet wastewater demand requirements under both existing and future developed conditions. The Program all incorporated areas of Modesto, a portion of north Ceres, the unincorporated community of Empire, and unincorporated "islands" in Stanislaus County that are served by agreement with the City (Figure 1). The Sutter Avenue Primary Treatment Plant (Primary Plant or Sutter Plant) is in the southwestern portion of Modesto adjacent to the north bank of the Tuolumne River. The Jennings Road Secondary Treatment Plant (Secondary Plant or Jennings Plant) is approximately 6.5 miles southwest of the Modesto urban area and located on City-owned land on the eastern side of the San Joaquin River. These areas are shown in Figure 2.

The Program involves several improvements to the City's collection system, such as replacement or construction of new trunk sewers or pump stations, construction of new parallel sewers, and removal of storm drain cross connections. Proposed improvements at the Sutter Plant include, but are not limited to, upgrading the influent pump station to increase its hydraulic capacity to convey peak wet weather flows, improvements to the headworks facilities, and decommissioning of primary treatment and solids handling facilities. The Program also includes outfall pipeline improvements, such as replacement of

existing pipe crossings under the Tuolumne River and construction of a new third outfall pipeline from the Sutter Plant to the Jennings Plant. At the Jennings Plant, the Program includes upgrades to the secondary and Cannery Segregation treatment facilities, and construction of new primary treatment and solids handling facilities.

Most of the proposed CIPs would be implemented within the City's sewer service area, the Sutter Plant, and the Jennings Plant. The Program also proposes a third outfall pipeline connecting the Sutter and Jennings Plants (Figure 3). The exact locations of some of the proposed new facilities (e.g., collection system improvements and outfall pipeline) have yet to be finalized; where tentative sites have been identified, these locations will be identified in the Draft EIR.

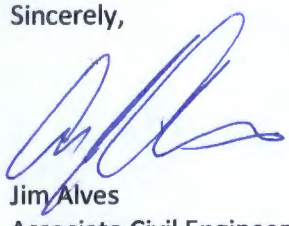
Pursuant to Public Resources Code Section 21080.3.1 *et seq.*, the City of Modesto Utilities Department is notifying you of our intent to consider the Proposed Project. To initiate formal consultation with the City regarding any potential impacts of this Proposed Project on tribal cultural resources, Public Resources Code Section 21080.3.1(e) requires that you contact us within 30 days from your receipt of this letter. If you wish to request the consultation, or if you have any questions, please contact:

Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95353
Phone: (209) 571-5557
Email: jalves@modestogov.com

If you do not contact us within 30 days following receipt of this letter, the City of Modesto Utilities Department will proceed with processing the above referenced application with the assumption that the project will not have a potential effect on tribal cultural resources. If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The City will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request.

More detailed information about this project is available, at your request. Thank you for giving this matter your prompt attention.

Sincerely,



Jim Alves
Associate Civil Engineer
City of Modesto Utilities Department
2647248.1

Attachments

2667716.1

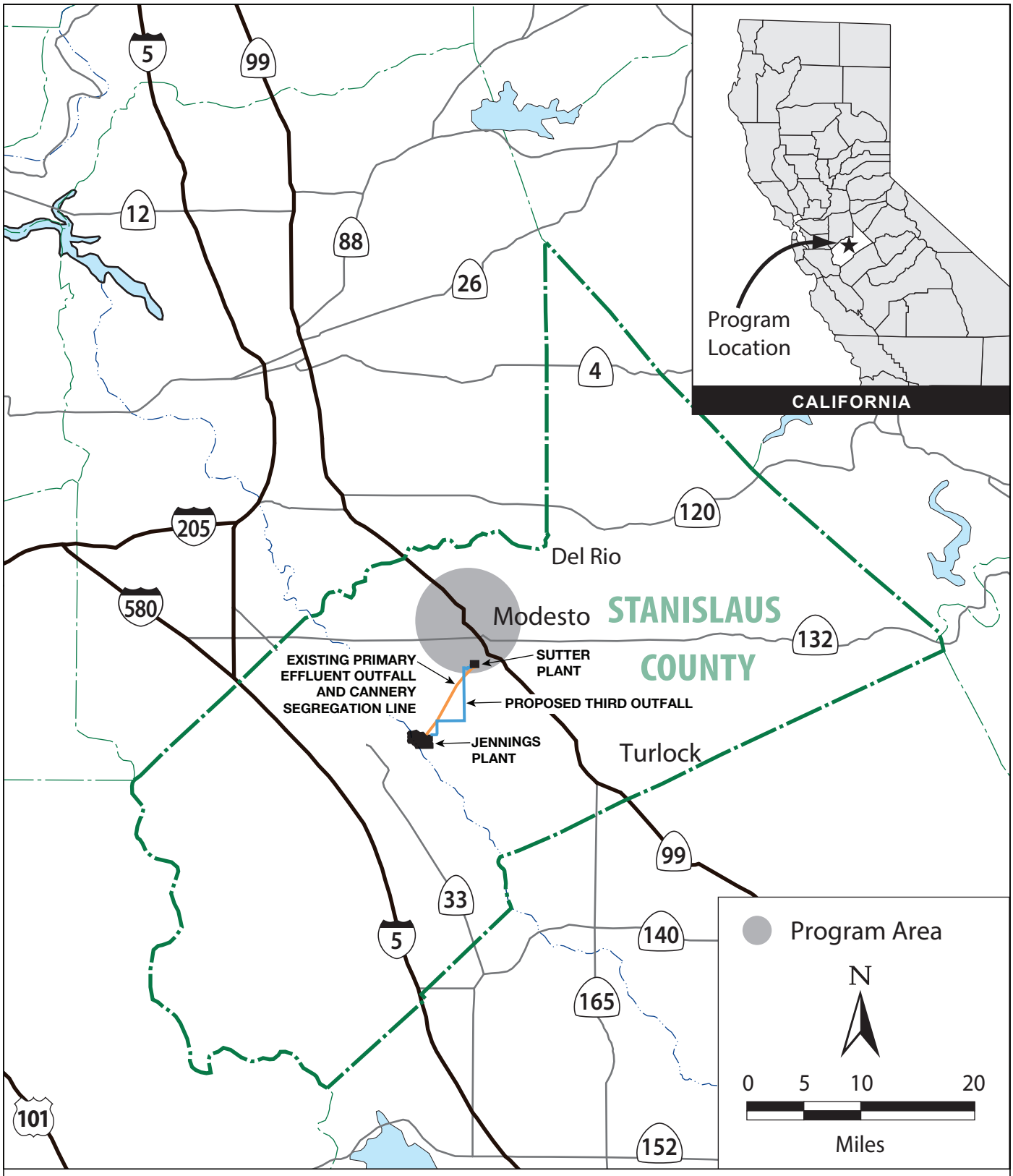


Figure 1
Project Location

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

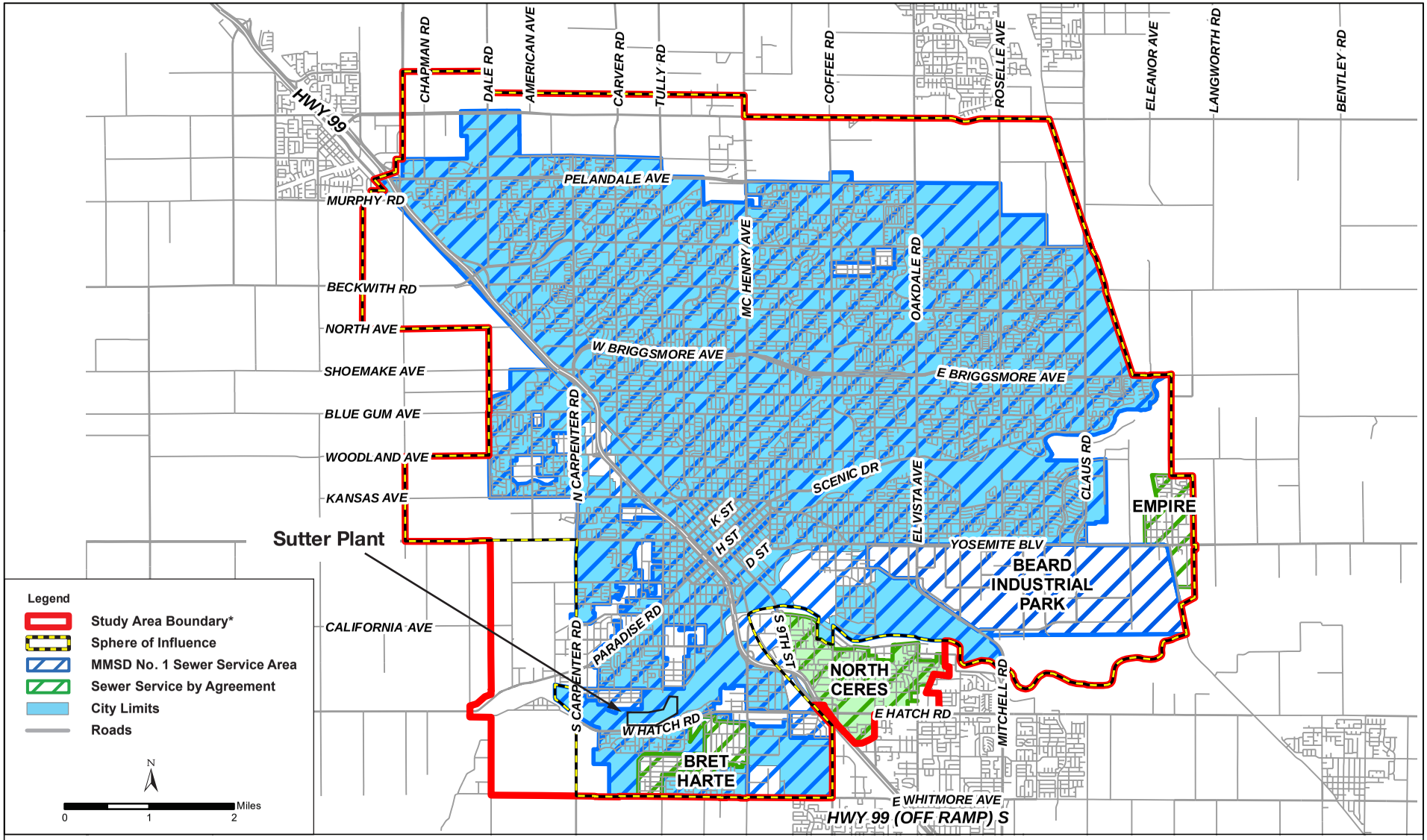


Figure 2
Wastewater Master Plan Sewer Service Study Area

Source: City of Modesto, 2016

Prepared by:
Horizon WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

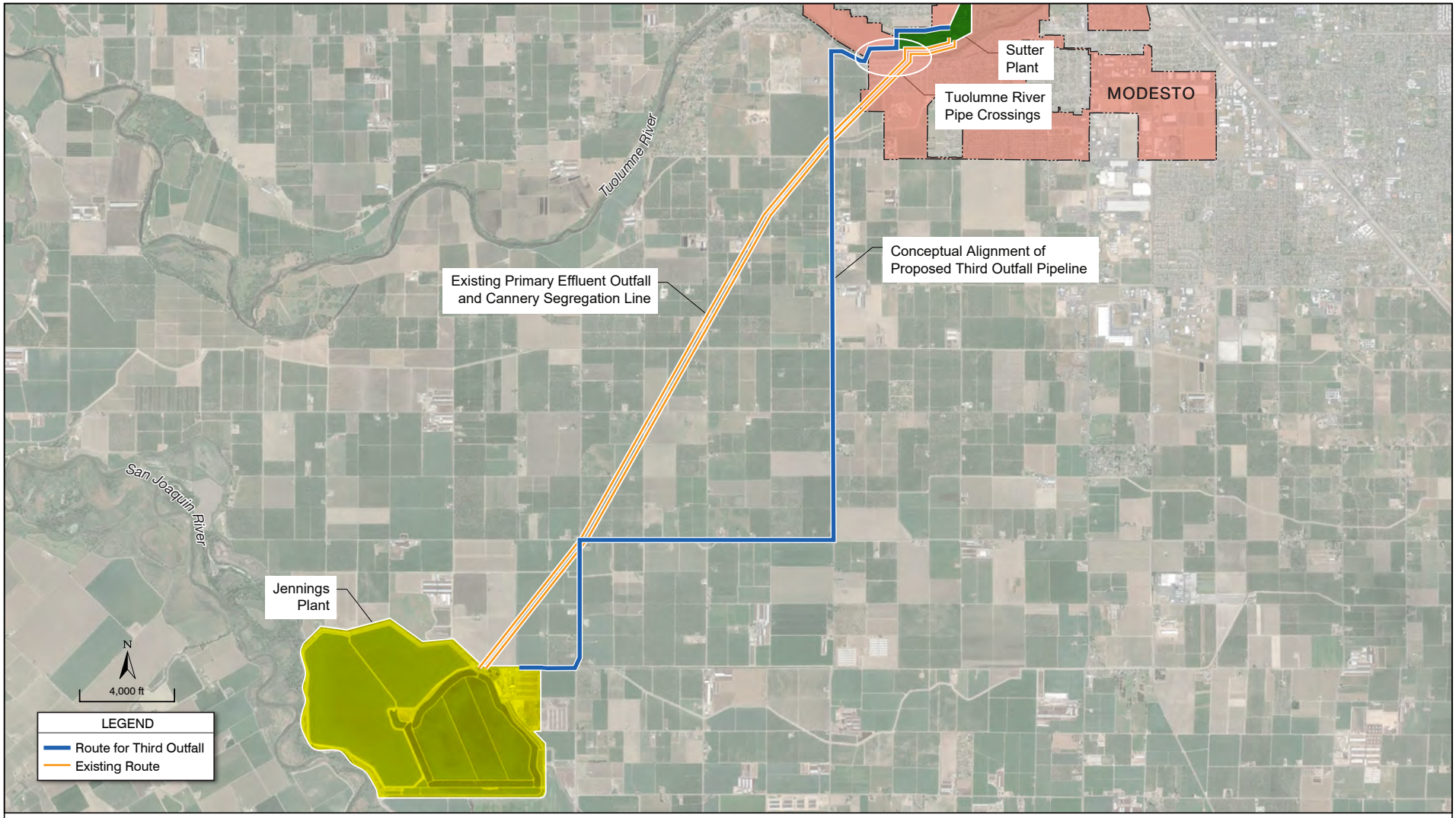


Figure 3
Location of Wastewater Treatment Plants

Source: Carollo, 2016

Prepared by:

Horizon
WATER and ENVIRONMENT

City of Modesto Wastewater Master Plan Update

Appendix G

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the City of Modesto (City) Wastewater Master Plan Draft Environmental Impact Report (DEIR). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed. It is the responsibility of the Contractor to ensure that actions required for all mitigation measures listed herein are included in the project plans and specifications. It is the responsibility of the City to review and confirm that all of the mitigation measure actions described herein are in the project plans and specifications.

Mitigation measures that are applicable to specific types of program-level improvements are indicated in the table. Mitigation measures that are applicable to the River Trunk Realignment Project are indicated with a "X" in the table.

Acronyms and Abbreviations

a.m.	ante meridiem
ANSI	American National Standards Institute
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Modesto
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dBA	A-weighted decibel scale
EIR	environmental impact report
GPS	global positioning system
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
mph	miles per hour
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NOx	nitrogen oxides
NRHP	National Register of Historic Places
p.m.	post meridiem
PM	particulate matter
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less

Rare Plant Plan	Rare Plant Relocation, Management, and Protection Plan
ROG	reactive organic gases
SJVAPCD	San Joaquin Valley Air Pollution Control District
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
VELB	valley elderberry longhorn beetle
WWMP	Wastewater Master Plan

	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
Aesthetics							
AES-1	**Locate Staging Areas Away from Public Areas and Install Screening.** For components located in residential areas and near public parks, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. With the exception of designated staging areas for the River Trunk Realignment Project, to the extent practicable, staging areas for Program components shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials	CSC OP SP	X	1. Include requirements in project plans and specifications. 2. Identify staging area locations that meet the requirements described in the measure. 3. In instances where on-street or on-site staging areas are necessary, implement screening methods.	1. Confirm that measure is included in plans and specifications. 2. Confirm that selected staging areas comply with requirements of the measure. 3. If necessary, confirm that screening methods are implemented appropriately.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to construction.	
Air Quality							
AQ-1	**Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10}** The following controls are required to be implemented by the City or its contractor at all construction sites. ▪ All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover. ▪ All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant. ▪ All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of water during work or by presoaking. ▪ When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained. ▪ All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.) ▪ Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant. ▪ Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday. ▪ Any site with 150 or more vehicle trips per day will prevent carryout and trackout.	CSC JP LSC OC OP PL SP	X	1. Include emission reduction measures into the project plans and specifications. 2. Implement and document emission reduction measures.	1. Confirm emission reduction measures are incorporated into the project plans and specifications. 2. Confirm emission reduction measures are implemented properly.	1. During development of the plans and specifications. 2. During construction.	

Key to program-level Components: CSC = Collection System Components; JP = Jennings Plant; LSC = Lift Station Components; OC = Other Components; OP = Outfall Pipelines; PL = New/Upgraded Sewer Pipelines and Pipeline Rehabilitation; SP = Sutter Plant

	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
AQ-2	**Implement Enhanced Control Measures for Construction Emissions of PM_{10}** The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM10 impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements). 1. Limit traffic speeds on unpaved roads to 15 mph. 2. Install sandbags or other erosion-control measures to prevent silt runoff. The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason. 1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. 2. Install wind breaks at windward sides of construction areas. 3. Suspend excavation and grading activity when winds exceed 20 miles per hour (mph). 4. Limit the area subject to excavation, grading, and other construction activity at any one time. 5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.	CSC JP LSC OC OP PL SP	X	1. Include enhanced emission control measures into project plans and specifications. 2. Implement and document enhanced emission control measures. 3. The quantitative air analyses shall be based on the types, locations, numbers, and operations of equipment to be used and shall determine whether the combined emissions exceed the SJVAPCD's permitted and unpermitted air quality thresholds.	1. Confirm enhanced emission control measures are included in project plans and specifications. 2. Confirm that enhanced emission control measures are implemented properly.	1. During preparation of plans and specifications. 2. During construction. 3.Prior to or during construction.	
AQ-3	**Implement Control Measures for Operation Emissions of PM_{10} and for Ozone Precursors (ROG and NO_x)** In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified wastewater system sites when required to mitigate significant PM10 and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.	CSC JP LSC OC OP PL SP	X	1. N/A 2. If necessary, and if directed by the City, install equipment with Best Available Control Technology at new or modified facility sites.	1. For new or modified facilities, conduct site-specific air quality analysis to determine if operational emissions will exceed SJVAPCD thresholds. 2. If thresholds will be exceeded, ensure that equipment with Best Available Control Technology is installed.	1. Prior to or during design phase. 2. If necessary, include equipment specifications during development of plans and specifications. Install equipment during construction.	
Biological Resources							
BIO-1	**Perform Surveys for Special-status Plant Species.** Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species. Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site as determined by the botanist. If special-status plants may be directly or indirectly affected, then **Mitigation Measure BIO-2** shall be implemented.	CSC OP	X	1. N/A 2. Provide the City with advance notice of construction schedule and anticipated start date. Support site access for qualified biologist. 3. Do not start construction until	1. Retain a qualified biologist to conduct focused surveys. 2. Ensure qualified biologist conducts focused surveys prior to implementation of construction activities. 3. If special-status plants are identified that may	1. Prior to construction. 2. Prior to construction. 3. Prior to construction.	

Key to program-level Components: CSC = Collection System Components; JP = Jennings Plant; LSC = Lift Station Components; OC = Other Components; OP = Outfall Pipelines; PL = New/Upgraded Sewer Pipelines and Pipeline Rehabilitation; SP = Sutter Plant

	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
				focused surveys have been conducted and, if necessary, **Mitigation Measure BIO-2** has been implemented.	be directly or indirectly affected by activities, ensure that **Mitigation Measure BIO-2** is implemented.		
BIO-2	**Avoid, Minimize and Compensate for Impacts on Special-status Plant Species.** If special-status plants are detected, the City shall implement the following measures to avoid, minimize, and compensate for impacts on special-status plant species: ▪ The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally-sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally-sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally-sensitive area. ▪ If avoidance is not feasible, the Program proponent will consult with either CDFW or USFWS, or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival. ▪ The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the	CSC OP	X	1. If necessary, redesign or modify Program components to avoid or minimize impacts on special-status species. 2. Incorporate requirements prohibiting activities within fenced environmentally-sensitive areas into plans and specifications. 3. Protect any special-status plant species occurrences near a Program component site with environmentally-sensitive area fencing. 4. N/A 5. If directed by the City, implement the Rare Plant Plan prepared by the qualified botanist.	1. Confirm that modified design would avoid or minimize special-status plant species. 2. Confirm that requirements prohibiting activities within fenced environmentally-sensitive areas are included in plans and specifications. 3. Confirm that environmentally-sensitive area fencing is appropriately implemented, if such fencing is necessary to protect special-status species. 4. If avoidance is not feasible, consult with CDFW and/or USFWS to determine feasibility of special-status plant species transplantation. If feasible, retain qualified botanist to prepare Rare Plant Plan.	1. During design phase. 2. During preparation of plans and specifications. 3. Prior to start of construction. 4. Prior to construction. 5. During and/or after construction. Annual monitoring would occur for 5 years after planting.	

Key to program-level Components: CSC = Collection System Components; JP = Jennings Plant; LSC = Lift Station Components; OC = Other Components; OP = Outfall Pipelines; PL = New/Upgraded Sewer Pipelines and Pipeline Rehabilitation; SP = Sutter Plant

	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
	Rare Plant Plan. If success criteria are not met at that time, then mitigation activities and monitoring will continue until success criteria are met. ▪ As part of the Rare Plant Plan, the program proponent, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation, maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.				5. If necessary (i.e., avoidance is not feasible), confirm Rare Plant Plan is appropriately prepared by a qualified individual, and appropriately implemented (including 5-year monitoring requirements).		
BIO-3	**Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.** Prior to implementation of proposed CIPs in areas that could contain habitat for vernal pool branchiopods, the City shall retain a qualified biologist to conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City shall avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.	All Program-level components in grasslands or pastures	N/A	1. N/A 2. If necessary, and if habitat is present on-site, implement buffer zone identified by qualified biologist and/or USFWS to protect habitat.	1. Retain a qualified biologist to conduct surveys for vernal pools and wetlands. 2. If surveys find potential special-status invertebrate species habitat, confirm that an adequate buffer zone is implemented to protect resources.	1. Prior to construction. 2. Prior to initiation of construction activities.	
BIO-4	**Minimize and Compensate for Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.** If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures: ▪ After construction, restore surface topography and drainage to pre-construction conditions; and ▪ Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.	All Program-level components in grasslands or pastures	X	1. If impacts to habitat could not be avoided per **Mitigation Measure BIO-3**, restore surface topography and drainage to pre-construction conditions to minimize impacts. 2. N/A 3. If instructed by the City, implement off-site compensation plan for impacts to vernal pool branchiopods and/or western spadefoot.	1. If impacts could not be avoided per **Mitigation Measure BIO-3**, ensure that surface topography and drainage is restored to pre-construction conditions following construction. 2. Consult with USFWS and CDFW to determine appropriate ratios for off-site compensation for impacts to vernal pool branchiopods and/or western spadefoot.	1. Following construction. 2. As soon as it is determined that impacts to species/habitat cannot be avoided per **Mitigation Measure BIO-3**. 3. Following consultation with USFWS/CDFW and development of compensation approach.	

Key to program-level Components: CSC = Collection System Components; JP = Jennings Plant; LSC = Lift Station Components; OC = Other Components; OP = Outfall Pipelines; PL = New/Upgraded Sewer Pipelines and Pipeline Rehabilitation; SP = Sutter Plant

	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
					3. Either implement compensation plan, instruct the contractor to do so, or hire a third party to perform the needed work.		
BIO-5	**Avoid Impacts on VELB Habitat.** The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed improvements that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017f). This shall include the following avoidance measures: ▪ If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal. ▪ The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities. ▪ No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. ▪ A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance. ▪ A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and should be discussed with USFWS. ▪ As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March - July). ▪ If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter.	CSC JP LSC OC OP PL SP	X	1. Incorporate requirement to avoid riparian habitat and/or elderberry shrubs into plans and specifications. 2. Make any necessary accommodations to allow biologist to conduct survey for elderberry shrubs/VELB habitat. 3. Avoid riparian habitat and/or elderberry shrubs whenever possible. If necessary, and VELB habitat is present on-site, implement avoidance measures described in mitigation measure. 4. N/A	1. Confirm that requirement to avoid riparian habitat and/or elderberry shrubs is included in project plans and specifications. 2. Retain qualified biologist to conduct surveys for the presence of elderberry shrubs that may be required. 3. If elderberry shrubs are present, ensure that avoidance measures are implemented. 4. If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to, and during, construction. 4. As soon as it is evident that elderberry shrubs cannot be avoided during construction.	

Key to program-level Components: CSC = Collection System Components; JP = Jennings Plant; LSC = Lift Station Components; OC = Other Components; OP = Outfall Pipelines; PL = New/Upgraded Sewer Pipelines and Pipeline Rehabilitation; SP = Sutter Plant

	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	▪ Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method. ▪ Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry. ▪ Erosion control shall be implemented and the affected area shall be re-vegetated with appropriate native plants. If elderberry shrubs cannot be avoided, implement **Mitigation Measure BIO-6**.						
BIO-6	***Implement VELB Compensatory Mitigation, if Necessary.*** The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per **Mitigation Measure BIO-7.** Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS. Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used. Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.	CSC JP LSC OC OP PL SP	X	1. Take all measures to preserve any elderberry shrub encountered that must be removed, such that the shrub may be transplanted per **Mitigation Measure BIO-7**. 2. If on-site mitigation is selected as the compensatory mitigation approach, implement any measures of the mitigation plan to which the contractor is delegated responsibility. 3. N/A	1. Ensure that any elderberry shrub removed during construction is preserved and transplanted per **Mitigation Measure BIO-7,** if feasible. 2. In coordination with USFWS, develop a compensatory mitigation approach following requirements set forth in mitigation measure. Either implement approach or delegate certain responsibilities to contractor. 3. Confirm that compensatory mitigation is satisfactorily provided.	1. During or prior to construction, if elderberry shrubs are encountered. 2. Once it is determined that avoidance of elderberry shrubs is infeasible. Compensatory mitigation shall be provided after approach is confirmed by USFWS. 3. After implementation of compensatory mitigation plan/approach.	
BIO-7	**Transplant Elderberry Shrubs if Avoidance Is Not Feasible.** The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to **Mitigation Measure BIO-6**, the shrub shall be transplanted. Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems,	CSC JP LSC OC OP PL SP	X	1. N/A 2. Under direction of the qualified biologist, transplant elderberry shrubs that cannot be avoided following the guidelines and requirements in the mitigation measure.	1. Retain a qualified biologist to oversee transplantation activities, should such activities be necessary. 2. Confirm that any elderberry shrubs that cannot be avoided are transplanted appropriately in accordance with the guidelines contained in	1. Prior to construction. 2. After it is determined that elderberry shrubs cannot be avoided.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	may not be appropriate for transplanting. The transplanting guidelines below shall be followed: ▪ A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures. ▪ Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the CNDDB. ▪ Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. ▪ Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (www.tcia.org).				the mitigation measure, and that exit-hole surveys are reported to CDFW and USFWS.		
BIO-8	**Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.** Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, ponds, and sloughs where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented. ▪ The project proponent will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating western pond turtles. ▪ If a western pond turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site (with authorization from CDFW). ▪ The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat. ▪ If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).	CSC JP LSC OC OP PL SP	X	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been conducted. 3. In coordination with the qualified biologist, relocate any discovered turtles outside of the construction area and erect exclusion fence to prevent re-entry. Implement minimization measures described in the mitigation measure, as directed by the biologist.	1. Retain a qualified biologist to conduct preconstruction surveys for western pond turtle in any suitable habitat. 2. Confirm that surveys are conducted in accordance with the mitigation measure prior to initiation of construction activities. 3. For any turtles discovered in the project area, ensure these individuals are relocated out of the area and that exclusion fence is installed to prevent re-entry. Also, confirm that minimization measures are implemented in the event that turtles or their habitat are present.	1. Prior to construction. 2. Prior to initiation of construction activities. 3. Prior to, or during, construction, if necessary.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
BIO-9	**Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary.** Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented. If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW. If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.	CSC JP LSC OC OP PL SP	N/A	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been completed. Provide any needed support/assistance to the qualified biologist in establishing no-work buffers around occupied burrows, if such burrows are discovered. 3. Provide any needed support/assistance to the qualified biologist and the City in implementing a passive owl relocation plan, if such a plan is deemed necessary.	1. Retain a qualified biologist to conduct the preconstruction surveys for burrowing owls. 2. If burrowing owls are located on or within 250 feet of the construction site, ensure that no-work buffers are established around occupied burrows in accordance with mitigation measure. Confirm appropriate buffer distances with CDFW. 3. If occupied burrows cannot be avoided, ensure that passive owl relocation techniques are appropriately implemented. Enhance or create burrows in adjacent habitat at a 1:1 ratio one week prior to implementation of passive relocation techniques. Obtain approval from CDFW for owl relocation plan.	1. Prior to construction. 2. Prior to construction. 3. Prior to construction / after it is determined that occupied burrows cannot be avoided.	
BIO-10	**Avoid and Minimize Impacts on Raptors, including Special-status Species.** The City shall implement the following measures. If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests.	CSC JP LSC OC OP PL SP	X	1. N/A 2. Do not initiate ground- and vegetation-disturbing activities between February 1 and August 31 until a nesting raptor survey has been conducted. If nesting raptors are detected, provide any needed support to the	1. Retain a qualified biologist to conduct the nesting raptor survey. 2. If nesting raptors are detected, ensure that an appropriate 500-foot no-disturbance buffer is established around the nest.	1. Prior to construction. 2. Prior to construction, if necessary.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.			qualified biologist and/or the City in establishing no-disturbance buffers around the nest(s). Do not conduct activities within the buffer(s) until directed by the biologist.			
BIO-11	**Compensate for Loss of Raptor Foraging Habitat.** The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the study area, such as the Dutchman Creek Conservation Bank. The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program-level components are assumed to be within 1 mile of an active Swainson's hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows: ▪ 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk; or ▪ 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands. The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.	CSC JP LSC OC OP PL SP	X	1. N/A	1. Provide off-site compensation for losses of raptor foraging habitat through one of the methods described in the mitigation measure. Confirm that off-site mitigation is sufficient to compensate for impacts following the ratios outlined in the measure.	1. After the acreage of any permanent impacts to raptor foraging habitat is determined.	
BIO-12	**Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary.** The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required.	CSC JP LSC OC OP PL SP	X	1. N/A 2. Do not initiate construction activities during the bird breeding season until surveys have been conducted. Provide any assistance or accommodation	1. Retain a qualified biologist to conduct the preconstruction surveys for nesting birds. 2. Confirm that surveys are appropriately conducted within 14 days of construction	1. Prior to construction. 2. Prior to construction. 3. Prior to and during construction.	

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	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
	If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.			necessary to the biologist conducting the survey. 3. In the event that active nests are identified, provide any needed assistance to the qualified biologist in establishing the no-disturbance buffers. Do not conduct construction activities within the buffers until directed by the biologist.	activity that would occur during the bird breeding season. 3. In the event that active nests are identified, ensure that no-disturbance buffers are established around nests in accordance with the measure.		
BIO-13	**Avoid and Minimize Impacts on Federally Protected Wetlands.** The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands. If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of **Mitigation Measure BIO-14**. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters, and for all activities less than one acre of disturbance, a Local SWPPP shall be implemented. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.	CSC OP	X	1. N/A 2. Avoid wetlands to the extent feasible. 3. If wetlands cannot be avoided, following construction, restore surface topography and drainage to pre-construction conditions. Additionally, where appropriate, revegetate impacted wetland areas with site-adapted native plant species.	1. If complete avoidance of wetlands is not possible, perform or commission a wetland delineation study for the project site, to be used during implementation of **Mitigation Measure BIO-14**. 2. Confirm that wetlands are avoided during construction activities to the extent feasible. 3. In the event that wetlands cannot be avoided, confirm that wetland areas are restored to pre-construction conditions.	1. Prior to construction. 2. During construction. 3. Following construction.	
BIO-14	**Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.** The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA	CSC OP	X	1. Do not initiate work in areas defined as water of the U.S. and State until the City has obtained the appropriate regulatory permits. 2. N/A	1. For work within areas defined as waters of the U.S. and State, obtain appropriate regulatory permits. 2. For areas where wetland impacts occur, provide compensatory	1. Prior to initiation of construction activities within waters. 2. At a time acceptable to the regulatory agencies.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. S19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.				mitigation by one of the methods described in the mitigation measure.		
BIO-15	**Install Temporary Trench Plates over Open Trenches.** The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.	CSC JP LSC OC OP PL SP	X	1. Incorporate requirement into project plans and specifications. 2. Cover open trenches with trench plates at the end of each work day.	1. Confirm that requirement is included in plans and specifications. 2. Confirm that contractor is covering trenches appropriately at the end of each work day.	1. During preparation of plans and specifications. 2. During construction.	
Cultural Resources							
CR-1	**Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work** Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive information about the kinds of archaeological materials that could be present at the River Trunk Realignment Project site and other CIP sites, and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.	CSC JP LSC OC OP PL SP	X	1. Coordinate with the City to provide workers information about potential buried cultural resources.	1. Arrange for workers to receive information about potential buried cultural resources	1. Prior to construction	
Greenhouse Gases							
None.							
Hydrology and Water Quality							
HYD/WQ-1	**Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.** The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling, microtunneling, pipe bursting) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include: ▪ Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions.	OP	X	1. N/A 2. Implement all preventative measures identified in mitigation measure. Make accommodations for geotechnical engineer, archaeologist, and biologist to survey area and make	1. Incorporate requirements into plans and specifications. 2. Ensure that all preventative measures are implemented. Retain geotechnical engineer and qualified archaeologist and	1. During preparation of plans and specifications. 2. During construction, if necessary.	

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Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	Program-level Components	River Trunk Realignment Project				
▪ Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route. ▪ Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below. ▪ Maintain necessary response equipment on-site or at a readily accessible location and in good working order. ▪ Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003): For a terrestrial frac-out: - Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud. - Based on consultation with CDFW (see below), either: ▪ Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or ▪ Leave the drilling mud in place to avoid potential damage from vehicles entering the area. - Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation. For an aquatic frac-out: - Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location). - Based on consultation with CDFW (see below), either: ▪ If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column. ▪ If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain). ▪ If the fracture becomes excessively large, call in a spill response team to contain and clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site. - If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation. ▪ Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.			recommendations. Coordinate worker training for field personnel. 3. For any frac-outs that occur, notify the appropriate agencies and implement the appropriate measures, as specified in the measure.	biologist to make recommendations to minimize impacts. Arrange for field personnel to receive training. 3. For any frac-outs that occur, confirm that proper protocols were followed to contain the frac-out and minimize impacts.		

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HYD/WQ-2	**Conduct Flood Flow Study for Benson Lift Station.** Prior to final project design, the City of Modesto and/or its contractor(s) shall conduct a study to ascertain the changes in flows that may be caused by the proposed Benson Lift Station structure in the event of a 100-year flood. The study shall model the change, if any, in inundation area that may be caused by restriction in flood flow passage caused by the structure. If the study determines that the proposed lift station may cause inundation of adjacent or upstream/downstream properties or structures during a 100-year flood event, the City shall develop mitigation measures to address this impact. Feasible mitigation measures may include construction of flood protection structures for potentially affected properties or reconfiguration of the proposed project facilities to reduce impedance or redirection of flows (e.g., elevating critical facilities such as electrical panels and underground pump vault doors to levels above flood stage). Alternatively, the City may identify an alternative site for the proposed lift station that would avoid impacts on flood flows.	LSC #3	N/A	1. N/A 2. Conduct flood flow study of pre- and post-project conditions in accordance with the mitigation measure. If study determines that the lift station may cause inundation of adjacent properties during a 100-year flood event, develop feasible mitigation measures.	1. Incorporate requirements into plans and specifications. 2. Ensure that flood flow study meets requirements described in **Mitigation Measure HYD/WQ-2**.	1. During preparation of plans and specifications. 2. During preparation of plans and specifications.	
Land Use and Planning							
None.							
Noise and Vibration							
NOI-1	**Employ Noise-Reducing Construction and Maintenance Practices.** The following measures will be implemented by the City or its contractor(s) to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected: ▪ Locate stationary equipment as far as practical from noise-sensitive land uses; ▪ Use electrified or otherwise quieter equipment when practical; ▪ Use sound-control devices on equipment that are more effective than devices originally provided on the equipment; ▪ Use noise-reducing enclosures around noise-generating equipment; and ▪ Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission. When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.	CSC JP LSC OC OP PL SP	X	1. Include noise reduction measures in project plans and specifications. 2. Implement and document noise reduction measures. In coordination with the City, develop haul routes that avoid sensitive receptors to the extent feasible.	1. Confirm that noise reduction measures are included in project plans and specifications. 2. Confirm that noise reduction measures are implemented properly. Work with Contractor to identify haul routes that avoid sensitive receptors.	1. During preparation of plans and specifications. 2. During construction.	
NOI-2	**Limit Nighttime Construction Noise.** When feasible, the City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays unless a special exemption permit allowed by Modesto Municipal Code Section 4-9.103(b)(6) is obtained.	CSC JP LSC OC OP PL SP	X	1. Include measure in project plans and specifications. 2. Do not conduct construction activities in close proximity to a residence outside of the hours specified in the measure.	1. Confirm that measure is included in project plans and specifications. 2. Confirm that Contractor follows requirements specified in the mitigation measure.	1. During development of plans and specifications. 2. During construction.	

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Mitigation Measure		Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
				Document compliance with this requirement.			
NOI-3	**Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components** The City or its contractor(s) shall prepare a project-level noise analysis for operation of proposed Sutter Plant components. The detailed noise study should show that appropriate mitigation measures will be implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the analysis demonstrates that significant operational noise impacts are likely to occur, **Mitigation Measure NOI-4** shall be implemented. Alternately, the City can assume that the impacts would be significant and implement **Mitigation Measure NOI-4** without first conducting a noise study under **Mitigation Measure NOI-3**.	SP	N/A	1. N/A 2. Conduct noise study in accordance with **Mitigation Measure NOI-3**.	1. Retain contractor to conduct a noise analysis for the Sutter Plant components. 2. Ensure that noise evaluation meets requirements outlined in **Mitigation Measure NOI-3**.	1. Prior to the design phase of Sutter Plant components. 2. Prior to construction of Sutter Plant components.	
NOI-4	**Employ Noise-Reducing Methods During Operations** The City or its contractor(s) shall implement noise-reducing methods so that noise from lift stations does not exceed City or County noise-level standards at adjacent residences. This measure shall also be implemented to achieve City or County noise-level standards for Sutter Plant components if deemed necessary per **Mitigation Measure NOI-3**. Example measures may include, but are not limited to, the following: ▪ Locate stationary equipment as far as practical from noise-sensitive land uses; ▪ Use electrified or otherwise quieter equipment when practical; ▪ Use sound-control devices on equipment that are more effective than devices originally provided on the equipment; ▪ Install permanent barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (terrain and structures) to block sound transmission; ▪ Limit operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas; and ▪ Use sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available.	LSC SP	N/A	1. N/A 2. If necessary, and if directed by the City, implement noise-reducing measures at new or modified facility sites.	1. For new or modified facilities, conduct site-specific noise analysis to determine if County noise-level standards will be exceeded at adjacent residences during facility operations. 2. If standards will be exceeded, implement noise-reducing measures to reduce noise to below standards.	1. Prior to or during the design phase. 2. Incorporate measures during design phase. Implement measures during construction.	
NOI-5	**Implement Vibration Reduction Measures** The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors: ▪ Ensure proper tuning of vibration-causing equipment. ▪ Use vibration damping devices to the extent feasible. ▪ Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings. ▪ Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically	CSC JP LSC OC OP PL SP	X	1. Include measures in project plans and specifications. 2. Implement and document vibration-reducing measures.	1. Confirm that measures are included in project plans and specifications. 2. Confirm that measures are implemented properly.	1. During development of plans and specifications. 2. During construction.	

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Mitigation Measure		Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
	powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ Use electric stationary equipment (e.g., generators) where feasible. ▪ Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.						
Population and Housing							
None.							
Transportation and Traffic							
None.							
Utilities and Service Systems							
None.							
Other Statutory Considerations							
None.							

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MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the City of Modesto (City) Wastewater Master Plan Draft Environmental Impact Report (DEIR). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed. It is the responsibility of the Contractor to ensure that actions required for all mitigation measures listed herein are included in the project plans and specifications. It is the responsibility of the City to review and confirm that all of the mitigation measure actions described herein are in the project plans and specifications.

Mitigation measures that are applicable to specific types of program-level improvements are indicated in the table. Mitigation measures that are applicable to the River Trunk Realignment Project are indicated with a "X" in the table.

Acronyms and Abbreviations

a.m.	ante meridiem
ANSI	American National Standards Institute
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Modesto
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dBA	A-weighted decibel scale
EIR	environmental impact report
GPS	global positioning system
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
mph	miles per hour
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NOx	nitrogen oxides
NRHP	National Register of Historic Places
p.m.	post meridiem
PM	particulate matter
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less

Rare Plant Plan	Rare Plant Relocation, Management, and Protection Plan
ROG	reactive organic gases
SJVAPCD	San Joaquin Valley Air Pollution Control District
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
VELB	valley elderberry longhorn beetle
WWMP	Wastewater Master Plan

	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
Aesthetics							
AES-1	**Locate Staging Areas Away from Public Areas and Install Screening.** For components located in residential areas and near public parks, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. With the exception of designated staging areas for the River Trunk Realignment Project, to the extent practicable, staging areas for Program components shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials	CSC OP SP	X	1. Include requirements in project plans and specifications. 2. Identify staging area locations that meet the requirements described in the measure. 3. In instances where on-street or on-site staging areas are necessary, implement screening methods.	1. Confirm that measure is included in plans and specifications. 2. Confirm that selected staging areas comply with requirements of the measure. 3. If necessary, confirm that screening methods are implemented appropriately.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to construction.	
Air Quality							
AQ-1	**Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10}** The following controls are required to be implemented by the City or its contractor at all construction sites. ▪ All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover. ▪ All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant. ▪ All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of water during work or by presoaking. ▪ When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained. ▪ All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.) ▪ Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant. ▪ Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday. ▪ Any site with 150 or more vehicle trips per day will prevent carryout and trackout.	CSC JP LSC OC OP PL SP	X	1. Include emission reduction measures into the project plans and specifications. 2. Implement and document emission reduction measures.	1. Confirm emission reduction measures are incorporated into the project plans and specifications. 2. Confirm emission reduction measures are implemented properly.	1. During development of the plans and specifications. 2. During construction.	

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	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
AQ-2	**Implement Enhanced Control Measures for Construction Emissions of PM_{10}** The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM10 impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements). 1. Limit traffic speeds on unpaved roads to 15 mph. 2. Install sandbags or other erosion-control measures to prevent silt runoff. The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason. 1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. 2. Install wind breaks at windward sides of construction areas. 3. Suspend excavation and grading activity when winds exceed 20 miles per hour (mph). 4. Limit the area subject to excavation, grading, and other construction activity at any one time. 5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.	CSC JP LSC OC OP PL SP	X	1. Include enhanced emission control measures into project plans and specifications. 2. Implement and document enhanced emission control measures. 3. The quantitative air analyses shall be based on the types, locations, numbers, and operations of equipment to be used and shall determine whether the combined emissions exceed the SJVAPCD's permitted and unpermitted air quality thresholds.	1. Confirm enhanced emission control measures are included in project plans and specifications. 2. Confirm that enhanced emission control measures are implemented properly.	1. During preparation of plans and specifications. 2. During construction. 3.Prior to or during construction.	
AQ-3	**Implement Control Measures for Operation Emissions of PM_{10} and for Ozone Precursors (ROG and NO_x)** In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified wastewater system sites when required to mitigate significant PM10 and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.	CSC JP LSC OC OP PL SP	X	1. N/A 2. If necessary, and if directed by the City, install equipment with Best Available Control Technology at new or modified facility sites.	1. For new or modified facilities, conduct site-specific air quality analysis to determine if operational emissions will exceed SJVAPCD thresholds. 2. If thresholds will be exceeded, ensure that equipment with Best Available Control Technology is installed.	1. Prior to or during design phase. 2. If necessary, include equipment specifications during development of plans and specifications. Install equipment during construction.	
Biological Resources							
BIO-1	**Perform Surveys for Special-status Plant Species.** Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species. Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site as determined by the botanist. If special-status plants may be directly or indirectly affected, then **Mitigation Measure BIO-2** shall be implemented.	CSC OP	X	1. N/A 2. Provide the City with advance notice of construction schedule and anticipated start date. Support site access for qualified biologist. 3. Do not start construction until	1. Retain a qualified biologist to conduct focused surveys. 2. Ensure qualified biologist conducts focused surveys prior to implementation of construction activities. 3. If special-status plants are identified that may	1. Prior to construction. 2. Prior to construction. 3. Prior to construction.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
				focused surveys have been conducted and, if necessary, **Mitigation Measure BIO-2** has been implemented.	be directly or indirectly affected by activities, ensure that **Mitigation Measure BIO-2** is implemented.		
BIO-2	**Avoid, Minimize and Compensate for Impacts on Special-status Plant Species.** If special-status plants are detected, the City shall implement the following measures to avoid, minimize, and compensate for impacts on special-status plant species: ▪ The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally-sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally-sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally-sensitive area. ▪ If avoidance is not feasible, the Program proponent will consult with either CDFW or USFWS, or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival. ▪ The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the Rare Plant Plan. If success criteria are not met at that time, then mitigation	CSC OP	X	1. If necessary, redesign or modify Program components to avoid or minimize impacts on special-status species. 2. Incorporate requirements prohibiting activities within fenced environmentally-sensitive areas into plans and specifications. 3. Protect any special-status plant species occurrences near a Program component site with environmentally-sensitive area fencing. 4. N/A 5. If directed by the City, implement the Rare Plant Plan prepared by the qualified botanist.	1. Confirm that modified design would avoid or minimize special-status plant species. 2. Confirm that requirements prohibiting activities within fenced environmentally-sensitive areas are included in plans and specifications. 3. Confirm that environmentally-sensitive area fencing is appropriately implemented, if such fencing is necessary to protect special-status species. 4. If avoidance is not feasible, consult with CDFW and/or USFWS to determine feasibility of special-status plant species transplantation. If feasible, retain qualified botanist to prepare Rare Plant Plan. 5. If necessary (i.e., avoidance is not feasible), confirm Rare Plant Plan is appropriately prepared by a qualified individual, and appropriately implemented	1. During design phase. 2. During preparation of plans and specifications. 3. Prior to start of construction. 4. Prior to construction. 5. During and/or after construction. Annual monitoring would occur for 5 years after planting.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	activities and monitoring will continue until success criteria are met. ▪ As part of the Rare Plant Plan, the program proponent, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation, maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.				(including 5-year monitoring requirements).		
BIO-3	**Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.** Prior to implementation of proposed CIPs in areas that could contain habitat for vernal pool branchiopods, the City shall retain a qualified biologist to conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City shall avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.	All Program-level components in grasslands or pastures	N/A	1. N/A 2. If necessary, and if habitat is present on-site, implement buffer zone identified by qualified biologist and/or USFWS to protect habitat.	1. Retain a qualified biologist to conduct surveys for vernal pools and wetlands. 2. If surveys find potential special-status invertebrate species habitat, confirm that an adequate buffer zone is implemented to protect resources.	1. Prior to construction. 2. Prior to initiation of construction activities.	
BIO-4	**Minimize and Compensate for Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.** If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures: ▪ After construction, restore surface topography and drainage to pre-construction conditions; and ▪ Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.	All Program-level components in grasslands or pastures	X	1. If impacts to habitat could not be avoided per **Mitigation Measure BIO-3**, restore surface topography and drainage to pre-construction conditions to minimize impacts. 2. N/A 3. If instructed by the City, implement off-site compensation plan for impacts to vernal pool branchiopods and/or western spadefoot.	1. If impacts could not be avoided per **Mitigation Measure BIO-3**, ensure that surface topography and drainage is restored to pre-construction conditions following construction. 2. Consult with USFWS and CDFW to determine appropriate ratios for off-site compensation for impacts to vernal pool branchiopods and/or western spadefoot. 3. Either implement compensation plan,	1. Following construction. 2. As soon as it is determined that impacts to species/habitat cannot be avoided per **Mitigation Measure BIO-3**. 3. Following consultation with USFWS/CDFW and development of compensation approach.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
					instruct the contractor to do so, or hire a third party to perform the needed work.		
BIO-5	**Avoid Impacts on VELB Habitat.** The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed improvements that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017f). This shall include the following avoidance measures: ▪ If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal. ▪ The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities. ▪ No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. ▪ A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance. ▪ A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and should be discussed with USFWS. ▪ As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March - July). ▪ If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter. ▪ Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a	CSC JP LSC OC OP PL SP	X	1. Incorporate requirement to avoid riparian habitat and/or elderberry shrubs into plans and specifications. 2. Make any necessary accommodations to allow biologist to conduct survey for elderberry shrubs/VELB habitat. 3. Avoid riparian habitat and/or elderberry shrubs whenever possible. If necessary, and VELB habitat is present on-site, implement avoidance measures described in mitigation measure. 4. N/A	1. Confirm that requirement to avoid riparian habitat and/or elderberry shrubs is included in project plans and specifications. 2. Retain qualified biologist to conduct surveys for the presence of elderberry shrubs that may be required. 3. If elderberry shrubs are present, ensure that avoidance measures are implemented. 4. If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to, and during, construction. 4. As soon as it is evident that elderberry shrubs cannot be avoided during construction.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	backpack sprayer or similar direct application method. ▪ Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry. ▪ Erosion control shall be implemented and the affected area shall be re-vegetated with appropriate native plants. If elderberry shrubs cannot be avoided, implement **Mitigation Measure BIO-6**.						
BIO-6	***Implement VELB Compensatory Mitigation, if Necessary.*** The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per **Mitigation Measure BIO-7.** Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS. Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used. Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.	CSC JP LSC OC OP PL SP	X	1. Take all measures to preserve any elderberry shrub encountered that must be removed, such that the shrub may be transplanted per **Mitigation Measure BIO-7**. 2. If on-site mitigation is selected as the compensatory mitigation approach, implement any measures of the mitigation plan to which the contractor is delegated responsibility. 3. N/A	1. Ensure that any elderberry shrub removed during construction is preserved and transplanted per **Mitigation Measure BIO-7,** if feasible. 2. In coordination with USFWS, develop a compensatory mitigation approach following requirements set forth in mitigation measure. Either implement approach or delegate certain responsibilities to contractor. 3. Confirm that compensatory mitigation is satisfactorily provided.	1. During or prior to construction, if elderberry shrubs are encountered. 2. Once it is determined that avoidance of elderberry shrubs is infeasible. Compensatory mitigation shall be provided after approach is confirmed by USFWS. 3. After implementation of compensatory mitigation plan/approach.	
BIO-7	**Transplant Elderberry Shrubs if Avoidance Is Not Feasible.** The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to **Mitigation Measure BIO-6**, the shrub shall be transplanted. Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed:	CSC JP LSC OC OP PL SP	X	1. N/A 2. Under direction of the qualified biologist, transplant elderberry shrubs that cannot be avoided following the guidelines and requirements in the mitigation measure.	1. Retain a qualified biologist to oversee transplantation activities, should such activities be necessary. 2. Confirm that any elderberry shrubs that cannot be avoided are transplanted appropriately in accordance with the guidelines contained in the mitigation measure, and that	1. Prior to construction. 2. After it is determined that elderberry shrubs cannot be avoided.	

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	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
	▪ A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures. ▪ Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the CNDDB. ▪ Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. ▪ Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (www.tcia.org).				exit-hole surveys are reported to CDFW and USFWS.		
BIO-8	**Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.** Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, ponds, and sloughs where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented. ▪ The project proponent will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating western pond turtles. ▪ If a western pond turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site (with authorization from CDFW). ▪ The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat. ▪ If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).	CSC JP LSC OC OP PL SP	X	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been conducted. 3. In coordination with the qualified biologist, relocate any discovered turtles outside of the construction area and erect exclusion fence to prevent re-entry. Implement minimization measures described in the mitigation measure, as directed by the biologist.	1. Retain a qualified biologist to conduct preconstruction surveys for western pond turtle in any suitable habitat. 2. Confirm that surveys are conducted in accordance with the mitigation measure prior to initiation of construction activities. 3. For any turtles discovered in the project area, ensure these individuals are relocated out of the area and that exclusion fence is installed to prevent re-entry. Also, confirm that minimization measures are implemented in the event that turtles or their habitat are present.	1. Prior to construction. 2. Prior to initiation of construction activities. 3. Prior to, or during, construction, if necessary.	
BIO-9	**Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary.** Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed.	CSC JP LSC OC OP	N/A	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been completed. Provide	1. Retain a qualified biologist to conduct the preconstruction surveys for burrowing owls. 2. If burrowing owls are	1. Prior to construction. 2. Prior to construction. 3. Prior to construction / after it is determined that occupied burrows	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented. If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW. If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.	PL SP		any needed support/assistance to the qualified biologist in establishing no-work buffers around occupied burrows, if such burrows are discovered. 3. Provide any needed support/assistance to the qualified biologist and the City in implementing a passive owl relocation plan, if such a plan is deemed necessary.	located on or within 250 feet of the construction site, ensure that no-work buffers are established around occupied burrows in accordance with mitigation measure. Confirm appropriate buffer distances with CDFW. 3. If occupied burrows cannot be avoided, ensure that passive owl relocation techniques are appropriately implemented. Enhance or create burrows in adjacent habitat at a 1:1 ratio one week prior to implementation of passive relocation techniques. Obtain approval from CDFW for owl relocation plan.	cannot be avoided.	
BIO-10	**Avoid and Minimize Impacts on Raptors, including Special-status Species.** The City shall implement the following measures. If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests. If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.	CSC JP LSC OC OP PL SP	X	1. N/A 2. Do not initiate ground- and vegetation-disturbing activities between February 1 and August 31 until a nesting raptor survey has been conducted. If nesting raptors are detected, provide any needed support to the qualified biologist and/or the City in establishing no-disturbance buffers around the nest(s). Do not conduct activities	1. Retain a qualified biologist to conduct the nesting raptor survey. 2. If nesting raptors are detected, ensure that an appropriate 500-foot no-disturbance buffer is established around the nest.	1. Prior to construction. 2. Prior to construction, if necessary.	

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	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
				within the buffer(s) until directed by the biologist.			
BIO-11	**Compensate for Loss of Raptor Foraging Habitat.** The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the study area, such as the Dutchman Creek Conservation Bank. The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program-level components are assumed to be within 1 mile of an active Swainson's hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows: ▪ 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk; or ▪ 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands. The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.	CSC JP LSC OC OP PL SP	X	1. N/A	1. Provide off-site compensation for losses of raptor foraging habitat through one of the methods described in the mitigation measure. Confirm that off-site mitigation is sufficient to compensate for impacts following the ratios outlined in the measure.	1. After the acreage of any permanent impacts to raptor foraging habitat is determined.	
BIO-12	**Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas If Necessary.** The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required. If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned	CSC JP LSC OC OP PL SP	X	1. N/A 2. Do not initiate construction activities during the bird breeding season until surveys have been conducted. Provide any assistance or accommodation necessary to the biologist conducting the survey. 3. In the event that active nests are identified, provide any needed	1. Retain a qualified biologist to conduct the preconstruction surveys for nesting birds. 2. Confirm that surveys are appropriately conducted within 14 days of construction activity that would occur during the bird breeding season. 3. In the event that active nests are identified, ensure that no-	1. Prior to construction. 2. Prior to construction. 3. Prior to and during construction.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.			assistance to the qualified biologist in establishing the no-disturbance buffers. Do not conduct construction activities within the buffers until directed by the biologist.	disturbance buffers are established around nests in accordance with the measure.		
BIO-13	**Avoid and Minimize Impacts on Federally Protected Wetlands.** The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands. If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of **Mitigation Measure BIO-14**. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters, and for all activities less than one acre of disturbance, a Local SWPPP shall be implemented. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.	CSC OP	X	1. N/A 2. Avoid wetlands to the extent feasible. 3. If wetlands cannot be avoided, following construction, restore surface topography and drainage to pre-construction conditions. Additionally, where appropriate, revegetate impacted wetland areas with site-adapted native plant species.	1. If complete avoidance of wetlands is not possible, perform or commission a wetland delineation study for the project site, to be used during implementation of **Mitigation Measure BIO-14**. 2. Confirm that wetlands are avoided during construction activities to the extent feasible. 3. In the event that wetlands cannot be avoided, confirm that wetland areas are restored to pre-construction conditions.	1. Prior to construction. 2. During construction. 3. Following construction.	
BIO-14	**Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.** The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. S19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.	CSC OP	X	1. Do not initiate work in areas defined as water of the U.S. and State until the City has obtained the appropriate regulatory permits. 2. N/A	1. For work within areas defined as waters of the U.S. and State, obtain appropriate regulatory permits. 2. For areas where wetland impacts occur, provide compensatory mitigation by one of the methods described in the mitigation measure.	1. Prior to initiation of construction activities within waters. 2. At a time acceptable to the regulatory agencies.	
BIO-15	**Install Temporary Trench Plates over Open Trenches.**	CSC	X	1. Incorporate	1. Confirm that	1. During preparation of	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.	JP LSC OC OP PL SP		requirement into project plans and specifications. 2. Cover open trenches with trench plates at the end of each work day.	requirement is included in plans and specifications. 2. Confirm that contractor is covering trenches appropriately at the end of each work day.	plans and specifications. 2. During construction.	
Cultural Resources							
CR-1	**Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work** Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive information about the kinds of archaeological materials that could be present at the River Trunk Realignment Project site and other CIP sites, and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.	CSC JP LSC OC OP PL SP	X	1. Coordinate with the City to provide workers information about potential buried cultural resources.	1. Arrange for workers to receive information about potential buried cultural resources	1. Prior to construction	
Greenhouse Gases							
None.							
Hydrology and Water Quality							
HYD/WQ-1	**Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.** The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling, microtunneling, pipe bursting) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include: ▪ Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions. ▪ Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route. ▪ Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below. ▪ Maintain necessary response equipment on-site or at a readily accessible location	OP	X	1. N/A 2. Implement all preventative measures identified in mitigation measure. Make accommodations for geotechnical engineer, archaeologist, and biologist to survey area and make recommendations. Coordinate worker training for field personnel. 3. For any frac-outs that occur, notify the appropriate agencies	1. Incorporate requirements into plans and specifications. 2. Ensure that all preventative measures are implemented. Retain geotechnical engineer and qualified archaeologist and biologist to make recommendations to minimize impacts. Arrange for field personnel to receive training. 3. For any frac-outs that	1. During preparation of plans and specifications. 2. During construction, if necessary.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	and in good working order. ▪ Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003): For a terrestrial frac-out: - Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud. - Based on consultation with CDFW (see below), either: ▪ Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or ▪ Leave the drilling mud in place to avoid potential damage from vehicles entering the area. - Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation. For an aquatic frac-out: - Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location). - Based on consultation with CDFW (see below), either: ▪ If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column. ▪ If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain). ▪ If the fracture becomes excessively large, call in a spill response team to contain and clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site. - If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation. ▪ Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.			and implement the appropriate measures, as specified in the measure.	occur, confirm that proper protocols were followed to contain the frac-out and minimize impacts.		
HYD/WQ-2	**Conduct Flood Flow Study for Benson Lift Station.** Prior to final project design, the City of Modesto and/or its contractor(s) shall conduct a study to ascertain the changes in flows that may be caused by the proposed Benson Lift Station structure in the event of a 100-year flood. The study shall model the change, if any, in inundation area that may be caused by restriction in flood flow passage caused by the structure. If the study determines that the proposed lift station may cause inundation of adjacent or upstream/downstream properties or structures during a 100-year flood event, the City shall develop mitigation measures to address this impact. Feasible mitigation measures may include construction of flood protection structures for potentially affected	LSC #3	N/A	1. N/A 2. Conduct flood flow study of pre- and post-project conditions in accordance with the mitigation measure. If study determines that the lift station may cause inundation of	1. Incorporate requirements into plans and specifications. 2. Ensure that flood flow study meets requirements described in **Mitigation Measure**	1. During preparation of plans and specifications. 2. During preparation of plans and specifications.	

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	Mitigation Measure	Applicable WWMP Improvement: Program-level Components	Applicable WWMP Improvement: River Trunk Realignment Project	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	properties or reconfiguration of the proposed project facilities to reduce impedance or redirection of flows (e.g., elevating critical facilities such as electrical panels and underground pump vault doors to levels above flood stage). Alternatively, the City may identify an alternative site for the proposed lift station that would avoid impacts on flood flows.			adjacent properties during a 100-year flood event, develop feasible mitigation measures.	**HYD/WQ-2**.		
Land Use and Planning							
None.							
Noise and Vibration							
NOI-1	**Employ Noise-Reducing Construction and Maintenance Practices.** The following measures will be implemented by the City or its contractor(s) to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected: ▪ Locate stationary equipment as far as practical from noise-sensitive land uses; ▪ Use electrified or otherwise quieter equipment when practical; ▪ Use sound-control devices on equipment that are more effective than devices originally provided on the equipment; ▪ Use noise-reducing enclosures around noise-generating equipment; and ▪ Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission. When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.	CSC JP LSC OC OP PL SP	X	1. Include noise reduction measures in project plans and specifications. 2. Implement and document noise reduction measures. In coordination with the City, develop haul routes that avoid sensitive receptors to the extent feasible.	1. Confirm that noise reduction measures are included in project plans and specifications. 2. Confirm that noise reduction measures are implemented properly. Work with Contractor to identify haul routes that avoid sensitive receptors.	1. During preparation of plans and specifications. 2. During construction.	
NOI-2	**Limit Nighttime Construction Noise.** When feasible, the City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays unless a special exemption permit allowed by Modesto Municipal Code Section 4-9.103(b)(6) is obtained.	CSC JP LSC OC OP PL SP	X	1. Include measure in project plans and specifications. 2. Do not conduct construction activities in close proximity to a residence outside of the hours specified in the measure. Document compliance with this requirement.	1. Confirm that measure is included in project plans and specifications. 2. Confirm that Contractor follows requirements specified in the mitigation measure.	1. During development of plans and specifications. 2. During construction.	
NOI-3	**Prepare Project-level Noise Analysis for Operation of Proposed Sutter Plant Components** The City or its contractor(s) shall prepare a project-level noise analysis for operation of proposed Sutter Plant components. The detailed noise study should show that appropriate mitigation measures will be implemented to reduce noise levels to less than a 10-dB increase in residential areas. If the analysis demonstrates that significant operational noise impacts are likely to occur, **Mitigation Measure NOI-4** shall be implemented. Alternately, the City can assume that the impacts would be significant and implement **Mitigation Measure NOI-4** without first conducting a noise study under **Mitigation Measure NOI-3**.	SP	N/A	1. N/A 2. Conduct noise study in accordance with **Mitigation Measure NOI-3**.	1. Retain contractor to conduct a noise analysis for the Sutter Plant components. 2. Ensure that noise evaluation meets requirements outlined in **Mitigation Measure**	1. Prior to the design phase of Sutter Plant components. 2. Prior to construction of Sutter Plant components.	

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	Mitigation Measure	Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
					NOI-3.		
NOI-4	**Employ Noise-Reducing Methods During Operations** The City or its contractor(s) shall implement noise-reducing methods so that noise from lift stations does not exceed City or County noise-level standards at adjacent residences. This measure shall also be implemented to achieve City or County noise-level standards for Sutter Plant components if deemed necessary per **Mitigation Measure NOI-3**. Example measures may include, but are not limited to, the following: ▪ Locate stationary equipment as far as practical from noise-sensitive land uses; ▪ Use electrified or otherwise quieter equipment when practical; ▪ Use sound-control devices on equipment that are more effective than devices originally provided on the equipment; ▪ Install permanent barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (terrain and structures) to block sound transmission; ▪ Limit operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas; and ▪ Use sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available.	LSC SP	N/A	1. N/A 2. If necessary, and if directed by the City, implement noise-reducing measures at new or modified facility sites.	1. For new or modified facilities, conduct site-specific noise analysis to determine if County noise-level standards will be exceeded at adjacent residences during facility operations. 2. If standards will be exceeded, implement noise-reducing measures to reduce noise to below standards.	1. Prior to or during the design phase. 2. Incorporate measures during design phase. Implement measures during construction.	
NOI-5	**Implement Vibration Reduction Measures** The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors: ▪ Ensure proper tuning of vibration-causing equipment. ▪ Use vibration damping devices to the extent feasible. ▪ Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings. ▪ Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ Use electric stationary equipment (e.g., generators) where feasible. ▪ Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment,	CSC JP LSC OC OP PL SP	X	1. Include measures in project plans and specifications. 2. Implement and document vibration-reducing measures.	1. Confirm that measures are included in project plans and specifications. 2. Confirm that measures are implemented properly.	1. During development of plans and specifications. 2. During construction.	

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Mitigation Measure		Applicable WWMP Improvement		Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
		Program-level Components	River Trunk Realignment Project				
	particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.						
Population and Housing							
None.							
Transportation and Traffic							
None.							
Utilities and Service Systems							
None.							
Other Statutory Considerations							
None.							

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PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-055

RESOLUTION APPROVING THE 2016 WASTEWATER MASTER PLAN AS COMPLETE

WHEREAS, Council had an approved contract with Carollo Engineers to update the City's Wastewater Master Plan (WWMP), and

WHEREAS, the WWMP consists of two major components, the first focusing on the Wastewater Collection System and the second concentrating on the Wastewater Treatment Systems, and

WHEREAS, the WWMP serves as a roadmap in identifying wastewater infrastructure needed to serve both existing and future users via build-out of the City's planned sewer service area, and

WHEREAS, having a current and comprehensive WWMP is a critical step in keeping ahead of the replacement requirements of an aging infrastructure system and the pressures of expanding urban growth, and

WHEREAS, WWMP has identified a Capital Improvement Program for both Wastewater Collection and Treatment Facilities that will be required for the build-out of the City's Sewer Service Area, and

WHEREAS, Carollo Engineers has completed the 2016 Wastewater Master Plan.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the 2016 Wastewater Master Plan as complete.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-056

PRINT

RESOLUTION ACCEPTING THE MODESTO TRAFFIC SIGNAL SYSTEM MASTER PLAN, AND AUTHORIZING CITY STAFF TO APPLY FOR GRANT FUNDING IDENTIFIED IN THE MODESTO TRAFFIC SIGNAL SYSTEM MASTER PLAN

WHEREAS, the City's traffic signal system has effectively served the City for approximately 25 years and is nearing its useful life, and

WHEREAS, the City would like to update the traffic signal system to a state-of-art system to provide continuous operations and advance future goals of implementing connected and autonomous vehicles (CV/AV) technology with a focus on the Vehicle to Infrastructure component, and

WHEREAS, a state-of-the-art traffic signal system uses the latest infrastructure and computer technology that contains excess volume for hardware improvements and flexible computer software that allows for interchangeability from one technology to another, and

WHEREAS, on September 4, 2018, by Resolution No. 2018-380, Council approved Measure L projects which included Traffic Signal Analysis Study System Wide, and

WHEREAS, the Traffic Signal Analysis Study System Wide project consists of a qualified consultant to improve traffic signal equipment, traffic specifications, Advanced Traffic Management System (ATMS), traffic engineering operations, a 5-year plan, and funding options for the City, and

WHEREAS, on January 22, 2019, by Resolution No. 2019-16, Council approved an agreement with Iteris Inc. as the consultant for the Traffic Signal System Engineering Services Project, and

WHEREAS, on November 26, 2019 Iteris submitted the final Modesto Traffic Signal System Master Plan Document for City acceptance, and

WHEREAS, the Master Plan details out specific Intelligent Transportation System (ITS) elements that the City should be used to upgrade/implement within their traffic signal system infrastructure, and

WHEREAS, The plan provides a 12 year implementation schedule assuming the City is able to fund approximately $3,800,000 per year for a total capital cost of all improvements up to $45,850,000 which includes 25% contingency, and

WHEREAS, the plan identifies potential federal, state and local funding opportunities that would assist the City in procuring and implementing a state of the art traffic signal system.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the Modesto Traffic Signal System Master Plan, and authorizes City staff to pursue all grant funding opportunities identified in the Modesto Traffic Signal System Master Plan.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of January, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Zoslocki

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
for: ADAM U. LINDGREN, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-057

RESOLUTION APPROVING THE AWARD OF PROPOSALS AND AGREEMENT FOR THE HOMELESS EMPLOYMENT LITTER PROGRAM TO READY TO WORK (RTW), FOR A 3 YEAR AGREEMENT, FOR AN ANNUAL COST NOT TO EXCEED $150,000, AND A TOTAL AGREEMENT AMOUNT NOT TO EXCEED $450,000, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, in 2019, the City consistently received approximately 1,345 complaints and requests for service each month for blight and homeless related issues across the community, and

WHEREAS, as a response to these concerns, the City explored innovative strategies to help address these issues, and

WHEREAS, modeled after the Homeless Employment Litter Program (HELP) in the City of Stockton who has partnered with the California Department of Transportation (CalTrans) to employ individuals experiencing homelessness for litter abatement work on State right of ways, and

WHEREAS, the City has entered into a Delegated Maintenance Agreement with CalTrans for litter abatement, as approved by Council by Resolution 2019-512, that authorizes $100,000 from CalTrans to the City of Modesto to support the employment of individuals experiencing homelessness, and

WHEREAS, the City has supplemented this amount by CalTrans with an additional $50,000 to support this program for litter abatement on City right of ways, and

WHEREAS, to fulfill the responsibility of the Delegated Maintenance Agreement, the City intends to enter into a subsequent contract with an organization that

supports no-to-low barrier access to employment for individuals who are experiencing or at-risk of homelessness, and

WHEREAS, the City released a Request for Proposals (RFP) in June and did not receive any submissions, and released an RFP a second time in August, 2019 and proposals were formally opened on October 15, 2019, and

WHEREAS, an interdepartmental committee of City staff recommends the award of Request for Proposals and Agreement for the Homeless Employment Litter Program to Ready to Work (RTW), and

WHEREAS, the scope of work for this contract will include employment support, litter abatement on State right of ways, and litter abatement on City right of ways, and

WHEREAS, the fiscal impact includes an authorized reimbursable amount of up to $100,000 by the California Department of Transportation for State right of ways, and an additional $50,000 from the City's Commercial Litter Abatement Fee for City right of ways, which will be used to supplement the program on City right of ways, for 3-year period not to exceed $450,000.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approving the award of proposals and agreement for the Homeless Employment Litter Program to Ready to Work (RTW), for a 3 year agreement, for an annual cost not to exceed $150,000, and a total agreement amount not to exceed $450,000.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreement in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-058

RESOLUTION APPROVING THE AWARD OF PROPOSALS AND AGREEMENT FOR CONSULTANT SUPPORT WITH ENERGY AND WATER USAGE ANALYSIS TO SAGE ENERGY, WITH A COST NOT TO EXCEED $119,323 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT; AND AUTHORIZING THE CITY MANAGER TO NEGOTIATE, ENTER INTO, AND EXECUTE A MEMORANDUM OF UNDERSTANDING WITH THE COUNTY OF STANISLAUS FOR CONSULTANT SUPPORT FROM SAGE ENERGY AT CITY AND COUNTY SHARED FACILITIES.

WHEREAS, the City of Modesto currently spends approximately seven million dollars ($7,000,000) annually on utility costs, and

WHEREAS, the City and the County of Stanislaus have explored innovative strategies to reduce expenditures, and

WHEREAS, based on a joint procurement process with the County, an interdepartmental committee comprised of City and County staff have selected Sage Energy for support with identifying facilities with the highest amount of potential savings through the installation of Energy Service Company (ESCO) retrofits, and

WHEREAS, the scope of work for this consultant will include a facility feasibility and cost analysis, perform an energy and water resources audit of city facilities, calculate the estimated savings for each facility and support with the procurement of the ESCO, and

WHEREAS, the committee recommends the award of Request for Proposals (RFP) and agreement for consultant services for support with energy and water usage analysis to Sage Energy.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an agreement with Sage Energy for consultant support with energy and water usage analysis with a cost not-to exceed $119,323.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreement in a form approved by the City Attorney.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to negotiate, enter into, and execute a Memorandum of Understanding with the County of Stanislaus for consultant support from Sage Energy at City and County shared facilities.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-059

RESOLUTION APPROVING THE AUDITED FINANCIAL STATEMENTS AND VARIOUS AUDIT REPORTS FOR FISCAL YEAR 2018-2019 AUDITED BY EXTERNAL AUDITORS HUDSON HENDERSON & COMPANY, INC. FOR THE CITY'S COMPREHENSIVE ANNUAL FINANCIAL REPORT, TWELVE COMMUNITY FACILITIES DISTRICTS AND VARIOUS JOINT POWERS AGENCIES

WHEREAS, pursuant to Section 1306 of the Charter of the City of Modesto, the City Council shall employ an independent certified public accountant who, at least annually, shall audit the books and records of the City of Modesto, and submit a final audit and report to the City Council as soon as practicable after the end of the fiscal year and

WHEREAS, the accounting firm of Hudson Henderson & Company, Inc., has completed their audit of the City's financial statements for the fiscal year ended June 30, 2019, and has provided its opinion on these financial statements based on that audit, and

WHEREAS, the independent auditors also audited financial statements of twelve Community Facilities Districts and various Joint Powers Agencies, as required by their respective enabling legislations, and for which the City of Modesto serves as the financial administrator, and

WHEREAS, as part of the City's Fiscal Year 2018-2019 Comprehensive Annual Financial Report, one audit finding was reported related to the accuracy of the City's capital assets and a corrective action plan has been defined by staff, and

WHEREAS, by the Council of the City of Modesto that it hereby accepts the Fiscal Year 2018-2019 annual audit reports for the City of Modesto, Community

Facilities Districts, and various Joint Powers Agencies, as listed in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the Fiscal Year 2018-2019 annual audit reports for the City of Modesto and other Joint Power Agencies, as listed in **Exhibit A**, which is incorporated by reference herein.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-059

RESOLUTION ACCEPTING THE FISCAL YEAR 2018-2019 ANNUAL AUDIT REPORTS

EXHIBIT A

City of Modesto:

1. Comprehensive Annual Financial Report FY 2018-2019
2. GANN Limit Report FY 2018-2019
3. Community Facilities District Number 1998-2 (Carver-Bangs/Pelandale-Snyder)
4. Community Facilities District Number 2000-2 (Coffee-Claratina)
5. Community Facilities District Number 1998-1 (Enterprise Business Park)
6. Community Facilities District Number 2003-1 (Fairview Village)
7. Community Facilities District Number 2007-2 (Kiernan Business Park West)
8. Community Facilities District Number 1997-1 (North Beyer Park)
9. Community Facilities District Number 2002-1 (Northpointe)
10. Community Facilities District Number 2004-1 (Village One #2)
11. Community Facilities District Number 1996-1 (Village One)
12. Community Facilities District Number 2016-2 (Kiernan Business Park East #2)
13. Community Facilities District Number 2007-1 (North Beyer #2)
14. Community Facilities District Number 2016-2 (The Vintage)

Other Agencies:

15. Abandoned Vehicle Abatement (AVA)
16. Modesto-Ceres Fire Protection Agency Financial Statements
17. Tuolumne River Regional Park (TRRP)
18. Transportation Development Agency (TDA)
19. Transportation Development Agency (TDA) National Transit Database (NTD) Reporting Forms

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-060

RESOLUTION APPROVING THE FISCAL YEAR 2018-2019 SINGLE AUDIT REPORT FOR THE CITY OF MODESTO FROM EXTERNAL AUDITORS HUDSON HENDERSON & COMPANY, INC

WHEREAS, the City of Modesto Single Audit reports are federally mandated by the provisions of the Federal Single Audit Act Amendments of 1996 and Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), which requires an audit to be conducted for any non-Federal entity that expends $750,000 or more a year in Federal awards, and

WHEREAS, this audit was conducted by the City's external auditors, Hudson Henderson & Company, Inc., and the main objectives were to ensure a fair presentation of the basic financial statements and the schedule of expenditures of Federal awards, and to also audit the City's internal controls and compliance with legal requirements, with special emphasis on internal controls and legal requirements involving the administration of federal awards expended during the fiscal year, and

WHEREAS, as part of the City's Fiscal Year 2018-2019 Single Audit report, no audit findings were reported for any of the grant funding received from the various federal agencies and all findings reported in the prior fiscal year have had the correction plan implemented.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto that it hereby accepts the Fiscal Year 2018-2019 Single Audit report for the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-061

RESOLUTION APPROVING THE AUDITORS' REPORTS AND SCHEDULE OF PASSENGER FACILITY CHARGE REVENUES AND EXPENDITURES FOR FISCAL YEAR ENDED JUNE 30, 2019, PREPARED BY EXTERNAL AUDITORS HUDSON HENDERSON & COMPANY, INC

WHEREAS, pursuant to Section 1306 of the Charter of the City of Modesto, the City Council shall employ an independent certified public accountant who, at least annually, shall audit the books and records of the City of Modesto, and submit a final audit and report to the City Council as soon as practicable after the end of the fiscal year and

WHEREAS, the accounting firm of Hudson Henderson & Company, Inc. has completed its Auditors' Report and Schedule of Passenger Facility Charge Revenues and Expenditures, and

WHEREAS, the independent audit is applicable to the City's Passenger Facility Charge program at the Modesto City-County Airport for the year ending June 30, 2019, and

WHEREAS, as part of the Independent Auditors' Reports and Schedule of Passenger Facility Charge Revenues and Expenditures, the auditors identified no findings for Fiscal Year Ending June 30, 2019.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the Independent Auditors' Reports and Schedule of Passenger Facility Charge Revenues and Expenditures for Fiscal Year Ended June 30, 2019 for the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-062

RESOLUTION APPROVING THE FISCAL YEAR 2018-2019 AUDITOR'S REPORT ON COMPLIANCE OF THE MEASURE L: LOCAL ROADS FIRST TRANSPORTATION FUNDING MEASURE

WHEREAS, in November of 2016 the voters of Stanislaus County approved the county wide, 25-year, half-cent sales tax increase for the Local Roads First Transportation Funding Measure, known as Measure L. As part of the safe guards built into the expenditure plan an annual independent audit and annual reporting must be completed, and

WHEREAS, on December 12, 2017, by resolution 2017-505, Council approved the Measure L master funding agreement with the Stanislaus Council of Governments (StanCOG) which requires an annual independent audit of all of recipients Measure L accounts which audit shall be conducted at recipients' sole cost and expense, and

WHEREAS, for the audit related to FY 2018-2019 the City received information from StanCOG that they would be continuing to conduct the annual audit and that it would be at the expense of StanCOG as part of the 1% allowable administrative expenses within the Measure L ordinance, and

WHEREAS, the accounting firm of Hudson Henderson & Company, Inc., was selected by StanCOG to conduct the Fiscal Year 2018-2019 audit report, and

WHEREAS, as part of the City's Fiscal Year 2018-2019 Measure L Program Audit, the accounting firm verified the revenues and expenditures, fund balances, and that the Maintenance of Effort requirement was met, and

WHEREAS, Hudson Henderson & Company, Inc. issued the final independent auditor's report of the Measure L program for the fiscal year ending in June 30, 2019. In

addition, the firm issued a letter to the Policy Board of Stanislaus Council of Governments with the final report. Neither the final report, nor the letter to StanCOG contained any findings for the year ending June 30, 2019.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto that it hereby accepts the Fiscal Year 2018-2019 Auditor's Report on Compliance of the Measure L: Local Roads First Transportation Funding Measure.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-063

RESOLUTION APPROVING THE SECOND AMENDMENT INCREASING THE AGREEMENT WITH HUDSON AND HENDERSON INC., FRESNO, CA FOR THE FURNISHING OF AUDITING SERVICES FOR THE FINANCE DEPARTMENT, ACCOUNTING DIVISION BY $33,600 FROM $735,550 TO A NEW TOTAL AMOUNT OF $769,150 OVER FIVE (5) YEARS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS, under Section 1306 of the Modesto City Charter requires the Council to employ independent auditors to perform an annual financial audit of the financial records managed by City employees, and

WHEREAS, the City requests an external auditor to express an opinion on the fair presentation of its basic financial statements and schedule of expenditures from federal awards in conformity with generally accepted accounting principles, the provisions of the Federal Single Audit Act Amendments of 1996 and Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), and

WHEREAS, on February 13, 2018 under Resolution 2018-72, Council approved awarding the audit services contract to Hudson and Henderson for an estimated annual cost of $147,110 and over five years of $735,550, and

WHEREAS, on April 9, 2019, the First Amendment was approved by the City Manager which had no financial impacts to the contract but to acknowledge the additional audit required by Federal Transit Administration (FTA) for the Federal Funding Allocation Data report, and

WHEREAS, with the City handling all financial records for the Community Facility Districts (CFD), the City is required to have an audit and preparation of the financial statements when any new CFD begins to be tax levied, and

WHEREAS, Hudson and Henderson provided an estimated annual cost of $2,200 for the additional CFD, which will be added to the second amendment being proposed for the remaining three (3) fiscal years of this contract; and

WHEREAS, the City anticipates up to three additional CFDs t will be tax levied during the term of this contract at an annual additional cost not to exceed $3,000 per CFD for an annual increase of $11,200 per year, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid. However, exceptions to the formal bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in his or her discretion, determines that a process other than the formal bid procedure set for in Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality." and this amendment confirms to this code due to the additional cost being the lowest compared to all other proposals for the original award.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Second Amendment increasing the agreement with Hudson and Henderson Inc., Fresno, CA for the furnishing of auditing services for the Finance Department, Accounting Division by $33,600 from $735,550 to a new total amount of $769,150 over five (5) years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the amendment to the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-064

RESOLUTION APPROVING THE AWARD OF BID AND SERVICE AGREEMENT FOR THE IRRIGATION PARTS & FITTINGS TO NORMAC, INC. OF MODESTO, CA, FOR A TWO-YEAR AGREEMENT WITH THREE ONE-YEAR EXTENSION OPTIONS, FOR AN ESTIMATED ANNUAL COST NOT TO EXCEED $69,000 IN THE FIRST YEAR AND TOTAL AMOUNT NOT TO EXCEED $370,000 OVER FIVE YEARS TO ALLOW FOR POTENTIAL CPI INCREASES FOR YEARS 3-5 AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, Parks, Recreation and Neighborhoods maintain 76 parks throughout the city with over five hundred acres of turf, and

WHEREAS, Parks, Recreation and Neighborhoods use the materials such as booster pumps, dresser parts, pipes, sprinkler, etc.; when repairing and maintaining City's Parks, and

WHEREAS, city Parks equates to approximately 70% of the annual on annual expenditure on irrigation parts and fittings, and

WHEREAS, Public Works and Utilities Department also uses irrigation and fittings and their work historically represents 20% of what is spent on irrigation parts and fittings to maintain City landscaping basins, lift stations, customer job sites and overall general maintenance for City, and

WHEREAS, on November 12, 2019, bids were received, four companies chose to respond, Normac Inc, Ewing Irrigation, Western Oilfields Supply Company dba Rain for Rent; and Site One Landscape Company, with Normac, Inc. being the low bidder, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures, and

WHEREAS, an award of bid RFB 1819-23 and agreement for the purchase irrigation parts and fittings to Normac, Inc. in Modesto, CA conforms to the Modesto Municipal Code because Normac Inc. providing the overall lowest responsive and responsible bid.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the award of bids for Citywide use for the purchase of Irrigation Parts & Fittings to Normac Inc, Modesto, CA for a two (2) year agreement with three (3) one year extension options at the sole discretion of the City, for an estimated annual cost not to exceed $69,000 in the first year and total amount not to exceed $370,000 over five years to allow for potential CPI increases for years 3-5.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to execute the agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-065

RESOLUTION APPROVING AN UPDATE ON THE POLICY FOR DISCONTINUATION OF RESIDENTIAL WATER SERVICE FOR NONPAYMENT AND UPDATING THE UTILITY BILLING DELINQUENCY TIMELINE INCREASING THE AMNESTY PERIOD FROM 45 DAYS TO 60 DAYS FOR DELINQUENT RESIDENTIAL CUSTOMERS BEFORE SERVICES ARE DISCONNECTED FOR NONPAYMENT IN COMPLIANCE WITH SENATE BILL NO. 998 EFFECTIVE FEBRUARY 1, 2020

WHEREAS, on September 28, 2018 the Governor of the State of California signed into law Senate Bill No. 998, Discontinuation of Residential Water Service: Urban and Community Water Systems also knowns as the Water Shutoff Protection Act, and

WHEREAS, compliance with the new legislation requires a written policy on the discontinuation of water service to certain types of residences for nonpayment, making that policy available in prescribed languages on the City's website effective February 1, 2020, and

WHEREAS, the policy must include but is not limited to the following key components: a formal mechanism for a customer to contest or appeal a bill, a formal payment plan policy, a residential customer may not be disconnected for nonpayment until a payment has been delinquent for at least sixty (60) days, the policy must be posted on the City's website, the City shall mail notices regarding impending discontinuation for nonpayment seven (7) days prior to discontinuation as well as mail a notice to Occupant at service address when service address differs from mailing address, when unable to make contact by phone or mail the City must make good faith effort to leave notice posted a property and the City must provide information on how to restore service in the event a discontinuation for nonpayment occurs, and

WHEREAS, in conjunction with the City Attorney's office the Utility Billing Division has created a new Discontinuation of Residential Water Service for Nonpayment policy to be posted on the City website as of February 1, 2020 and

WHEREAS, the Utility Billing Division will make all necessary changes to internal practices as described above to ensure the City is adhering to all aspects of Senate Bill No. 998 as of February 1, 2020.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves this update on the policy for Discontinuation of Residential Water Service for Nonpayment and updating the utility billing delinquency timeline increasing the amnesty period from 45 days to 60 days for delinquent residential customers before services are disconnected for nonpayment in compliance with Senate Bill No. 998 effective February 1, 2020.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-066

RESOLUTION APPROVING A MEMORANDUM OF UNDERSTANDING BETWEEN THE MODESTO FIRE DEPARTMENT AND STANISLAUS COUNTY (OPERATIONAL AREA ADMINISTRATOR) FOR THE USE OF FIRE RADIO COMMUNICATION EQUIPMENT, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE MOU

WHEREAS, the need to upgrade the fire department's radio communication has become more critical in recent years; and

WHEREAS, in June 2018, the fire department's main communication channel suffered a critical failure; and

WHEREAS, City Council approved a plan to upgrade MFD's radio system in August 2018, by Resolution 2018-356; and

WHEREAS, Stanislaus County received a grant for a countywide fire communication needs, through Assembly Bill 109; and

WHEREAS, effective February 4, 2020, MFD will be allowed to use the communication equipment purchased by Stanislaus County with the grant funds; and

WHEREAS, no funds will be transferred between any agency under this MOU; therefore, the General Fund budget for the Fire Department is not impacted.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Council hereby approves the Memorandum of Understanding between the Modesto Fire Department and Stanislaus County (operational area administrator) for the use of fire radio communication equipment.

BE IT FURTHER RESOLVED that the City Manager or designee is hereby authorized to execute the MOU, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-067

RESOLUTION APPROVING A PURCHASE ORDER FOR THE PURCHASE OF A CELL PHONE DATA EXTRACTION PRODUCT FROM CELLEBRITE FOR A TOTAL AMOUNT NOT TO EXCEED $75,802, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO ISSUE THE PURCHASE ORDER

WHEREAS, the Modesto Police Department utilizes various technology strategies to achieve the goals of the department and protect the community; and

WHEREAS, the ability to extract and analyze data from cellular devices is crucial in almost all criminal investigations; and

WHEREAS, in the past three years, mobile operating system developers and cell phone manufacturers have been increasing security on cellular devices; and

WHEREAS, the ability of law enforcement agencies to acquire data from a cell phone has become increasingly difficult; and

WHEREAS, two years ago, Cellebrite developed a way to overcome the security and encryption systems for most cellular devices; and

WHEREAS, the Modesto Police Department seeks to purchase a cell phone data extraction product form Cellebrite; and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, in excess of $50,000 to follow formal bid procedures. However, MMC 8-3.204(b) provides that a purchase may be exempted from the City's formal bidding requirement where the Purchasing Agency's requirements can be met solely by a single article or process; and

WHEREAS, here, Cellebrite, is the only company that provides the service of extracting data from devices at the security level necessary. Therefore, staff recommends

the purchase of a cell phone data extraction product with Cellebrite should be exempt from the formal bidding procedures in accordance with Modesto Municipal Code 8-3.204(b) since Cellebrite is the sole provider of this software.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a purchase order for the purchase of a cell phone data extraction product from Cellebrite, for a total amount not to exceed $75,802.

BE IT FURHTER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to issue the Purchase Order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-068

RESOLUTION ACCEPTING THE STANDIFORD AVENUE PAVEMENT REHABILITATION PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $2,714,108 TO KNIFE RIVER CONSTRUCTION, OF STOCKTON, CA

WHEREAS, in November of 2016 the voters of Stanislaus County approved the county wide, 25-year, half- cent sales tax increase known as Measure L, and

WHEREAS, on July 5, 2017, by Resolution No. 2017-269, Council approved a list of proposed projects to be funded with Measure L tax proceeds in Fiscal Year 2017-18 and necessary budget adjustment, and

WHEREAS, on March 13, 2018, by Resolution No. 2018-124, Council amended the approved list of projects including the Standiford Avenue Pavement Rehabilitation Project to be funded with Measure L tax proceeds in Fiscal Year 2017-2018 and necessary budget adjustments, and

WHEREAS, Standiford Avenue Pavement Rehabilitation project begins at Dale Road and proceeds east to approximately Sherwood Avenue, the length of the project is 2.97 miles, and

WHEREAS, project improvements include roadway resurfacing and reconstruction, new signage and striping, ADA upgrades, storm drainage system improvements, and signal upgrades (including detection cameras), and

WHEREAS, bids were advertised on May 8, 2018, and

WHEREAS, three bids were publicly opened on June 5, 2018, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and Knife River Construction of Stockton, CA was the apparent low bidder, and

WHEREAS, on June 26, 2018, by Resolution No. 2018-265, Council awarded a contract to Knife River Construction, of Stockton, CA for the construction of the Standiford Avenue Pavement Rehabilitation Project in the amount of $2,591,417, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of August 13, 2018 and all contract work was completed by June 1, 2019, and

WHEREAS, the total project costs were $850,605 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $959,346 which included $847,317 for the construction contract and contingency with Knife River Construction, and

WHEREAS, there were four change orders resulting in an overall increase of $122,691 for change order work, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Standiford Avenue Pavement Rehabilitation Project is hereby accepted as complete from contractor Knife River Construction, of Stockton, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $2,714,107, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-069

RESOLUTION ACCEPTING THE CLAUS ROAD PAVEMENT REHABILITATION PROJECT, STPL-5059(195) AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $1,677,264 TO DSS COMPANY, DBA KNIFE RIVER CONSTRUCTION, OF STOCKTON, CA

WHEREAS, on June 25, 2013, by Ordinance No. 3587-C.S., Council adopted the 2013-2014 Annual and Multi-Year Operating Budgets and the 2013-2014 Capital Improvement Program for the City of Modesto and the related inter-fund transfers which provided funding for the project, and

WHEREAS, this project rehabilitated deteriorated pavement on Claus Road from Gomes Road to 700' north of Briggsmore Avenue. This road segment was milled grinded and overlayed with new asphalt pavement surface. Other improvements include installation of ADA curb ramps, a Class IV bicycle facility, traffic signal modifications, vehicle detection cameras and new traffic striping, and

WHEREAS, bids were advertised on February 27, 2018, and

WHEREAS, bids were publicly opened on April 3, 2018, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and DSS Company, dba Knife River Construction of Stockton, CA was the apparent low bidder, and

WHEREAS, on May 22, 2018, by Resolution No. 2018-176, Council awarded a contract to DSS Company, dba Knife River Construction of Stockton, CA for the construction of the Claus Road Pavement Rehabilitation Project, STPL-5059(195) in the amount of $1,588,636, and

WHEREAS, the contractor received the Notice to Proceed, with a first working day of June 25, 2018. All contract work was completed by September 9, 2019, and

WHEREAS, the total project costs were $2,061,551 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $2,143,750 which included $1,715,726 for the construction contract and contingency with DSS Company, dba Knife River Construction, and

WHEREAS, there were six change orders resulting in an overall increase of $88,628 for change order work, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Claus Road Pavement Rehabilitation Project is hereby accepted as complete from contractor DSS Company, dba Knife River Construction of Stockton, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $1,677,264, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-070

RESOLUTION APPROVING AN INCREASE TO ALL MUNICIPAL PARKING VIOLATION FINES AND UPDATING THE PARKING VIOLATION FINE SCHEDULE.

WHEREAS, in July of 1993Assembly Bill 408 became state law, establishing procedures for the decriminalization of parking violations and transferred the responsibility of setting fines, processing, collection, and the adjudication of parking violations from the courts to the issuing agencies, and

WHEREAS, the state legislature established procedures in Section 40203.05 of the California Vehicle Code which provided for the City Council of the jurisdiction where the notice of violation is issued to establish a schedule of parking fines for parking violations and late payment penalties, and

WHEREAS, the City of Modesto issues two types of parking violations, one for municipal parking violations as established by the Modesto Municipal Code (MMC) and a second type based on California Vehicle Code (CVC) that can be issued on a notice of parking violation, and

WHEREAS, when a notice of parking violation for parking, stopping, or standing is collected all issuing agencies are required to remit to the County Treasurer a total of $12.50 per citation in State in County surcharges which are then allocated for various court and jail funds, and

WHEREAS, in November of 1991 Council approved Resolution No. 91-705 for an increase to municipal parking violations in order to recuperate the State-mandated surcharge, and

WHEREAS, in June of 2005 Council approved Resolution No. 2005-583 increasing fines for parking violations to deter repeat offenders , and

WHEREAS, on June 2, 2009 Council approved Resolution No. 2009-239 authorizing the City Manager to adjust the fine schedule for parking violations when necessary to incorporate changes in the fees mandated by the State or County and collected by the City , and

WHEREAS, it is critical the City recover the costs of the surcharges imposed by the State and County in addition to capturing the costs of enforcement, and

WHEREAS, staff conducted a survey of parking violation fines for surrounding agencies and found many of the City's current parking violation fines to be well below other comparable cities, and

WHEREAS, the survey uncovered miscellaneous MMC violations with no established fine amount, and

WHEREAS, based on this survey staff is recommending adoption of an updated parking violation fine schedule to include fines for previously established MMC violations, to increase all MMC and CVC fines related to parking, stopping, or standing bringing them up to the average fine amount of surrounding agencies with an effective date of May 4, 2020 and to include an annual increase on the base fine amount for inflation based on Consumer Price Index (CPI), and

WHEREAS, staff will utilize the next 90 (ninety) days to notify the public of the fine increases in advance of fine increases going into effect, and

WHEREAS, the annual increase for inflation will be limited to nor more than the annual increase listed in the local Consumer Price Index for the State of California for the

Bay Area for the month of December of the prior year and will be effective January 1st of each year, and

WHEREAS, staff is recommending the City update the methodology to collect all State and County mandated surcharges as part of the City's approved parking violation fine amounts, and

WHEREAS, the City Manager will be authorized to approve the adjustment of the fine schedule for parking violations for the annual CPI increase and when necessary to incorporate changes in the fees mandated by the State and/or County and collected by the City without further Council action, and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves agreements an increase to all municipal parking violation fines and updating the parking violation fine schedule as shown on the **attached** City of Modesto Parking Violation Fine Schedule, which shall take effect 90 (ninety) days after adoption of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES: Councilmembers: Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki,

NOES: Councilmembers: Mayor Brandvold

ABSENT: Councilmembers: Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

City of Modesto Parking Violation Fine Schedule

MMC	PARKING VIOLATION DESCRIPTION	FINE AMOUNT
3-2.810 3-2.809	Removal of Chalk Marks	$ 71.00
3-2.812 3-2.810	Obstructing Intersections and Crosswalks	$ 55.00
3-2.813 3-2.811	Blocking Roadway Prohibited	$ 55.00
3-2.814 3-2.812	Leaving Unattended Vehicle	$ 51.00
3-2.1002	Use of Streets for Storage of Vehicles Prohibited (72 Hour Parking)	$ 108.00
3-2.1003 (b)	Parking for Certain Purposes Prohibited	$ 56.00
3-2.1004	Standing for Loading Only in Alleys (passengers 3 min and materials 20 min)	$ 56.00
3-2.1005A	Parallel Parking Parked Wrong Way	$ 57.00
3-.2.1005B	Parallel Parking (18) inches	$ 54.00
3-2.1005C	Angle Parking (18) inches	$ 54.00
3-2.1006	Parking of Commercial Vehicles in Residential Districts	$ 127.00
3-2.1007	Stopping or Parking Prohibited (Signs Required)	$ 61.00
3-2.1008	Emergency Signs - No Parking (a,b)	$ 57.00
3-2.1009	No Parking on Traffic Counters	$ 58.00
3-2.1010	Driving or Parking on Parks, Playgrounds and City Property (a,b)	$ 58.00
3-2.1010C	Parked on Sidewalk	$ 63.00
3-2.1011	Parked On Private Property without Consent Prohibited	$ 70.00
3-2.1017	Parked in Fire Lane	$ 90.00
3-2.1101	(1), (2), (3),(4) Curb Markings - Zone Parking-Red, Yellow, White, Green	$ 57.00
3-2.1101.5	No Stopping /Parking Blue Zone	$ 368.00
3-2.1104	Stopping, Standing for Loading or Unloading Only	$ 62.00
3-2.1105	Stopping, Standing or Parking of Vehicles in Roadway	$ 61.00
3-2.1201	Parking Ristricted or Prohibited	$ 60.00
3-2.1202	Overtime Parking Time Limited	$ 52.00
3-2.1203	Parking Prohibited at Certain Times on Certain Streets (a, b,c)	$ 56.00
3-2.1204	Parking Out of Space (on street)	$ 44.00
3-2.1205	Vision Obstruction - Parking Prohibited (Signs Required)	$ 71.00
3-2.1206	Roadway Parking Prohibited	$ 70.00
3-2.1301	Truck Routes (a,b)	$ 96.00
3-2.1503	Method of Parking - Parked Backed into Metered Stall (on-street)	$ 51.00
3-2.1504	Overtime Parking in Meter Zone (a,b)	$ 53.00
3-2.1511	Parking Commercial Veh In Meter Zone	$ 71.00
3-2.1605	Obedience to Signs Posted	$ 51.00
3-2.1607	City Reserved Parking - Off Street Parking Lots	$ 52.00
3-2.1608	Parking In Designated Spaces (off street)	$ 57.00
3-2.1904	No Residential Parking Permit (a)	$ 61.00
3-2.1904	Residential Parking Permit Misuse (c,d, e)	$ 500.00
3-2.2006	Oversized Vehicles - Parking Prohibited	$ 83.00
3-2.2007	Trailers-Parking Prohibited (a) Unhitched (b)	$ 137.00
3-2.2008	Oversized Vehicles w/o Permit	$ 129.00
CVC	**PARKING VIOLATION DESCRIPTION**	**FINE AMOUNT**
22500 (e)	Blocking Driveway	$ 67.00
22500 (l)	Lowered Curb Wheelchair Access	$ 345.00
22500 (a)	Parking within an Intersection	$ 198.00
22500 (i)	Parked in Bus Zone	$ 263.00
21116 (a)	Parked on Levee or Canal	$ 61.00
22500 (h)	Double Parked	$ 51.00
22511.1 (a-b)	Parked in Charging Electric Vehicle Space	$ 126.00
22514 (a)	Fire Hydrant	$ 80.00
22507.8 (a-c)	Violation of Disabled Parking Provisions	$ 370.00
22522	Parked Near Sidewalk Access Ramp for Disabled (sign or paint required)	$ 350.00
21211(b)	Bike Lane	$ 73.00

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-071

RESOLUTION APPROVING THE TRANSITION OF PARKING ENFORCEMENT RESPONSIBILITIES FROM THE POLICE DEPARTMENT TO THE PUBLIC WORKS DEPARTMENT, PARKING SERVICES DIVISION AND APPROVING ONE FULL-TIME PARKING ENFORCEMENT OFFICER FOR AN ESTIMATED ANNUAL COST OF $54,132

WHEREAS, city staff has explored strategies to improve the management, enforcement, and availability of parking in Downtown Modesto since 2006 and within this timeframe there have been several opportunities for the public to offer recommendations for improvements in these areas, and

WHEREAS, the most recent opportunity is the current Downtown Master Plan engagement process which included various opportunities for residents to engage and offer recommendations to improve downtown and one of the prevalent concerns from these activities was the availability of parking in the downtown core, despite the data showing an abundance of parking in the garages across downtown, and

WHEREAS, this analysis is consistent with the findings of the various consultant reports that have been prepared for City Council, which refer to limited on-street parking and virtually empty parking garages, and

WHEREAS, this initial phase of a larger Citywide Parking Strategy is specifically intended to improve parking enforcement that currently involves three city departments: Police, Finance and Public Works. Parking operations, including maintaining and monitoring all seven surface lots and three garages, is managed by Public Works, and

WHEREAS, the Finance Department provides support with adjudication, collections and citation processing , and the Police Department provides support with

three part-time Police Assistants who perform parking enforcement under general supervision of a Police Sergeant, and

WHEREAS, to streamline the City's workflow, increase parking availability, and ensure fiscal sustainability staff recommends the consolidation of the parking enforcement program and parking services division under the umbrella of the Public Works department, in conjunction with the Finance Department's continued management of collections and adjudication , and

WHEREAS, the transition will require an expansion of enforcement staff to include one full-time Parking Enforcement Officer and a rotation of six part-time Parking Assistants that will cost $114,972 on an annual basis beginning on July 1, 2020, and

WHEREAS, under this scenario, the Parking Enforcement Officer and Parking Assistants are projected to work a total of 118 hours per week, which will translate to projected revenues of $901,837 based on a conservative increase of 50% in citation issuance in Fiscal Year 2020-2021, which is an increase of approximately $400,000 compared to Fiscal Year 2018-2019.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the transition of parking enforcement responsibilities from the Police Department to the Public Works Department, Parking Services Division.

BE IT FURTHER RESOLVED by the Council of the City of Modesto that it hereby approves the allocation of one full-time parking enforcement officer for an estimated annual cost of $54,132.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 4th day of February, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ah You

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
Jose Sanchez, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-072

RESOLUTION OF THE CITY OF MODESTO REQUESTING FROM THE STANISLAUS COUNTY BOARD OF SUPERVISORS TO CONSOLIDATE THE CITY OF MODESTO GENERAL MUNICIPAL ELECTION TO BE HELD ON NOVEMBER 3, 2020, REQUESTING THE SERVICES OF THE REGISTRAR OF VOTERS, ELECTIONS DIVISION OF THE COUNTY OF STANISLAUS TO CONDUCT THE ELECTION ON BEHALF OF THE CITY OF MODESTO AND THE MODESTO CITY SCHOOLS BOARD

WHEREAS, the City of Modesto will hold an election on November 3, 2020 for the purpose of electing the City of Modesto Mayor and three (3) Councilmembers (Districts 1, 3 and 6); and three (3) Modesto City Schools Board members (Trustee Areas 2, 4, and 6); and

WHEREAS, the City of Modesto respectively requests that the Stanislaus County Registrar of Voters, Elections Division, furnish all other services, facilities, supplies, equipment, etc. necessary for the election; and

WHEREAS, the City of Modesto City Clerk's Office will be responsible for issuing/collecting election information, publishing the Notice of Election and the Nominees for Public Office; and

WHEREAS, the City of Modesto will reimburse the County of Stanislaus for all actual costs for services performed to conduct the municipal election on behalf of the City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby formally requests from the Board of Supervisors of Stanislaus County, California, to consolidate the City of Modesto's Municipal Election with the County's General Election to be held on November 3, 2020, requesting the services of the Registrar

of Voters, Elections Division of the County of Stanislaus to conduct the election on behalf of the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-073

RESOLUTION OF THE CITY OF MODESTO REQUESTING FROM THE STANISLAUS COUNTY BOARD OF SUPERVISORS TO CONSOLIDATE THE CITY OF MODESTO RUN-OFF ELECTION FOR MAYOR BY MAIL, IF NECESSARY, TO BE HELD ON FEBRUARY 2, 2021, REQUSETING THE SERVICES OF THE REGISTRAR OF VOTERS, ELECTIONS DIVISION OF THE COUNTY OF STANISLAUS TO CONDUCT THE RUN-OFF ELECTION FOR MAYOR BY MAIL ON BEHALF OF THE CITY OF MODESTO

WHEREAS, the City of Modesto will hold a run-off election for Mayor by Mail, if necessary, to be held on February 2, 2021; and

WHEREAS, the City of Modesto respectively requests that the Stanislaus County Registrar of Voters, Elections Division, furnish all other services, facilities, supplies, equipment, etc. necessary for a Run-Off Election for Mayor by Mail, if necessary, to be held on February 2, 2021; and

WHEREAS, the City of Modesto City Clerk's Office will be responsible for issuing/collecting election information, publishing the Notice of Election and the Nominees for Public Office; and

WHEREAS, the City of Modesto will reimburse the County of Stanislaus for all actual costs for services performed to conduct the municipal election on behalf of the City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby formally requests from the Board of Supervisors of Stanislaus County, California, to conduct the City of Modesto's Run-Off Election for Mayor by mail, if necessary, requesting the services of the Registrar of Voters, Elections Division of the County of Stanislaus to conduct the run-election on behalf of the City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-074

RESOLUTION AMENDING FISCAL YEAR 2019-2020 ANNUAL OPERATING AND CAPITAL IMPROVEMENT FUND BUDGETS

WHEREAS, a financial analysis has been completed and it has been determined that a budget adjustment is required to the Annual and Capital Improvement Budgets of the City of Modesto for Fiscal Year 2019-20.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Fiscal Year 2019-20 Annual Operating and Capital Improvement budget as shown in **Exhibit A**, which is **attached** hereto and incorporated by reference herein.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

FISCAL YEAR 2019-20

FINANCE

- A budget adjustment is needed to increase the interfund transfer from fund 4210-Sewer Operations Fund to the debt service fund 4245-State Revolving Loan (Tertiary Treatment Funding) by $81,000, to a total fiscal year 2020 budget of $8,245,729. The Sewer Operations Fund provides funding annually to the Tertiary debt service fund from which payments on the State Revolving Loan are made. This transfer adjustment will allow for the true-up of the balance of the debt service fund on June 30, 2020, based on projected debt service expense requirements during fiscal year 2020.

- A budget adjustment is needed to increase Professional Services expense in fund 4245-State Revolving Loan (Tertiary Treatment Funding), Cost Center 12186-FIN – Wastewater State Revolving Loan Debt (Tertiary Plant), by $654,166. This fund is the debt service fund for the State Revolving Loan-Tertiary debt. This budget increase will allow for the payment of the fiscal year 2020 service charge expense as per the debt service schedule that was not fully incorporated into the original budget.

PUBLIC WORKS

- A budget adjustment in the amount of $213,946 is needed to create and establish the budget for non-capital project 101198 – "PW-MADAR-CAD/AVL". This project is for the purchase, installation, and configuration of new computer-aided dispatch/automated vehicle location system for the City's complementary paratransit system, Modesto Area Express, and will serve individuals with disabilities and seniors age 65 or older. Funding will be provided from Local Transportation Funds (LTF) awards (4510 – Bus Fixed Route Fund)

- A budget adjustment in the amount of $150,000 is needed to fully fund the replacement of the roof at the Amtrak Station in project 101187 – "Amtrak Roof Repair/Replacement". Funding will be provided from Local Transportation Funds (LTF) awards (4510 – Bus Fixed Route Fund)

URGENT ITEMS NOT REVIEWED BY FINANCE COMMITTEE

COMMUNITY AND ECONOMIC DEVELOPMENT

- A budget adjustment in the amount of $3,551,706 is necessary to establish the transfer out from Project 100243 - CDBG NSP2 Program Income to Fund 1130 – CDBG Direct Program – Program Income and to establish the revenue budgets in the operating and

project budgets for this allocated amount. The US Department of Housing and Urban Development (HUD) has authorized a transfer of program income from the Neighborhood Stabilization Program 2 (NSP2) to the Community Development Block Grant (CDBG) Program for the City of Modesto in the amount of $3,551,706. Of this amount, $2,600,000 will need to be budgeted in revenues for Project #101215 - Kansas House Project Acquisition, with an additional $250,000 budgeted for Admin Support associated with this project. The remaining $701,706 will be used to further projects in accordance with the approved City CDBG Annual Action Plan

FIRE DEPARTMENT

- A budget adjustment in the amount of $113,500 is necessary to establish a transfer from the Station 1 Roof Replacement and Repainting project (101065) to the Fire Station 5 Remodel project (101234) and to establish the expense appropriations for the remodel of the kitchen, office and corridor of Fire Station 5.

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-075

RESOLUTION APPROVING AN AGREEMENT WITH GEOCON CONSULTANTS INC. (GEOCON) FOR REMEDIAL ACTION PLAN MONITORING DURING CONSTRUCTION FOR THE STATE ROUTE 132 WEST FREEWAY/EXPRESSWAY – PHASE 1 PROJECT IN AN AMOUNT OF $197,684 FOR THE IDENTIFIED SCOPE OF SERVICES, PLUS $19,768 FOR ADDITIONAL SERVICES (IF NEEDED), FOR AN AGREEMENT TOTAL NOT TO EXCEED $217,452, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the purpose of the State Route 132 West Freeway/Expressway - Phase 1 Project (Project) is to improve regional and interregional circulation, relieve traffic congestion along existing State Route 132, and enhance safety and operations for the existing and proposed transportation network, and

WHEREAS, a construction contract was awarded to Bay Cities Paving and Grading (Bay Cities) on September 24, 2019 per Resolution 2019-439 and a Notice to Proceed was issued on December 10, 2019, and

WHEREAS, the California Department of Transportation (Caltrans) and the Department of Toxic Substance Control (DTSC) have an environmental requirement to properly handle and contain Barium Containing Stockpiles (BCS) that exist on the new SR132 roadway alignment, and

WHEREAS, a Remedial Action Plan (RAP) was developed during the environmental phase of the Project. This RAP was further developed into a Remedial Design and Implementation Plan (RDIP) during final project design. The RDIP serves as the roadmap for the prime construction contractor to properly handle and contain the BCS, and

WHEREAS, during this process, Caltrans hired Geocon to design and develop the Project RAP/RDIP so that it could meet its commitment to the DTSC. Further, it was Caltrans' intention to engage Geocon to provide monitoring services during construction to ensure that the toxic materials were handled appropriately, however Caltrans recently notified the City that because of funding issues, they would be unable to hire Geocon, and

WHEREAS, Caltrans has requested that the City assist with its obligation to engage the compliance monitoring via Geocon. Caltrans has notified the City that no BCS activities can occur without compliance monitoring. Due to the tight timeline for procurement, City staff does not have time to engage a consultant via its standard procurement protocol, thus the Project may experience significant cost due to delay should this BCS element be stopped, and

WHEREAS, a Notice To Proceed was given to Bay Cities on December 10, 2019, and Project construction commenced as of that date. The City is now fully engaged with all terms, compliances and requirements that exist under the terms of that contract. Contractor has provided its statutory notice to the City of its intent to commence relocation activities of the BCS. This notification requires the contractor to wait 30 calendar days prior to commencement of this construction element. This pause to commencement of construction will sunset on February 14th, and

WHEREAS, Modesto Municipal Code Section 8-3.204 generally requires all purchase in excess of fifty thousand dollars ($50,000) to follow formal bid procedures. However, MMC 8-3.204(c) provides that a purchase may be exempted from the City's

formal bidding requirement where the Purchasing Manager determines that calling for bids on a competitive basis is undesirable due to exigent circumstances, and

WHEREAS, also, in accordance with Modesto Municipal Code 8-3.204(a), Exceptions to Formal Bidding Requirements, the agreement with Geocon Consultants Inc. is for professional services and, therefore, is exempt from the bidding requirement, and

WHEREAS, Geocon should be exempt from the formal bidding procedure in accordance with Modesto Municipal Code 8-3.204(c) for the following reasons: 1) Geocon was selected by Caltrans several years ago to perform work on this project through a competitive bidding process, and 2) Caltrans has advised the City that Geocon is the best consultant candidate since it has obtained an intimate knowledge of intent as to the compliances during its coordination with DTSC and the development of the RAP/RDIP, and 3) Geocon can commence work immediately with superior knowledge and therefore protect City, Caltrans, and the environment as required to meet the challenge of monitoring the contractor's work which is expected to begin on February 14th, and therefore, this purchase qualifies for exemption from the City's formal bidding procedures.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an agreement with Geocon Consultants Inc. (Geocon) for Remedial Action Plan Monitoring during construction for the State Route 132 West Freeway/Expressway – Phase 1 Project in an amount of $197,684 for the identified scope of services, plus $19,768 for additional services (if needed), for an agreement total not to exceed $217,452.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

*Amended for Clerical Error

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-076

RESOLUTION AMENDING THE POSITION ALLOCATION FOR FISCAL YEAR 2019-20 AS ADOPTED IN THE OPERATING BUDGET.

WHEREAS, a Position Allocation for the City of Modesto was adopted by Modesto City Council on June 25, 2019, as part of the Annual Budget of the City of Modesto for Fiscal Year 2019-2020, and

WHEREAS, classification studies are conducted to ensure that a classification system is equitable and consistent within an organization and that positions are correctly classified, and

WHEREAS, per Personnel Administrative Order 2.2-87-12, a classification study may be conducted in response to a reclassification request, to develop/revise a classification specification, or to assist in a reorganization, and

WHEREAS, classification studies were conducted by Human Resources to determine appropriate classification, and

WHEREAS, position changes will be effective the pay period starting February 4, 2020, and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Position Allocation and the Fiscal Year 2019-20 Operating Budget for various departments as follows:

1. Reallocate one (1) Fire Inspector to one (1) Senior Fire Inspector in the Fire Prevention Division (18510) of the Modesto Fire Department.
2. Allocate one (1) Administrative Office Assistant III in the Administration Division (18110) of the Modesto Fire Department.

3. Move nine (9) Fire Fighters from the SAFER Grant Division (18510) to the Suppression Division (18210) of the Modesto Fire Department.
4. Reallocate one (1) Assistant Engineer to one (1) Associate Engineer in the Traffic Engineering Division (53510) of the Public Works Department.
5. Reallocate one (1) Software Analyst I to one (1) Software Analyst II in the Business Applications/Development Services Division (17510) of the Information Technology Department.
6. Reallocate one (1) Business Manager to one (1) Economic Development Manager in the Economic Development Division (14180) of the Community & Economic Development Department.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-077

RESOLUTION AUTHORIZING A PAYMENT IN THE AMOUNT OF $100,000 TO BELFOR PROPERTY RESTORATION, MODESTO, CA FOR THE DOWNEY PARK RESTROOM FIRE RENOVATION AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO ISSUE THE PAYMENT

WHEREAS, on July 14, 2019 the public restroom, park storage and electrical building at Downey Community Park was heavily damaged by a fire, and

WHEREAS, at approximately 11:00 PM the Modesto Fire Department responded to the park, located at 1230 Brighton Ave, and was able to extinguish the blaze before the building was a complete loss, and

WHEREAS, the property insurance company, Alliant dispatched Belfor Property Restoration of Modesto, CA (Belfor) to secure the property against additional damages, perform environmental testing, and fence the structure off to protect the public from unnecessary hazards, and

WHEREAS, Belfor evaluated the site with City staff and the insurance adjuster and conclude that although approximately 90% of the structure (728 sq/ft) had been damaged, the facility could be restored, and

WHEREAS, on September 20, 2019, Belfor provided a Scope and Preliminary budget to the insurance adjuster for renovation of the burned structure with an initial budget estimate between $190,000 and $217,500, and

WHEREAS, based upon the most recent plans reviewed by staff, it is currently estimated that the total project cost is likely to exceed $300,000, and

WHEREAS, the City of Modesto's property insurance policy establishes a maximum deductible (out-of-pocket cost to the City) of $100,000, and

WHEREAS, the insurance adjuster confirmed that once the City has paid its deductible to Belfor Property Restoration, the insurance company will cover the remainder of the project's cost, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid, but exceptions to the formal bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in his or her discretion, determines that a process other than the formal bid procedure set for in Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality," and

WHEREAS, this project meets these requirements, as the contractor has been selected directly by the insurance company and it makes the best business sense to utilize their services, given the active insurance claim.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves a payment in the amount of $100,000 to Belfor Property Restoration, Modesto, CA for the Downey Park Restroom Fire Renovation.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is authorized to issue the payment.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-078

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROGRAM BUDGET FOR PROJECT #101225 AND #100911 AS OUTLINED IN ATTACHMENT A

WHEREAS, certain budgetary transactions are necessary in order to fully fund the payment to Belfor Property Restoration for the Downey Park Restroom Fire Renovation, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget for Project 101225 – Downey Park Fire Renovation must be amended as shown in **Exhibit A,** which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget for Project 101225 – Downey Park Fire Renovation and #100911 – Various Park Partners Projects as shown in **Exhibit A, attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

Exhibit A

Budget Adjustment for Capital Project 100911 (Various Park Partners Projects)
Fund 3130 – Park Fund - CIP:

Expense:	**Current Budget**	**Increase/ (Decrease)**	**Final Budget**
3130-14999-100911 – CTGY General PP	$104,174	($100,000)	$ 4,174
3130-14999-100911 – ALL Other Tasks	$228,272	$0	$228,272
	Total Expense Budget		**$232,446**

Budget Adjustment for Non-Capital Project 101225 (Downey Park Fire Renovation)
Fund 3130 – Parks Fund - CIP:

Expense:	**Current Budget**	**Increase/ (Decrease)**	**Final Budget**
3130-39998-101225 – Appr Unit C	$0,000	$100,000	$100,000
	Total Expense Budget:		**$100,000**

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-079

RESOLUTION APPROVING THE FIRST AMENDMENT TO THE AGREEMENT FOR THE OPERATION OF THE KING-KENNEDY MEMORIAL CENTER WITH THE WEST MODESTO COMMUNITY COLLABORATIVE (WMCC), AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS, the City owns the community center known as the King-Kennedy Memorial Center which was established to address issues impacting the West Modesto community, and

WHEREAS, the CITY entered into an agreement with the West Modesto Community Collaborative to operate the King-Kennedy Memorial Center through Resolution No. 2018-303 (Agreement), and

WHEREAS, the CITY and WMCC desire to amend the Agreement for the purposes of updating the stipulations in **Exhibit D** of the Agreement, dealing with the submission of rental applications to allow the WMCC to act on behalf of the King-Kennedy Memorial Center Board of Directors, the NAACP Modesto Stanislaus Branch 1048, and The Women's Auxiliary, A Modesto Community Connection when booking the King-Kennedy Memorial Center for community-based services and events, and

WHEREAS, the CITY and WMCC desire to further amend the Agreement with an administrative correction in **Exhibit D,** Section 6 which incorrectly references itself.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the First Amendment to the Agreement with the West Modesto Community Collaborative to operate the King-Kennedy Memorial Center.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the First Amendment to the Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-080

RESOLUTION APPROVING A FIVE YEAR LEASE AGREEMENT WITH HERTZ RENT-A-CAR CORPORATION LLC TO PROVIDE SERVICES AT THE MODESTO CITY-COUNTY AIRPORT IN THE AMOUNT OF $6,228 PER YEAR, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, Hertz Rent-A-Car Corporation LLC (Hertz) would like to enter into a new five year lease at the Modesto City–County Airport, and

WHEREAS, the lease agreement would allow them to lease a larger office, Office Space #2 in the terminal building, and

WHEREAS, the lease agreement currently reflects a 7.8% concessions of Hertz's gross revenue at Modesto City-County Airport, and

WHEREAS, the lease agreement would include rent for Office Space #2 as follows: 519 s.f. x $1.00/s.f./month=$519.00/month, and

WHEREAS, the lease agreement would increase annual revenue $6,228 per year, and

WHEREAS, the lease agreement would guarantee Hertz remains at the Modesto City-County Airport, continuing to serve the community.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Airport Lease Agreement between the City of Modesto and Hertz Rent-A-Car Corporation LLC to provide car rental services at the Modesto City-County Airport in the amount of $6,228 per year.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-081

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE SPENCER AVENUE NEIGHBORHOOD STRENGTHEN & REPLACE WATER MAINS PROJECT, ACCEPTING THE BID, AND APPROVING A CONSTRUCTION CONTRACT TO ROLFE CONSTRUCTION INC., ATWATER, CA, IN THE AMOUNT OF $1,275,618 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the Spencer Avenue Neighborhood is one of many prioritized areas in the City's water service area that require replacement of current, aging water infrastructure, and

WHEREAS, the Spencer Avenue Neighborhood Strengthen & Replace Water Mains project will replace and upgrade deficient water mains, associated water valves, services and fire hydrants to increase service reliability, flows, and pressures, and

WHEREAS, specifications have been prepared for the Spencer Avenue Neighborhood Strengthen & Replace Water Mains project, and

WHEREAS, on January 14, 2020 staff received bids from three companies that were responsible and responsive, including a bid from Rolfe Construction Inc., and

WHEREAS, MMC 8-3.203 states that all purchases, in excess of fifty thousand dollars ($50,000), or when directed by the City Manager for any purchase of fifty thousand dollars ($50,000) or less, shall follow formal bid procedures, and

WHEREAS, and the award of bid for the Spencer Avenue Neighborhood Strengthen & Replace Water Mains project conforms to the Modesto Municipal code based on providing the overall lowest cost, while providing improved service, and

WHEREAS, the Director of Utilities has recommended that the bid of $1,275,618 received from Rolfe Construction Inc., be accepted as the lowest responsible and responsive bid and the contract be awarded to Rolfe Construction Inc.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the plans and specifications for the Spencer Avenue Neighborhood Strengthen & Replace Water Mains project and accepts the bid of $1,275,618 and Awards Rolfe Construction Inc., of Atwater, CA, the contract for the Spencer Avenue Neighborhood Strengthen & Replace Water Mains project.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-082

RESOLUTION AUTHORIZING AN INCREASE IN THE DIRECTOR'S AUTHORITY TO ISSUE CHANGE ORDERS FOR THE SPENCER AVENUE NEIGHBORHOOD STRENGTHEN & REPLACE WATER MAINS PROJECT FROM 8% ($102,049) TO 10% ($127,562) OF THE CONSTRUCTION CONTRACT PRICE OF $1,275,618 WITH ROLFE CONSTRUCTION INC, ATWATER, CA

WHEREAS, the City's "Change Order Approval Policy", enacted by Council Resolution No. 94-443 on July 19, 1994, and updated by Resolution No. 2019-326 on July 9, 2019, established a contract change order budget of 8% for projects over $1 Million, and

WHEREAS, given the nature of a rehabilitation project, additional work may be needed to address unexpected conditions that require changes in project scope, and

WHEREAS, the additional costs may exceed the Director's authority for the project as established by the Council's Change Order Approval Policy adopted by Resolution No. 94-443 and revised on July 9, 2019 by Resolution No. 2019-326, and

WHEREAS, staff is requesting authorization to increase the contract change order budget to 10% ($127,562) to account for unexpected conditions.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to issue change orders for the Spencer Avenue Neighborhood Strengthen & Replace Water Mains Project from 8 percent (102,049) to 10 percent ($127,562) of the construction contract price of 1,275,618 with Rolfe Construction Inc., of Atwater, CA.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-083

RESOLUTION APPROVING THE DOWNTOWN MODESTO HOTEL PROJECT ESTIMATED TIMELINE AND BUDGET FOR POTENTIAL DEVELOPMENT OF A HOTEL LOCATED IN DOWNTOWN MODESTO AND AUTHORIZING STAFF TO PROCEED WITH TASKS I AND II, INCLUDING SUPPORTING BOND, REDEVELOPMENT SUCCESSOR AGENCY AND GENERAL LEGAL SERVICES FOR THE DOWNTOWN MODESTO HOTEL PROJECT

WHEREAS, the 2006 Redevelopment Master Plan (Plan) provided updated goals and implementation strategies for the redevelopment project area, and

WHEREAS, the Plan identified that development should support the vision for downtown as the "commercial and cultural heart of the city" and prioritization of land use and economic development goals to attract new development, and

WHEREAS, the Plan identified target areas and catalyst and opportunity sites for development, and

WHEREAS, one catalyst site, identified for potential development of a new hotel with ground floor commercial and retail space, is the surface parking lot adjacent to the Modesto Centre Plaza (MCP), and

WHEREAS, the site is owned by the Redevelopment Successor Agency, which, prior to its dissolution in 2012, supported the downtown hotel concept, and

WHEREAS, in August 2018, the City issued an informal Request for Proposals (RFP) for a lodging and market study to explore the feasibility of an additional hotel adjacent to MCP, and

WHEREAS, on October 24, 2018, by City Manager authority, the City retained HVS Convention, Entertainment, Sports, and Facilities Consulting (HVS) to conduct the lodging and market study, and

WHEREAS, on January 22, 2019, HVS submitted the "Feasibility Study – Proposed Convention Center Hotel" (Study) to the City, and

WHEREAS, the Study, based on the hotel market and a feasibility analysis, concluded that a 200-room select service hotel with minimum function space and limited food service would be the most viable due to the subject property size, development costs, and steadily growing demand for this product in the larger area hotel market, and

WHEREAS, based on the findings, development of the proposed hotel is projected to yield $8.6 million in new direct spending, 106 new full-time jobs, and $1.2 million in annual tax revenue in a stable year, and

WHEREAS, the Study identified the following practical next steps to determine whether the proposed hotel can be developed including 1) Project Management, 2) Site Parameters, Valuation and Parking, and 3) Solicitation of Development Partner, and

WHEREAS, on April 12, 2019, the Economic Development Committee unanimously recommended forwarding the Study to Council and proceeding with preparing a budget and timeline for the next steps, and

WHEREAS, on May 7, 2019, by Resolution No. 2019-228, Council accepted the Study and directed staff to prepare a timeline and budget for each of next steps, and

WHEREAS, the estimated timeline and budget ("Timeline and Budget") for the next steps in the Downtown Modesto Hotel Project (Project) is projected to take approximately 12-18 months to complete at a projected cost of $381,080 **(Exhibit "A"),** and

WHEREAS, the estimated capital improvements for the Modesto Centre Plaza are estimated at $3.2 million which may be considered at a later time, and

WHEREAS, additional costs may be identified during the next phase of the Project, and

WHEREAS, on September 4, 2019, the Economic Development Committee unanimously recommended approving the estimated timeline and budget, authorizing staff to proceed with the next steps in the Downtown Modesto Hotel Project, and forwarding to Council for approval, and

WHEREAS, staff recommends proceeding with Tasks I (Project Management) and II (Determine Initial Interest in Hotel Development) and supporting legal services for the Downtown Modesto Hotel Project, estimated at $84,600, and

WHEREAS, funding for the Tasks I, II, and supporting legal services will be covered by FY 18/19 General Fund carryover, pending availability after the year-end audit ($60,850), and Redevelopment Successor Agency Funds ($11,250).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Downtown Modesto Hotel Project estimated Timeline and Budget for potential development of a hotel located in downtown Modesto and authorizes staff to proceed with the Tasks I, II, and supporting legal services.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	Ah You, Zoslocki
ABSENT:	Councilmembers:	Grewal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-084

RESOLUTION APPROVING AN AGREEMENT WITH MANAGEMENT ADVISORY SERVICES, A CALIFORNIA LIMITED LIABILITY COMPANY, FOR PROFESSIONAL SERVICES AND PROJECT CO-MANAGEMENT FOR TASK I AND II OF THE DOWNTOWN MODESTO HOTEL PROJECT IN AN AMOUNT NOT TO EXCEED $42,100 AND AUTHORIZING THE CITY MANAGER, OR DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the 2006 Redevelopment Master Plan (Plan) provided updated goals and implementation strategies for the redevelopment project area, and

WHEREAS, the Plan identified that development should support the vision for downtown as the "commercial and cultural heart of the city" and prioritization of land use and economic development goals to attract new development, and

WHEREAS, the Plan identified target areas and catalyst and opportunity sites for development, and

WHEREAS, one catalyst site, identified for potential development of a new hotel with ground floor commercial and retail space, is the surface parking lot adjacent to the Modesto Centre Plaza (MCP), and

WHEREAS, the site is owned by the Redevelopment Successor Agency, which, prior to its dissolution in 2012, supported the downtown hotel concept, and

WHEREAS, on May 9, 2018, the Economic Development Committee directed staff to proceed with an agreement with Management Advisory Services to develop a scope of work and issue a Request for Proposals for a downtown hotel market study, and

WHEREAS, in August 2018, the City issued an informal Request for Proposals (RFP) for a lodging and market study to explore the feasibility of an additional hotel adjacent to MCP, and

WHEREAS, on October 24, 2018, by City Manager authority, the City retained HVS Convention, Entertainment, Sports, and Facilities Consulting (HVS) to conduct the lodging and market study, and

WHEREAS, on January 22, 2019, HVS submitted the "Feasibility Study – Proposed Convention Center Hotel" (Study) to the City, and

WHEREAS, the Study, based on the hotel market and a feasibility analysis, concluded that a 200-room select service hotel with minimum function space and limited food service would be the most viable due to the subject property size, development costs, and steadily growing demand for this product in the larger area hotel market, and

WHEREAS, based on the findings, development of the proposed hotel is projected to yield $8.6 million in new direct spending, 106 new full-time jobs, and $1.2 million in annual tax revenue in a stable year, and

WHEREAS, the Study identified the following practical next steps to determine whether the proposed hotel can be developed including 1) Project Management, 2) Site Parameters, Valuation and Parking, and 3) Solicitation of Development Partner, and

WHEREAS, on April 12, 2019, the Economic Development Committee unanimously recommended forwarding the Study to Council and proceeding with preparing a budget and timeline for the next steps, and

WHEREAS, on May 7, 2019, by Resolution No. 2019-228, Council accepted the Study and directed staff to prepare a timeline and budget for each of next steps, and

WHEREAS, on September 4, 2019, the Economic Development Committee unanimously recommended approving the estimated timeline and budget, retaining

Management Advisory Services and authorizing staff to proceed with the Tasks I and II for the Downtown Modesto Hotel Project, and

WHEREAS, the Management Advisory Services agrees to accept a sum not to exceed $42,100 as full remuneration for performing all services and furnishing all staffing and materials for Tasks I and II, and

WHEREAS, funding for the Agreement will be from 2018-2019 General Fund carryover funds, pending availability after the year end audit, and

WHEREAS, Modesto Municipal Code Section 8-3.204(a) exempts professional services from formal bidding requirements.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the agreement with Management Advisory Services for professional services for Task I and II of the Downtown Modesto Hotel Project, in an amount not to exceed $42,100 over a twelve month period.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is authorized to execute the agreement in form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	Ah You, Zoslocki
ABSENT:	Councilmembers:	Grewal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-085

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 OPERATING BUDGET IN THE AMOUNT OF $60,850 TO FUND TASKS I, II, AND SUPPORTING LEGAL SERVICES FOR THE DOWNTOWN MODESTO HOTEL PROJECT

WHEREAS, in August 2018, the City issued an informal Request for Proposals (RFP) for a lodging and market study to explore the feasibility of an additional hotel adjacent to MCP, and

WHEREAS, on January 22, 2019, HVS submitted the "Feasibility Study – Proposed Convention Center Hotel" (Study) to the City, and

WHEREAS, the Study identified the following practical next steps to determine whether the proposed hotel can be developed including 1) Project Management, 2) Site Parameters, Valuation and Parking, and 3) Solicitation of Development Partner, and

WHEREAS, on May 7, 2019, by Resolution No. 2019-228, Council accepted the Study and directed staff to prepare a timeline and budget for each of next steps for the Downtown Modesto Hotel Project ("Project"), and

WHEREAS, on September 4, 2019, the Economic Development Committee unanimously recommended approving the estimated timeline and budget, authorizing staff to proceed with the next steps in the Downtown Modesto Hotel Project, and forwarding to Council for approval, and

WHEREAS, staff recommended proceeding with Tasks I and II and supporting legal services estimated at $84,600, and

WHEREAS, the Fiscal Year 2019-2020 Operating Budget must be amended to allocate $60,850 from FY 18/19 General Fund carryover funds pending availability after the year-end audit, to the Community and Economic Development Department (0100-14110-53300) to fund the Tasks I, II, and supporting legal services for the Downtown Modesto Hotel Project.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Operating Budget to allocate $60,850 from FY 18/19 General Fund carryover funds pending availability after the year-end audit, to the Community and Economic Development Department (0100-14110-5330) for the Downtown Modesto Hotel Project.

BE IT FURTHER RESOLVED that the City Manager, or designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 11th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Kenoyer, Madrigal, Ridenour, Mayor Brandvold
NOES:	Councilmembers:	Ah You, Zoslocki
ABSENT:	Councilmembers:	Grewal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

By: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-086

RESOLUTION APPOINTING MONICA VALENCIA, AS A REGISTERED COUNTY VOTER RESIDING IN MODESTO, TO THE CITY OF MODESTO CULTURE COMMISSION, WITH A TERM EXPIRATION DATE OF JANUARY 1, 2021

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Culture Commission is comprised of seven members representing County Registered Voters: five (5) who reside in the City of Modesto and two (2) who live outside of the City of Modesto, and

WHEREAS, Monica Valencia has expressed interest in serving on the City of Modesto Culture Commission as a registered voter residing in the City of Modesto, and

WHEREAS, there is a vacancy on the City of Modesto Culture Commission, and

WHEREAS, the Appointments Committee has recommended filling the vacancy with Ms. Valencia.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby appoints, Monica Valencia as a Commissioner of the Culture Commission representing a County Registered Voter residing within the City of Modesto, with a termination date of January 1, 2021.

BE IT FURTHER RESOLVED that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Culture Commission, and the Secretary, thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-087

RESOLUTION APPOINTING DEWEY BEDFORD, AS A REGISTERED COUNTY VOTER RESIDING IN MODESTO, TO THE CITY OF MODESTO CULTURE COMMISSION, WITH A TERM EXPIRATION DATE OF JANUARY 1, 2022

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Culture Commission is comprised of seven members representing County Registered Voters: five (5) who reside in the City of Modesto and two (2) who live outside of the City of Modesto, and

WHEREAS, Dewey Bedford has expressed interest in serving on the City of Modesto Culture Commission as a registered voter residing in the City of Modesto, and

WHEREAS, there is a vacancy on the City of Modesto Culture Commission, and

WHEREAS, the Appointments Committee has recommended filling the vacancy with Mr. Bedford.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby appoints, Dewey Bedford as a Commissioner of the Culture Commission representing a County Registered Voter residing within the City of Modesto, with a termination date of January 1, 2023.

BE IT FURTHER RESOLVED that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Culture Commission, and the Secretary, thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-088

RESOLUTION APPOINTING EDUARDO FLORES, AS A REGISTERED COUNTY VOTER RESIDING IN MODESTO, TO THE CITY OF MODESTO CULTURE COMMISSION, WITH A TERM EXPIRATION DATE OF JANUARY 1, 2024

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Culture Commission is comprised of seven members representing County Registered Voters: five (5) who reside in the City of Modesto and two (2) who live outside of the City of Modesto, and

WHEREAS, Eduardo Flores has expressed interest in serving on the City of Modesto Culture Commission as a registered voter residing in the City of Modesto, and

WHEREAS, there is a vacancy on the City of Modesto Culture Commission, and

WHEREAS, the Appointments Committee has recommended filling the vacancy with Mr. Flores.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby appoints, Eduardo Flores as a Commissioner of the Culture Commission representing a County Registered Voter residing within the City of Modesto, with a termination date of January 1, 2024.

BE IT FURTHER RESOLVED that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Culture Commission, and the Secretary, thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-089

RESOLUTION APPOINTING LACY VINCENT, AS A REGISTERED COUNTY VOTER WHO DOES NOT LIVE IN MODESTO, TO THE CITY OF MODESTO CULTURE COMMISSION, WITH A TERM EXPIRATION OF JANUARY 1, 2023

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Culture Commission is comprised of seven members representing County Registered Voters: five (5) who reside in the City of Modesto and two (2) who live outside of the City of Modesto, and

WHEREAS, Lucy Vincent has expressed interest in serving on the City of Modesto Culture Commission as a registered voter residing outside the City of Modesto, and

WHEREAS, there is a vacancy on the City of Modesto Culture Commission, and

WHEREAS, the Appointments Committee has recommended filling the vacancy with Ms. Vincent.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby appoints, Lucy Vincent as a Commissioner of the Culture Commission representing a County Registered Voter residing outside the City of Modesto, with a termination date of January 1, 2023.

BE IT FURTHER RESOLVED that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Culture Commission, and the Secretary, thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-090

RESOLUTION APPROVING THE PLANS AND SPECIFICATIONS FOR THE PELANDALE AVENUE PAVEMENT REHABILITATION PROJECT, STPL-5059(220), ACCEPTING THE BID, AND AWARDING A CONTRACT TO DSS COMPANY DBA KNIFE RIVER CONSTRUCTION, OF STOCKTON, CALIFORNIA, IN THE AMOUNT OF $2,034,488 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, plans and specifications have been prepared for the Pelandale Avenue Pavement Rehabilitation Project,STPL-5059(220), and City staff recommends approval by the City Council, and

WHEREAS, the bids received for the Pelandale Avenue Pavement Rehabilitation Project, STPL-5059(220), were publicly opened at 11:00 a.m. on January 21, 2020, and later tabulated by the Director of Community and Economic Development for the consideration of Council, and

WHEREAS, the Director of Community and Economic Development has recommended that the bid of $2,034,487.45 received from DSS Company dba Knife River Construction, of Stockton, California be accepted as the lowest responsible and responsive bid and the contract be awarded to DSS Company dba Knife River Construction, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow the formal bid procedures, and

WHEREAS, an award of $2,034,487.45 and agreement for construction for Community and Economic Development Department to use DSS Company dba Knife River Construction, of Stockton, California, conforms to the Modesto Municipal Code

because the City complied with the formal bid procedures and DSS Company dba Knife River Construction, of Stockton, California, was the lowest responsive bidder.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the plans and specifications for the Pelandale Avenue Pavement Rehabilitation Project, STPL-5059(220), accepts the bid of DSS Company dba Knife River Construction, of Stockton, California, in the amount of $2,034,487.45 and awards DSS Company dba Knife River Construction the contract for the Pelandale Avenue Pavement Rehabilitation Project, STPL-5059(220).

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-091

RESOLUTION ACCEPTING FEDERAL REGIONAL SURFACE TRANSPORTATION PROGRAM (RSTP) ENTITLEMENT FUNDS IN THE AMOUNT OF $1,734,493 FOR THE PELANDALE AVENUE PAVEMENT REHABILITATION PROJECT, STPL-5059(220), AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE NECESSARY FEDERAL ENTITLEMENT FUND DOCUMENTS

WHEREAS, the Pelandale Avenue Pavement Rehabilitation Project, STPL-5059(220), proposes to rehabilitate the pavement on Pelandale Avenue from Dale Road to Honey Creek Road, and

WHEREAS, an additional $1,734,493 for the Pelandale Avenue Pavement Rehabilitation Project, STPL-5059(220), funds were available from the Regional Surface Transportation Program (RSTP).

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby Accepts the Federal Regional Surface Transportation Program grant funds in the amount of $1,734,493 for the construction phase of the Project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the necessary RSTP grant funding documents and implement the acceptance and use of such funds for the construction phase of the project.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-092

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROGRAM BUDGET IN THE AMOUNT AS SHOWN IN EXHIBIT A IN ORDER TO FULLY FUND THE PELANDALE AVENUE PAVEMENT REHABILITATION PROJECT

WHEREAS, certain budgetary transactions are necessary in the amounts shown in **Exhibit A**, in order to fund the Pelandale Avenue Pavement Rehabilitation Project, and

WHEREAS, the Pelandale Avenue Pavement Rehabilitation Project, has local funds component as approved Measure L Oversite Committee as shown in **Exhibit A**, and

WHEREAS, the Fiscal Year 1920-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 1920-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A.**

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

100966 – CED – Pelandale Avenue Pavement Rehabilitation

EXPENSES	**PJTD Budget**	**Increase / Decrease**	**Proposed New Budget**
CA - Construction Administration	$260,174	-$60,174	$200,000
CON - Construction	$1,326,887	$707,601	$2,034,488
CTGY - Contingency - CIP	$147,432	$15,327	$162,759
EDA - Eng/Design/Admin	$323,000	$2,971	$325,971
CC – Consultant Charges	$0	$34,275	$34,275
Total	$2,057,493	$700,000	$2,757,493
SOURCES	**Regional Surface Transportation Program Entitlement (RSTP)**	**Measure L**	**Fund 1510**
CA - Construction Administration	$0	$200,000	$0
CON - Construction	$1,734,493	$299,995	$0
CTGY - Contingency - CIP	$0	$162,759	$0
EDA - Eng/Design/Admin	$300,000	$0	$23,000
CC – Consultant Charges	$0	$37,246	$0
Total	$2,034,493	$700,000	$23,000

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-093

RESOLUTION AUTHORIZING THE PAYMENT OF $280,722 TO THE PACIFIC GAS AND ELECTRIC COMPANY (PG&E) FOR THE RELOCATION OF GAS LINES ON ROSEMORE AVENUE AT KANSAS AVENUE, KANSAS AVENUE AT MERCY AVENUE, FRANKLIN STREET (KANSAS AVENUE EXTENSION), AND SHIRLEY COURT AT ELM AVENUE AS REQUIRED FOR THE STATE ROUTE 132 WEST FREEWAY/EXPRESSWAY PHASE 1 PROJECT

WHEREAS, the State Route 132 West Freeway/Expressway – Phase 1 Project (Project) proposes to construct a two-lane highway on a new alignment in Stanislaus County and the City of Modesto from State Route 99 just south of Kansas Avenue to Dakota Avenue; and

WHEREAS, a construction contract was awarded to Bay Cities Paving and Grading on September 24, 2019 per Resolution 2019-439; and

WHEREAS, construction began in December of 2019 and is anticipated to be completed in 2022; and

WHEREAS, relocation of the Pacific Gas and Electric (PG&E) gas line facilities is required so that improvements needed for the Project can be constructed; and

WHEREAS, these existing gas lines are in conflict with the proposed improvements and must be relocated; and

WHEREAS, the conflicts and locations are identified as follows:

- Rosemore Avenue at Kansas Avenue- Cap existing line during bridge construction and then install approximately 190 lineal feet of 3-inch gas line. Line will be encased in a 12-inch steel casing within the bridge structure;

- Kansas Avenue at Mercy Avenue- Relocate approximately 200 lineal feet of existing 4-inch gas line. Relocation is necessary so that the City Utility Department's existing 54-inch sanitary sewer line can be reconstructed;
- Franklin Street (Kansas Avenue Extension)- Abandon approximately 435 lineal feet of existing gas line. Existing 3-inch steel gas line will be capped in place. This abandonment is required to meet Caltrans standards. Standards require that the existing right of way be cleared of utilities prior to construction of the bridge overcrossing of the State Route 99 Freeway;
- Shirley Court at Elm Avenue- Existing 3-inch gas line is in conflict with the proposed construction of the relocated MID Renna line. The Gas line must be lowered so that the new irrigation line can be constructed. Irrigation lines are controlled by gravity; therefore the gas line must be lowered; and

WHEREAS, the cost to design and install all of this work is estimated at $561,444 and this work is codified within the terms as stated in State Utility Agreement 2320.6 (Agreement), and

WHEREAS, this Agreement specifies that the cost for this work be split between the City and PG&E at a 50/50 percentage rate, and

WHEREAS, this work was reviewed by the design engineer Dokken Engineering and approved by Caltrans District 10 Utility Engineer, and

WHEREAS, Capital Facility Fees (CFF) funding is currently available in project account #100614 to pay PG&E the required $280,722.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the payment of $280,722 to Pacific Gas and Electric for the

relocation of gas lines on Rosemore Avenue at Kansas Avenue, Kansas Avenue at Mercy Avenue, Franklin Street (Kansas Avenue Extension), and Shirley Court at Elm Avenue as required for the State Route 132 West Freeway/Expressway Phase 1 Project.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-094

RESOLUTION DIRECTING STAFF TO PREPARE AND FILE THE 2020-2021 ANNUAL ENGINEER'S REPORT FOR CITY OF MODESTO LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 1

WHEREAS, Resolution No. 88-935 adopted by the Council of the City of Modesto on December 13, 1988, initiated proceedings for the formation of Landscape Maintenance Assessment District No. 1 (LMAD No. 1) to provide funding for the landscape maintenance in the public right-of-way, street medians and adjacent to the access control walls in Dry Creek Meadows Subdivisions Nos. 1-6, and

WHEREAS, LMAD No. 1 was formed in accordance with the Landscaping and Lighting Act of 1972 (Streets and Highways Code Sections 22500 through 22679), and comprised of 749 single-family residential lots and three (3) public agency owned parcels, and

WHEREAS, Section 22620 et. seq. of the Streets and Highways Code requires the legislative body (the City Council) adopt a resolution which shall generally describe any proposed new improvements or any substantial changes in existing improvements and orders the preparation and filing of the report, and

WHEREAS, the annual assessment for LMAD No. 1 has remained the same since 1996, and

WHEREAS, staff does not anticipate any new improvements or substantial changes in existing improvements.

NOW, THEREFORE, BE IT RESOLVED that the City Engineer is designated by this Council as the Engineer of Work for LMAD No. 1, and is hereby directed to prepare and file an annual report in accordance with the provisions of the Landscaping and

Lighting Act of 1972, as amended (Streets and Highways Code Sections 22500 through 22679).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-095

RESOLUTION DIRECTING STAFF TO PREPARE AND FILE THE 2020-2021 ANNUAL ENGINEER'S REPORT FOR LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 2

WHEREAS, Resolution No. 89-460, adopted by the Council of the City of Modesto on April 4, 1989, initiated proceedings for the formation of Landscape Maintenance Assessment District No. 2 (LMAD No. 2) to provide funding for the landscape maintenance in the public right-of-way, street medians, and areas adjacent to the access control walls in Dry Creek Meadows Subdivisions Nos. 7 through 10, Creekwood Meadows Subdivision, and Yosemite Meadows Subdivisions Units 1 and 2, and

WHEREAS, LMAD No. 2 was formed in accordance with the Landscaping and Lighting Act of 1972 (Streets and Highways Code Sections 22500 through 22679), and

WHEREAS, Section 22620 of the Streets and Highways Code requires the legislative body (the City Council) to adopt a resolution which shall generally describe any proposed new improvements or any substantial changes in existing improvements and direct staff to prepare and to file a report accordingly, and

WHEREAS, the annual assessment for LMAD No. 2 has gradually increased since July 2000, and

WHEREAS, staff does not anticipate any new improvements or substantial changes in existing improvements.

NOW, THEREFORE, BE IT RESOLVED, that the City Engineer is designated by this City Council as the Engineer of Work for LMAD No. 2, and is hereby directed to prepare and file an annual report in accordance with the provisions of the Landscaping

and Lighting Act of 1972, as amended, (Streets and Highways Code Sections 22500 through 22679).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-096

RESOLUTION DIRECTING STAFF TO PREPARE AND FILE THE 2020-2021 ANNUAL ENGINEER'S REPORT FOR THE SHACKELFORD LANDSCAPE AND LIGHTING DISTRICT

WHEREAS, on June 29, 1999, the County of Stanislaus formed the Shackelford Landscape and Lighting District (Shackelford LLD) for the purpose of administering the maintaining seventy-seven (77) 200-watt high-pressure sodium streetlights, and

WHEREAS, the Shackelford LLD was formed in accordance with the Landscaping and Lighting Act of 1972 (Streets and Highways Code Sections 22500 through 22679), and

WHEREAS, the Shackelford LLD is comprised of approximately 153 acres, includes 496 lots with both residential and commercial development, and is bounded by Crows Landing Road on the west, East Hatch Road on the south, Union Pacific Railroad on the east, and State Route 99 on the north, and

WHEREAS, on July 1, 2012, the City of Modesto assumed jurisdiction of the Shackelford Landscape and Lighting District from the County of Stanislaus, and

WHEREAS, Section 22620 of the Streets and Highways Code requires the legislative body (the City Council) to adopt a resolution which shall generally describe any proposed new improvements or any substantial changes in existing improvements and direct staff to prepare and to file a report accordingly, and

WHEREAS, the annual assessment for the Shackelford LLD has gradually increased since June 1999, and

WHEREAS, staff does not anticipate any new improvements or substantial changes in existing improvements.

NOW, THEREFORE, BE IT RESOLVED that the City Engineer is designated by this Council as the "Engineer of Work" for the Shackelford LLD, and is hereby directed to prepare and file an annual report in accordance with the provisions of the Landscaping and Lighting Act of 1972, as amended (Streets and Highways Code Sections 22500 through 22679).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-097

RESOLUTION APPROVING THE PURCHASE OF A ONE TON CREW CAB FLATBED TRUCK WITH SPECIFIC CONFIGURATIONS TO NATIONAL AUTO FLEET GROUP, WATSONVILLE, CA FOR A TOTAL AMOUNT NOT TO EXCEED $56,782 AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE PURCHASE ORDER

WHEREAS, the Public Works Department, Streets Maintenance Division will replace a current truck that was involved in an accident and cannot be safety fixed; and

WHEREAS, the Finance Department's Purchasing Division suggested utilizing an existing competitively bid contract, Sourcewell contract, previously known as National Joint Powers Alliance (NJPA); and

WHEREAS, Sourcewell's analysts streamline the procurement process by developing RFP's and IFB's for national, competitive solicitations that meet or exceed local requirements; and

WHEREAS, Modesto Municipal Code Section 8-3.203 requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services, to be formally bid; and

WHEREAS, however, there are exceptions to the rule set forth in the Modesto Municipal Code; and

WHEREAS, one exception, MMC 8-3.204(d) is available where the Purchasing Manager, in her discretion, determines that a process other than the usual formal bid procedure set forth in MMC Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality; and

WHEREAS, in addition, MMC 8-3.202(h) encourages the Purchasing Manager to join with the State of California and other units of government in cooperative purchasing plans where the best cost savings interest of the City would be served; and

WHEREAS, by accessing the terms of the Sourcewell Contract #120716-NAF, the purchase of this equipment will conform to MMC Section 8-3.204(d).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approved the award and purchase of a One Ton Crew Cab Flatbed Truck with specific configurations to National Auto Fleet Group, Watsonville, CA for a total amount not to exceed $56,782.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to execute the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-098

RESOLUTION APPROVING THE AWARD OF BID AND AGREEMENT WITH VAN DE POL PETROLEUM, STOCKTON, CA BY UTILIZING THE COMPETITIVE PROCESS WITH THE TWIN RIVERS UNIFIED SCHOOL DISTRICT, NORTH HIGHLANDS, CA FOR RENEWABLE DIESEL AND BULK FUELS FOR A TWO-YEAR AGREEMENT WITH THREE ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL ESTIMATED COST NOT TO EXCEED $1,270,000, AND A TOTAL AMOUNT NOT TO EXCEED $6,350,000 OVER FIVE YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the Public Works and Utilities Departments maintain storage tanks for bulk fuels used to fuel buses, fleet vehicles and non-public roadway powered equipment; and

WHEREAS, there are two 12,000 gallon diesel underground storage tanks located at the Bus Maintenance Facility, a 1,000 gallon diesel tank at the Corp Yard, and three various size diesel tanks located at the Primary and Secondary Treatment Plants; and

WHEREAS, a permanent change to renewable diesel benefits the City and its fleet by lowering emissions to help improve air quality, it is odorless, higher mileage and performance, and lower maintenance costs; and

WHEREAS, on August 17, 2018 the Twin Rivers Unified School District, North Highlands, CA issued RFP No. 81718 for Fuel, Oil, Coolant and Hazardous Waste Disposal Services; and

WHEREAS, on September 6, 2018 proposals were formally opened, and three companies chose to respond; and

WHEREAS, Van De Pol Petroleum, Stockton, CA was the successful proposer based on the evaluation criteria; and

WHEREAS, Modesto Municipal Code Section 8-3.204 generally requires all purchases, in excess of $50,000 to follow formal bid procedures; and

WHEREAS, however, exceptions to the formal bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in her discretion, determines that a process other than the formal bid procedure set forth in Section 8-3.203 will result in a procurement for the City at the lowest possible commensurate with the desired quality"; and

WHEREAS, in addition, MMC 8-3.202(d) permits the Purchasing Manager to utilize other government agencies competitive bid process such as Twin Rivers Unified School District when the best cost savings interest of the City would be served; and

WHEREAS, here, this exemption is satisfied because the Twin Rivers Unified School District did complete a competitive process for Fuel, Oil, Coolant and Hazardous Waste Services.

NOW, THEREFORE, BE IT RESOLVED by the City council of the City of Modesto that it hereby approved the award of bid and agreement for Fuel, Oil, Coolant and Hazardous Waste Services to Van De Pol Petroleum, Stockton, CA for a two-year agreement with three one-year extension options, for an annual estimated cost not to exceed $1,270,000, and a total amount not to exceed $6,350,000 over five years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-099

RESOLUTION APPROVING THE PURCHASE OF TWO (2) CLASS 7 TRUCKS WITH SPECIFIC CONFIGURATIONS TO NATIONAL AUTO FLEET GROUP, WATSONVILLE, CA, FOR A TOTAL AMOUNT NOT TO EXCEED $472,914 AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE PURCHASE ORDER

WHEREAS, these Class 7 trucks will be used by the Utilities Department, Water Construction Division to maintain current operations within the Water Construction Division; and

WHEREAS, each truck supports a crew with signs, air compressor, hand tools, flood lights, jack hammers, generator, parts and safety equipment to service the citizens of the City of Modesto water districts; and

WHEREAS, the trucks serve as a mobile shop, responding to emergency repair needs and scheduled work to the water systems; and

WHEREAS, the replacement of these two (2) Class 7 trucks for the Utilities Department was approved by the City Manager and City Council with the adopted Fiscal Year 2017-2018 budget; and

WHEREAS, the Finance Department's Purchasing Division recommended utilizing an existing competitively bid contract, Sourcewell Contract, previously known as National Joint Powers Alliance (NJPA) #081716-NAF for Class 6, 7 and 8 Chassis with Related Equipment; and

WHEREAS, Sourcewell's analysts streamline the procurement process by developing RFP's and IFB's for national competitive solicitations that meet or exceed local requirements; and

WHEREAS, Modesto Municipal Code Section 8-3.203 requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services, to be formally bid; and

WHEREAS, however, there are exceptions to the rule set forth in the Modesto Municipal Code; and

WHEREAS, one exception, MMC Section 8-3.204(d), is available where the Purchasing Manager, in her discretion, determines that a process other than the usual formal bid set forth in MMC Section 8-3.203 will result in a procurement for the City at the lowest possible cost commensurate with the desired quality; and

WHEREAS, in addition, MMC 8-3.202(h) encourages the Purchasing Manager to join with the State of California and other units of government in cooperative purchasing plans where the best cost savings interest of the City would be served; and

WHEREAS, by accessing the terms of the Sourcewell Contract #081716-NAF, the purchase of this equipment will conform to MMC Section 8-3204(d).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approved the award and purchase of two (2) Class 7 Trucks with specific configurations to National Auto Fleet Group, Watsonville, CA for a total amount not to exceed $472,914.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to execute the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-100

RESOLUTION APPROVING THE PURCHASE OF A PIPEHUNTER VACHUNTER 800 DUAL AXLE HYDRO-EXCAVATOR TRAILER WITH SPECIFIC CONFIGURATIONS TO TEXAS UNDERGROUND INC., PEARLAND, TX FOR A TOTAL AMOUNT NOT OT EXCEED $108,249 AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE PURCHASE ORDER

WHEREAS, the hydro-excavator trailer will be used by the Utilities Department, Wastewater collection Division to maintain current operations; and

WHEREAS, this equipment will be used daily by the sewer clean-out crew; and

WHEREAS, the clean-out crew installs clean-outs for customers at the property line, and there are often a large number of obstructions and dry utilities at or around the property line; and

WHEREAS, it is safer to use hydro-excavation than digging with mini excavator; and

WHEREAS, the addition of this equipment was approved by the City Manager and City Council with the adopted Fiscal Year 2019-2020 budget; and

WHEREAS, the Finance Department's Purchasing Division recommended utilizing a cooperative agreement on an existing bid contract with Houston-Galveston Area Council (H-GAC); and

WHEREAS, H-GAC's analysts streamline the procurement process by developing RFB's and RFP's for national competitive solicitations that meet or exceed local requirements; and

WHEREAS, Modesto Municipal Code Section 8-3.203 requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services, to be formally bid; and

WHEREAS, however, there are exceptions to the rule set forth in the Modesto Municipal Code; and

WHEREAS, one exception, MMC Section 8-3.204(d), is available where the Purchasing Manager, in her discretion, determines that a process other than the usual formal bid procedure set forth in MMC Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality; and

WHEREAS, in addition, MMC 8-3.202(h) encourages the Purchasing Manager to join with the State of California and other units of government in cooperative purchasing plans when the best cost savings interest of the City would be served; and

WHEREAS, by accessing the terms of the H-GAC Contract #SC01-18 the purchase of this equipment will conform to MMC Section 8-3.204(d).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award and purchase of a Pipehunter VacHunter 800Dual Axle Hydro-Excavator Trailer with specific configurations to Texas Underground, Inc., Pearland, TX for a total amount not to exceed $108,249.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to execute the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-101

RESOLUTION APPROVING A CITYWIDE ORGANIZATION DEVELOPMENT AND SUCCESSION PLAN AND PROFESSIONAL SERVICES AGREEMENT FOR AN EMPLOYEE LEADERSHIP DEVELOPMENT PROGRAM WITH BRANDMAN UNIVERSITY, MODESTO, CALIFORNIA FOR A TWO-YEAR AGREEMENT WITH THREE ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $50,000 AND A TOTAL AMOUNT NOT TO EXCEED $250,000 OVER FIVE YEARS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THIS AGREEMENT

WHEREAS, the City has identified the need for a citywide organizational development and succession plan that promotes proven strategies for a positive transformation in its overall culture, and

WHEREAS, from January 2018 to September 2019, the City experienced 15% turnover of its technical and management staff through resignations or retirements, and projections are that the City could be faced with a large wave of retirements over the next 3 to 5 years, and

WHEREAS, to further support the organization development and succession plan, staff is requesting funding for the Leadership Academy offered by the Brandman University, and

WHEREAS, implementing a robust Leadership Academy for the City's management staff and possible successors will increase knowledge in ethical standards, federal and state employment laws, effective employee relations, effective and proactive communication, quality-driven problem solving, positive conflict resolution, and performance management.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a citywide organization development and succession plan and

Professional Services agreement for an employee leadership development program with Brandman University, Modesto, California for a two-year agreement with three one-year extension options, for an annual cost not to exceed $50,000 and a total amount not to exceed $250,000 over five years.

BE IT FURTHER RESOLVED that the City Manager, or designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-102

RESOLUTION REJECTING ALL BIDS RECEIVED FOR REQUEST FOR BID NO. 1920-03 FOR OVERSIZED AND NON-COMPOSTABLE WASTE MATERIAL HANDLING

WHEREAS**,** the City of Modesto Compost Facility receives approximately 65,000 tons of green waste, paper waste, and food material for composting per year, and at the end of processing, some materials are oversized, non-compostable, and separated from the finished product, and

WHEREAS, this oversized and non-compostable waste material is referred to as "overs" and can consist of oversized wood pieces, rock, metal, glass, plastic, clothing and other items, and

WHEREAS, overs comprise of approximately eight percent of the annual material received, or approximately 5,000 tons of waste material per year and needs to be removed from the City's compost facility and disposed of in a landfill, and

WHEREAS, due to budget constraints, the last time overs were removed from the Compost site was in August of 2016, and

WHEREAS, the City Manager authorized the Purchasing Division to issue a Request for Bids (RFB) for Oversized and Non-Compostable Waste Material Handling, and on September 25, 2019 Request for Bid No. 1920-03 for Oversized and Non-Compostable Waste Material Handling was issued on Planet Bids, and

WHEREAS, 234 prospective bidders were notified online and emailed the bid opportunity, and 12 companies chose to download the bid package, and

WHEREAS, on October 29, 2019 bids were formally opened in the City Clerk's office and three companies chose to respond, and

WHEREAS, after reviewing the bids received and conferring with Compost staff it was determined that the bids contained higher than anticipated costs and that the Compost budget could not sustain the, and that staff would have to research different cost effective ways for the removal of the overs, and

WHEREAS, in accordance with Modesto Municipal Code Sec. 8-3.204(a), Formal Bid Procedures, the Council shall have the authority to accept or reject any or all bids and the rejection of all bids for the Oversized and Non-Compostable Waste Material Handling conforms to Modesto Municipal Code 8-3.204, subsection (e).

NOW THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the rejection of all bids received for Request for Bid No. 1920-03 for Oversized and Non-Compostable Waste Material Handling.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-103

RESOLUTION ACCEPTING THE REBID OF GROUNDWATER MONITORING WELLS PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $716,590 TO GREGORY DRILLING, INC., OF NORTH BEND, WA

WHEREAS, the Rebid Groundwater Monitoring Wells project provides groundwater monitoring wells at five different locations within the City limits and throughout the City's contiguous water service area, and

WHEREAS, at each of the five locations, the City constructed a cluster of four monitoring wells targeting discrete water-bearing zones at depths ranging from approximately 55 to 375 feet, and

WHEREAS, the data collected from the new monitoring wells will support characterizing groundwater conditions, evaluate fate and transport of contaminants, and ultimately provide the City information to efficiently operate the production wells and also compliance with SGMA, and

WHEREAS, the project was initially advertised for bids on August 21, 2018 and the City received one bid on September 18, 2018 which was withdrawn due to an error made on the bid by the bidder, and

WHEREAS, the project was advertised for rebid on November 20, 2018, and

WHEREAS, bids were publicly opened on January 8, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, five bids were received and Gregory Drilling, Inc., of North Bend, WA, was the apparent lowest responsible and responsive bidder, and

WHEREAS, on April 2, 2019, by Resolution No. 2019-144, Council awarded a contract to Gregory Drilling, Inc., of North Bend, WA for the construction of the Rebid Groundwater Monitoring Wells Project in the amount of $634,307, and also by Resolution 2019-145 an agreement with Ground Zero Analysis, Inc., of Modesto, CA, for Hydrogeological Design support during construction, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of April 29, 2019, and all contract work was completed by July 19, 2019, and

WHEREAS, the total project costs were $885,372 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $1,835,000 which included $761,168 for the construction contract and contingency with Gregory Drilling, Inc., and

WHEREAS, there were three change orders resulting in an overall increase of $82,283 for change order work, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the rebid of Groundwater Monitoring Wells Project is hereby accepted as complete from contractor Gregory Drilling, Inc., of North Bend, WA, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $716,590, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-104

RESOLUTION ACCEPTING THE MODESTO FIRE DEPARTMENT ASSISTANCE TO FIREFIGHTERS GRANT EXHAUST SYSTEMS PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $128,080 TO BENZ AIR ENGINEERING, OF BEAVERTON, OR

WHEREAS, the Modesto Fire Department currently has all first out apparatus bays equipped with adequate exhaust systems, and

WHEREAS, there are however, six fire stations that lacked exhaust systems in the secondary equipment apparatus bays (i.e. brush/grass rigs, reserve engines, etc.), and

WHEREAS, the department sought to be able to expand existing exhaust systems to the secondary apparatus bay, and

WHEREAS, source capture exhaust systems reduce the amount of soot, carcinogenic substances and other harmful airborne pollutants that diesel exhaust contains which all of our fire apparatus produce, and

WHEREAS, this is achieved by a system that attaches to the vehicle tailpipe and captures exhaust emissions, and the need for vehicle exhaust extraction is especially important when there are employees living in the quarters where the vehicles run (such as a firehouse), and

WHEREAS, bids were advertised on April 16, 2019, and

WHEREAS, bids were publicly opened on May 14, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and Benz Air Engineering Inc., Beaverton, OR, was the apparent responsible and responsive bidder, and

WHEREAS, on July 9, 2019, by Resolution No. 2019-342, Council awarded a contract to Benz Air Engineering Inc., Beaverton, OR, for the construction of the Modesto Fire Department Assistance to Firefighters Grant Exhaust Systems Project in the amount of $120,080, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of September 3, 2019, and all contract work was completed by November 12, 2019, and

WHEREAS, the total project costs were $163,757 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $229,102 which included $147,292 for the construction contract and contingency with Benz Air Engineering Inc., and

WHEREAS, there were no change orders on this project, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Modesto Fire Department Assistance to Firefighters Grant Exhaust Systems Project is hereby accepted as complete from contractor Benz Air Engineering Inc., Beaverton, OR, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $128,080, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-105

RESOLUTION APPROVING AN AMENDMENT TO THE AGREEMENT WITH VALI COOPER ASSOCIATES, INC., OF SACRAMENTO, CA, FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE AREA 2 STORM WATER TO SANITARY SEWER CROSS CONNECTION REMOVAL – PHASE 2 ROOSEVELT PARK PROJECT IN AN AMOUNT NOT TO EXCEED $95,494, FOR A TOTAL AMOUNT NOT TO EXCEED $195,106, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS, the purpose of the Area 2 Storm Water to Sanitary Sewer Cross Connection Removal – Phase 2 Roosevelt Park project is to remove direct connections of storm drain runoff to the sanitary sewer system and provide necessary storm drain improvements resulting from the removal of the cross connections, and

WHEREAS, the project proposes to capture, treat, and infiltrate stormwater runoff to augment groundwater supplies, reduce flood-related damage, and improve the quality of stormwater runoff percolating to the underlying groundwater basin, and

WHEREAS, on August 14, 2018, by Resolution No. 2018-343, Council awarded the construction contract to D.A. Wood Construction, Inc., Modesto, CA., and

WHEREAS, due to the limited availability of the City's Construction Administration staff and recent staffing transitions, staff recommended utilizing a consultant to provide construction management, inspection and materials testing services through completion of the construction phase, and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," this agreement for professional services is exempt from the bidding requirements of Modesto Municipal Code 8-3.203, and

WHEREAS, for the construction management and inspection services, a Request for Proposals (RFP) was issued to the prequalified list of firms for construction management and inspection services for this project, and

WHEREAS, on January 16, 2018, by Resolution No. 2018-10, Council approved the pre-qualified consultant list for construction management and inspection services for various capital improvement projects with NV5, Inc., Vali Cooper Associates, Inc., 4Leaf, Inc., Drake Haglan and Associates, Inc., Black Water Consulting Engineers, Structure Groups, and CMPROS, Inc., and

WHEREAS, in accordance with City's policy, Administrative Directive 3.1 Selection Procedures for Professional Consultants Who Provide Architectural and Engineering Services for Capital Projects, Vali Cooper Associates, Inc., was selected as the most qualified firm for the project, and

WHEREAS, on November 26, 2019, by Resolution No. 2019-527, Council approved an agreement with Vali Cooper Associates, Inc., of Sacramento, CA, for construction management and inspection services for the Area 2 Storm Water to Sanitary Sewer Cross Connection Removal – Phase 2 Roosevelt Park project in an amount not to exceed $99,612, plus $9,961 for additional services (if needed), for a total amount not to exceed $109,573, and

WHEREAS, the project was scheduled to be complete by December 31, 2019; however, the project has experienced delays due to unanticipated circumstances related to trench compaction issues and on-site park landscaping improvements, and

WHEREAS, the delays have resulted in an extended construction schedule and additional inspections with anticipated completion schedule of April 30, 2020.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an Amendment to the current agreement with Vali-Cooper Associates, Inc., for construction management and inspection services for Area 2 Storm Water to Sanitary Sewer Cross Connection Removal – Phase 2 Roosevelt Park project, in the amount of $95,494 for a total amount not to exceed $195,106.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: Stephanie Lopez
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-106

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE KANSAS AVENUE 12-INCH WATER MAIN UPGRADE PROJECT, ACCEPTING THE BID, AND APPROVING A CONSTRUCTION CONTRACT TO PLATINUM PIPELINE INC., OF LIVERMORE, CA, IN THE AMOUNT OF $638,916 PLUS $127,783 FOR CONTINGENCY (IF NEEDED) FOR A TOTAL AMOUNT NOT TO EXCEED $766,699 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the Kansas Avenue 12-inch Water Main Upgrade project area is one of many prioritized areas identified in the City's Water Master Plan that requires upgrading current, aging water infrastructure to meet current fire flow requirements, and

WHEREAS, the Kansas Avenue 12-inch Water Main Upgrade project will replace and upgrade the existing undersized 6-inch water main with a new 12-inch City Standard water main, as well as associated water valves, services, and fire hydrants to increase service reliability, flows, pressures, and most importantly, to meet current fire flow requirements for the surrounding businesses, and

WHEREAS, specifications have been prepared for the Kansas Avenue 12-Inch Water Main Upgrade project, and

WHEREAS, the Project was advertised for bids on January 15, 2020, and

WHEREAS, on February 04, 2020, Bids were publicly opened, pursuant to City Charter Section 1307, thee bids were received and Platinum Pipeline, Inc., Livermore, CA, was the responsible bidder with the lowest responsive bid, and

WHEREAS, MMC 8-3.203 states that all purchases, in excess of fifty thousand dollars ($50,000), or when directed by the City Manager for any purchase of fifty thousand dollars ($50,000) or less, shall follow formal bid procedures, and

WHEREAS, and the award of bid for the Kansas Avenue 12-Inch Water Main Upgrade project conforms to the Modesto Municipal code based on providing the overall lowest cost, while providing improved service, and

WHEREAS, the Director of Utilities has recommended that the bid of $638,916 received from Platinum Pipeline Inc., be accepted as the lowest responsible and responsive bid and the contract be awarded Platinum Pipeline Inc.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the plans and specifications for the Kansas Avenue 12-Inch Water Main Upgrade project and accepts the bid of $638,916 plus $127,783 for contingency (if needed) for a total amount not to exceed of $766,699 and Awards Platinum Pipeline Inc., of Livermore, CA, the contract for the Kansas Avenue 12-Inch Water Main Upgrade project.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-107

RESOLUTION AUTHORIZING AN INCREASE IN THE DIRECTOR'S AUTHORITY TO ISSUE CHANGE ORDERS FOR THE KANSAS AVENUE 12-INCH WATER MAIN UPGRADE PROJECT FROM 10% ($63,892) TO 20% ($127,783) OF THE CONSTRUCTION CONTRACT PRICE OF $638,916 WITH PLATINUM PIPELINE INC, OF LIVERMORE, CA

WHEREAS, the City's "Change Order Approval Policy", enacted by Council Resolution No. 94-443 on July 19, 1994, and updated by Resolution No. 2019-326 on July 9, 2019, established a contract change order budget of 10% for projects less than $1 Million, and

WHEREAS, given the nature of a rehabilitation project, additional work may be needed to address unexpected conditions that require changes in project scope, and

WHEREAS, the additional costs may exceed the Director's authority for the project as established by the Council's Change Order Approval Policy adopted by Resolution No. 94-443 and revised on July 9, 2019 by Resolution No. 2019-326, and

WHEREAS, staff is requesting authorization to increase the contract change order budget to 20% ($127,783) to account for unexpected conditions.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to issue change orders for the Kansas Avenue 12-Inch Water Main Upgrade Project from 10 percent ($63,892) to 20 percent ($127,783) of the construction contract price of $638,916 with Platinum Pipeline Inc., of Livermore, CA.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-108

RESOLUTION APPROVING AN AGREEMENT WITH NV5, OF MANTECA, CA FOR CONSTRUCTION MANAGEMENT, SPECIAL INSPECTION, AND MATERIALS TESTING SERVICES FOR THE KANSAS AVENUE 12-INCH WATER MAIN UPGRADE PROJECT IN AN AMOUNT NOT TO EXCEED $86,392, PLUS $8,639 FOR ADDITIONAL SERVICES (IF NEEDED), FOR A TOTAL AMOUNT NOT TO EXCEED $95,031; AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT AND ANY AMENDMENTS UP TO A CUMULATIVE AMOUNT OF TEN PERCENT (10%) OR $8,639

WHEREAS, the Kansas Avenue 12-inch Water Main Upgrade project area is one of many prioritized areas identified in the City's Water Master Plan that requires upgrading current, aging water infrastructure to meet current fire flow requirements; and

WHEREAS, the Kansas Avenue 12-inch Water Main Upgrade project will replace and upgrade the existing undersized 6-inch water main with a new 12-inch City Standard water main, associated water valves, services, and fire hydrants to increase service reliability, flows, pressures, and most importantly, to meet current fire flow requirements to the surrounding businesses; and

WHEREAS, the City has determined that Construction Management, Special Inspection, and Materials Testing Services should be performed for the Kansas Avenue 12-Inch Water Main Upgrade; and

WHEREAS, NV5, of Manteca, CA represents that it is qualified, willing and able to provide the requested Construction Management, Special Inspection, and Materials Testing Services to City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an Agreement with NV5, of Manteca, CA for Construction Management, Special Inspection, and Materials Testing Services for the Kansas Avenue

12-Inch Water Main Upgrade Project in an amount of $86,392 for the identified scope of services.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the Agreement, in a form approved by the City Attorney.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to execute one or more amendments to this Agreement in a cumulative amount up to ten percent (10%) of the original agreement amount of $86,392.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-109

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET IN THE AMOUNT OF $925,065 TO BE TRANSFERRED INTO THE PROJECT FROM WATER RESERVES IN ORDER TO FULLY FUND THE CONSTRUCTION, CONTINGENCY, CONSTRUCTION ADMINISTRATION AND DESIGN SUPPORT DURING CONSTRUCTION FOR THE KANSAS AVENUE 12-INCH WATER MAIN UPGRADE PROJECT

WHEREAS, certain budgetary transactions are necessary in the amount of $925,065, in order to fund to fully fund the construction, contingency, construction administration and design support during construction for the Kansas Avenue 12-Inch Water Main Upgrade Project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget in the amount of $925,065 to be transferred into the project from Water Reserves.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-110

RESOLUTION APPROVING AN AMENDMENT TO THE PURCHASE AGREEMENT WITH INDUSTRIAL ELECTRICAL CO., MODESTO, CA, FOR THE FURNISHING OF ELECTRIC MOTOR REWIND/REBUILD SERVICES, INCREASING THE ANNUAL COSTS FROM $88,548 TO $133,548 UNTIL THE END OF THE AGREEMENT AUGUST, 2020, AND A TOTAL AGREEMENT AMOUNT NOT TO EXCEED FROM $442,740 TO $487,740 AND AUTHORIZING THE PURCHASING MANAGER OR HER DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, electric motor rewinding/rebuilding services are required for various types and sizes of motors used within City facilities; these motors require immediate repair or rebuild services to ensure that City operations and facilities are maintained, and

WHEREAS, the City Manager authorized the Purchasing Manager to issue formal Request for Bids (RFB) for the furnishing of electric motor rewinding/rebuilding services and the Purchasing Division issued RFB No. 1415-31 on the City's website under the commodity code for electric motor rewind/rebuild services to 88 prospective bidders, twelve of which were local companies. Eight companies chose to download the RFB document, and

WHEREAS, bids were formally opened in the City Clerk's Office with four companies chose to respond, two of which were local companies; all four companies that responded provided responsive and responsible bids, and

WHEREAS, to ensure continuity of services to the City, two purchase agreements were awarded to a primary and secondary contractor, and

WHEREAS, based on providing the lowest responsive and responsible bids for the furnishing of electric motor rewind/rebuild services, agreements were awarded to Andrews Electric and Machine, Modesto, CA, as "primary" contractor and Industrial

Electrical Co., Modesto, CA, as "secondary" contractor, on September 1, 2017 by Resolution No. 2015-320 for one-year terms with four one-year extension options at the sole discretion of the City, for an estimated annual cost of $88,548, and over five years of $442,740, and

WHEREAS, wastewater utilizes this contract to maintain the City's process pumps and motors in the stormwater and sewer lift stations, Jennings and Sutter Treatment Plants and the North Valley Regional Recycled Water Project, and

WHEREAS, this increase will cover the unexpected failures of critical motors and pumps until the new agreement is put into place in 2020, and

WHEREAS, the Wastewater Division has often used Industrial Electric as primary contractor due to testing requirement on the City's many submersible motors, which Andrews Electric has been unable to accomplish, and

WHEREAS, staff recommends an amendment to the purchase agreement for the furnishing of electric motor rewind/rebuild services increasing the annual costs from $88,548 to $133,548 until the end of the agreement in August, 2020, and a total agreement amount not to exceed from $442,740 to $487,740.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment to the purchase agreement with Industrial Electrical Co., Modesto, CA, for the furnishing of Electric Motor Rewind/Rebuild Services, increasing the annual costs from $88,548 to $133,548 until the end of the agreement August, 2020, and a total agreement amount not to exceed from $442,740 to $487,740.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, is hereby authorized to execute the amendment.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-111

RESOLUTION APPROVING ON-CALL ENGINEERING CONSULTANT AGREEMENTS WITH BLACK WATER CONSULTING ENGINEERS INC. OF MODESTO CA, BROWN AND CALDWELL OF RANCHO CORDOVA, CA, CAROLLO ENGINEERS FO WALNUT CREEK, CA, HAZEN AND SAWYER OF SAN FRANCISCO, CA, WEST YOST ASSOCIATES OF DAVIS, CA AND WOODARD & CURRAN OF PORTLAND, ME FOR TWO-YEAR AGREEMENTS WITH THREE ONE-YEAR EXTENSION OPTIONS, FOR A COMBINED ANNUAL COST NOT TO EXCEED $200,000 FOR WASTEWATER FUND, AND $100,000 FOR STORM DRAIN FUND, FOR A TOTAL COMBINED COST NOT TO EXCEED $1,000,000 FOR WASTEWATER FUND, AND $500,000 FOR STORM DRAIN FUND, OVER FIVE YEARS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENTS

WHEREAS, the Wastewater Division performs a number of tasks associated with Wastewater Collections, Operations and Maintenance, and Environmental Services, and

WHEREAS, staff has selected six qualified consulting firms that have broad experience and allow for more competitive costs in the execution of projects under these On-Call Engineering Services agreements and these services are provided by engineers that have specialized expertise in wastewater collection, treatment and processes, environmental regulations, and other projects as necessary, and

WHEREAS, on September 11, 2019, a formal Request for Qualifications was issued on Planet Bids for On- Call Engineering Services and prospective bidders were notified online and via email of the request for qualifications, and

WHEREAS, eight firms chose to respond, of which three were local consultants, and

WHEREAS, based on the vast expertise among the following six proposers, staff recommends approving agreements with the consulting firms of Black Water Consulting Engineers Inc. (local), Brown & Caldwell, Carollo Engineers, Hazen and Sawyer, West

Yost Associates and Woodard & Curran for On-Call Engineering Services for wastewater and storm drain related work, and

WHEREAS, as tasks are determined, a scope of work will be written and sent to each consultant who will submit a written proposal outlining the specific work, schedule, and estimated cost associated with each scope of work, and

WHEREAS, the most responsive consultant will be selected and will not perform services until the Director of Utilities has approved and a written Notice to Proceed is sent to the consultant, and

WHEREAS, Modesto Municipal Code Section 8-3.204(a), "Exceptions to Formal Bidding Requirements," agreements for professional services are exempt from the bidding requirements of Modesto Municipal Code 8-3.203, and

WHEREAS, the approval for On-Call Engineering Services to Black Water Consulting, Brown & Caldwell, Carollo Engineering, Hazen and Sawyer, West Yost Associates, and Woodard & Curran conforms to Modesto Municipal Code 8-3.204, subsection (a) as they are providing professional services, and

WHEREAS, collectively, up to $200,000 from the Wastewater Fund (4210-44312-53300 Plant Operations) and up to $100,000 from the Storm Drain Fund (4480-44111-53300 Stormwater Compliance) will be spent for On-Call consultant work annually, and

WHEREAS, each consultant will sign an agreement for possible work to be performed in the communitive annual total shall not exceed the amount of $200,000 in the Wastewater Fund and $100,000 in the Storm Drain Fund.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves On-Call Engineering consultant agreement with Black Water

Consulting Engineers Inc. of Modesto CA Brown & Caldwell of Rancho Cordova, CA, Carollo Engineering of Walnut Creek, CA, Hazen and Sawyer of San Francisco, CA, West Yost Associates of Davis, CA, and Woodard & Curran, Inc. of Portland, ME for two-year agreements with three one-year extension options, for a combined annual cost not to exceed $200,000 for Wastewater Fund, and $100,000 for Storm Drain Fund, for a total combined cost not to exceed $1,000,000 for Wastewater Fund, and $500,000 for Storm Drain Fund, over five years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute these agreements, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-112

RESOLUTION APPROVING A NINTH AMENDMENT TO THE AGREEMENT WITH SCS ENGINEERS, INC., MODESTO, CA, TO PROVIDE ENGINEERING SUPPORT AND POTENTIAL ADDITIONAL WELL REMOVAL AND REPLACEMENT FOR THE CARPENTER ROAD LANDFILL CLEAN CLOSURE PROJECT AS MANDATED BY THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD COMPLIANCE ABATEMENT ORDER R5-2015-0700, IN AN AMOUNT NOT TO EXCEED $173,000 THROUGH DECEMBER 31, 2020 OR UNTIL THE PROJECT IS COMPLETE, FOR A TOTAL AMOUNT NOT TO EXCEED $1,679,156, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS**,** the City of Modesto owned and operated the Carpenter Road Landfill from 1956 to 1968, and the landfill includes fill sites on both the east and west sides of Carpenter Road, along the Tuolumne River, and

WHEREAS, the City is required by State law to perform post closure landfill maintenance, monitoring, and reporting for the landfill site, and

WHEREAS, in December 2005, it appeared that methane gas levels at the landfill's Northern boundary exceeded the maximum limits, and the California Integrated Waste Management Board (CIWMB) required the City to determine the cause and develop a Mitigation and Monitoring Plan, and

WHEREAS, the Central Valley Regional Water Quality Control Board (CVRWQCB) subsequently required the City to assess the potential for groundwater impacts, and

WHEREAS, on June 12, 2007 by Resolution No. 2007-341, Council authorized a Professional Services Agreement with SCS Engineers, Inc. in an amount not to exceed $299,500 to assess the landfill and recommend corrective action, and

WHEREAS, after the initial site assessment, Resolution No. 2007-728 authorized a no-cost Letter Amendment to shift the focus of the work to installation of gas probes, design and installation of groundwater monitoring wells, and ongoing monitoring and reporting of methane gas and groundwater, and

WHEREAS, the assessment determined that migration of methane gas past the boundaries of the landfill was not a problem, but that a groundwater monitoring event determined that the landfill had experienced a "release" that could potentially have affected groundwater, and

WHEREAS, an engineering feasibility study had to be completed and the CVRWQCB required the City to submit a Corrective Action Plan (CAP), and

WHEREAS, in May 2009 by Resolution 2009-199, Council approved a Second Amendment to the Agreement with SCS Engineers, Inc. to further evaluate the site, develop the CAP, and provide ongoing monitoring and reporting services in an amount not to exceed $242,000, and

WHEREAS, in November 2010, after conducting 12 hydro punch borings to sample groundwater and analyzing them for Volatile Organic Compounds (VOC's), SCS submitted the CAP to the CVRWQCB proposing to use an injection of a hydrogen releasing compound to remediate any groundwater impacts, and

WHEREAS, subsequently , the VOC concentrations began to consistently decline, and City staff and SCS Engineers, Inc. determined that the proposed CAP needed to be re-evaluated, and

WHEREAS, in August 2013 by Resolution No. 2013-277, Council approved a Third Amendment to the Agreement with SCS Engineers, Inc. for ongoing monitoring,

lab analysis, compliance reports, corrective action monitoring and maintenance, and re-evaluating and implementing the CAP in a cost not to exceed $290,500, and

WHEREAS, in October 2014, a revised CAP and post closure maintenance plan was submitted to the CVRWQCB and in March 2015, the CVRWQCB issued the City a Cleanup and Abatement Order (CAO R5-2015-0700) requiring the City to clean close the Eastern Fill, move all the waste to the Western Fill, install a final cover atop the Western Fill, and construct a storm water retention basin, and

WHEREAS, in April 2015, SCS Engineers, Inc. submitted the plans and drawings to address the CAO and it was conditionally approved by the CVRWQCB in July 2016, with mitigation to be completed by October 2017, and

WHEREAS, the Central Valley experienced a significant wet winter at the end of 2016 and into the beginning of 2017, with the Tuolumne River above flood stage and not expected to completely recede until September or mid-October 2017, and

WHEREAS, the City petitioned the CVRWQCB in June 2017 for an extension to the CAO due to the groundwater elevation being higher than that of the waste to be excavated, and

WHEREAS, in mid-July the CVRWQCB approved the City's request to postpone the execution of the Clean Closure Work Plan with the condition that the approved background soil assessment would be completed and submitted to the water board by October 20, 2017 and the Final Construction and Completion Report for the CAO would be submitted no later than October 31, 2018, and

WHEREAS, in September 2017, by Resolution No. 2017-341, Council approved a Fourth Amendment to the Agreement with SCS Engineers, Inc. to complete these tasks and carry the project through December 31, 2018 in a cost not to exceed $92,349, and

WHEREAS, in July 2018 the City opened the bid process for the Clean Closure work, and in August 2018, awarded the bid to Pacific States Environmental Contractors for a total of $3,776,598 by Council Resolution No. 2018-345, and

WHEREAS, in addition, a Fifth Amendment to the SCS Agreement in an amount not to exceed $520,000 was approved by Council Resolution No. 2018-348 for environmental and design support services to the Clean Closure work, and

WHEREAS, Resolution No. 2018-348 also authorized the City Manager to execute any amendments up to a cumulative amount of 10% of the Fifth Amendment, or $52,000, and

WHEREAS, in September 2018, it was determined that the City needed to have a No-Rise Certification in order to be in compliance with Federal Emergency Management Agency (FEMA) Regulation, and

WHEREAS, the City requested that SCS Engineers perform this analysis but since nothing was identified in their agreements for this type of work, in December 2018 a Sixth Amendment to the SCS Agreement in an amount not to exceed $44,036 was approved under the authority of the City Manager, for SCS to hire HDR Engineering to produce the model runs, analysis, and No-Rise Certification needed to be in compliance with FEMA, and

WHEREAS, HDR Engineering diligently worked with SCS Engineers and the City to help the City achieve a No-Rise Certification and determined that with some

slight design modifications and their site review of the vegetation layout, that the No-Rise Certification could be met, and

WHEREAS, with the number of analytical models that needed to be run and the slight design modifications that needed to be made, the Sixth Amendment fell short by $17,771, and in order to keep the project moving to meet construction deadlines, the City Manager executed a Seventh Amendment to the SCS Agreement, under his authority in the Fifth Amendment by Resolution No. 218-348, for the balance of the cumulative total of 10%, which was $7,964, and

WHEREAS, the previous amount was approved in the Sixth Amendment in the amount of $44,033, and the City Manager total delegated authority was $52,000, and

WHEREAS, an Eighth Amendment for the remaining $9,807 of the $17,771 was needed to complete the No-Rise Certification, and

WHEREAS, it was critical that this amendment be processed for several reasons: 1) the health and safety of the neighborhood in and around the landfill as the longer the project is delayed, the longer the waste sits in a non-line landfill without groundwater protection; 2) the contract was awarded almost a year ago and the contractor has been in a holding pattern; 3) there are time limitations to when construction can occur due to wildlife cycles; and 4) if the project does not get started as mandated by the CVRWQCB, the City will be subjected to fines of up to $10,000 per day, and

WHEREAS, the Eighth Amendment was approved at the City Council meeting of August 7, 2019 by Resolution No. 2019-360 in an amount not to exceed $9,807, and

WHEREAS, a notice to proceed was issued to Pacific States (Contractor) to begin the clean closure project work on September 3, 2019, and

WHEREAS, SCS Engineers removed four ground water monitoring wells as per the work plan, and the Contractor began stripping the site and performing pot-holing to determine the levels of waste, and

WHEREAS, after two weeks of work the Contractor engaged the City in discussions regarding the design modifications that were recommended by HDR in order to meet the No-Rise requirements, and the need for these design changes to be implemented in the design plans by SCS Engineers, and

WHEREAS, in agreement with the City, the Contractor halted the project to address these design issues and requested a change order be completed to ensure proper compensation was in line with the design changes proposed, and

WHEREAS, as part of the proposed designed changes, SCS Engineers has submitted a new Scope of Work to handle the additional services of the design support, as well as the potential removal and replacement of 4 additional wells if the Contractor deems it necessary to proceed with the project, and

WHEREAS, funds are collected in the garbage rate for this mitigation project, estimated to cost $6.2 million and to date the Carpenter Road Landfill Fund (Fund 4893-56016) has approximately $5 million.

NOW THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Ninth Amendment to the Agreement with SCS Engineers, Inc. to provide engineering support and potential additional well removal and replacement for the Carpenter Road Landfill Clean Closure Project as mandated by the Central Valley Regional Water Quality Control Board Compliance Abatement Order R5-2015-0700, in

an amount not to exceed $173,000 through December 31, 2020 or until the project is complete, for a total amount not to exceed $1,679,156.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the Ninth Amendment to the Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSÉ M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-113

RESOLUTION AUTHORIZING AN INCREASE OF THE DIRECTOR OF UTILITIES AUTHORITY TO ISSUE CHANGE ORDERS ON THE CARPENTER ROAD LANDFILL MITIGATION PROJECT FROM 10 PERCENT ($377,659) TO 48 PERCENT ($1,812,767) OF THE ORIGINAL CONSTRUCTION CONTRACT PRICE OF $3,776,598 WITH PACIFIC STATES ENVIRONMENTAL CONTRACTORS, INC. OF DUBLIN, CA

WHEREAS, on August 14, 2018, by Resolution No. 2018-345 Council awarded a construction contract to Pacific States Environmental Contractors, Inc. of Dublin, CA in an amount not to exceed $3,776,598 for the Carpenter Road Landfill Mitigation Project, and

WHEREAS, the original amount authorized to the Director of Utilities to issue change orders was 10 percent ($377,659) of the contract amount of $3,776,598, and

WHEREAS, a change order policy is utilized for each construction contract awarded by the City, and

WHEREAS, if after the contract is executed, a change in the original scope of work is determined necessary by staff, the policy authorized the Director to approve a change order up to a cumulative amount of the original contract, and

WHEREAS, in most cases, the budgeted amount set by the policy and specific requests by resolution are typically sufficient, however, as it relates to the Carpenter Road Landfill Mitigation Project, anticipated change order costs will exceed the authority allowed by policy, and

WHEREAS, upon award of the project and during the course of the submittal phase, City Construction Administration staff determined that the project had not

obtained a Federal Emergency Management Agency (FEMA) "No Rise Certification" which is required for construction located within a floodplain, and

WHEREAS, the consultant engineer was notified and requested to provide the "No Rise Certification", which resulted in additional hydraulic evaluation needed to verify that the proposed design met the "No Rise Certification" requirements, and

WHEREAS, the hydraulic analysis conducted confirmed that the proposed design did not meet the requirement, resulting in the need for the design to be revised, and

WHEREAS, the design revisions resulted in additional scope of work to address the significant changes in the design and unforeseen conditions such as increased excavation quantities and additional work associated with the sloped area, depth of debris material and additional environmental measures to address odors, and

WHEREAS, additional change order work not included in the original bid is needed to be added to the project to allow completion of the project.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an increase in Director's Authority to issue change orders for the Carpenter Road Landfill Mitigation Project from 10 percent ($377,659) to 48 percent ($1,812,767).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-114

RESOLUTION APPROVING AN AMENDED LOAN AMORTIZATION SCHEDULE FOR THE ORIGINAL INTERFUND LOAN FOR CARPENTER ROAL LANDFILL MITIGATION PROJECT, RESCINDING RESOLUTION NO. 2018-349 AND APPROVING A SECOND INTERFUND LOAN IN THE AMOUNT OF $900,000 FROM THE WATER FUND RESERVES TO THE CARPENTER ROAD LANDFILL FUND FOR THE CARPENTER ROAD LANDFILL CLEAN CLOSURE MITIGATION PROJECT, TO BE PAID BACK WITH INTEREST FROM FUTURE REVENUE COLLECTED ON THE GARBAGE RATES

THIS RESOLUTION WAS RESCINDED BY MODESTO CITY COUNCIL RESOLUTION NO. 2020-531 ON DECEMBER 8, 2020

WHEREAS, the City of Modesto owned and operated the Carpenter Road Landfill from 1956 to 1968, and the landfill includes fill sites on both the east and west sides of Carpenter Road, along the Tuolumne River, and

WHEREAS, the City is required by State law to perform post closure landfill maintenance, monitoring, and reporting for the landfill site, and

WHEREAS, On August 14, 2018, Council, by Resolution No. 2018-345, awarded a construction contract to Pacific States Environmental Contractors, Inc. in the amount of $3,776,598 for the Carpenter Road Landfill Mitigation project, and

WHEREAS, On August 14, 2018, Council, by Resolution No. 2018-349, approved an interfund loan in the amount of $2,300,000 from the Water Fund Reserves to the Carpenter Road Landfill Fund to assist with the funding of this project so that the project remains within the parameters of the set schedule approved by the Regional Water Quality Control Board, and

WHEREAS, the project design has experienced revisions due to Federal Emergency Management Agency (FEMA) “No Rise Certification” requirements, which have resulted in additional scope of work to address the significant changes in the design and unforeseen conditions such as increased excavation quantities and additional work

associated with the sloped area, depth of debris material and additional environmental measures to address odors, and

WHEREAS, additional change order work not included in the original bid is needed to be added to the project to allow completion of the project, and

WHEREAS, additional funds are needed to cover the costs of the additional work to allow completion of the project, and

WHEREAS, staff recommends amending the original loan to add a year to its repayment schedule, and

WHEREAS, staff also recommends establishing a second interfund loan in the amount of $900,000, and

WHEREAS, principal payments for each loan will be paid back each fiscal year through fiscal year 2025-26 plus interest, as outlined in **Exhibit A**, and

WHEREAS, City policy allows for interfund loans to be made at the interest rate of the City's investment portfolio, which is currently 2.35%.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an amended interfund loan amortization schedule for the original interfund loan for Carpenter Road Landfill Mitigation project, rescinding Resolution No. 2018-349 and approving a second interfund loan in the amount of $900,000 from the Water Fund Reserves to the Carpenter Road Landfill Fund for the Carpenter Road Landfill Clean Closure Mitigation Project, to be paid back with interest from future revenue collected on the garbage rate, as outlined in **Exhibit A.**

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-115

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROJECT BUDGET BY $1,557,155 FOR THE CARPENTER ROAD LANDFILL MITIGATION PROJECT (101046), INCLUDING $900,000 TO BE TRANSFERRED FROM THE WATER FUND TO AMEND THE INTERFUND LOAN (4100) TO THE CARPENTER ROAD LANDFILL FUND (4893)

WHEREAS, on August 14, 2018, by Resolution No. 2018-345 Council awarded a construction contract to Pacific States Environmental Contractors, Inc. of Dublin, CA in an amount not to exceed $3,776,598 for the Carpenter Road Landfill Mitigation Project, and

WHEREAS, a change order policy is utilized for each construction contract awarded by the City, and

WHEREAS, if after the contract is executed, a change in the original scope of work is determined necessary by staff, the policy authorized the Director to approve a change order up to a cumulative amount of the original contract, and

WHEREAS, in most cases, the budgeted amount set by the policy and specific requests by resolution are typically sufficient, however, as it relates to the Carpenter Road Landfill Mitigation Project, anticipated change order costs will exceed the authority allowed by policy, and

WHEREAS, staff has negotiated the change order work, but estimates are above the approved contingency limit set by Council at 10 percent or ($377,659), and

WHEREAS, the anticipated cost for the change order work is estimated to be 40 percent or ($1,812,767), and

WHEREAS, the total anticipated expenditures will be increased by $1,557,155 for change orders and staff costs, and

WHEREAS, staff has reviewed all funding sources for the project and has determined that an additional $1,557,155 in budget is needed to fund construction, contingency, construction administration, and design support.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it approves amending the fiscal year 2019-2020 Capital Improvement Project budget by $1,557,155 for the Carpenter Road Landfill Mitigation project (101046), including $900,000 to be transferred from the Water fund to amend the interfund loan (4100) to the Carpenter Road Landfill fund (4893).

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 25th day of February, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-116

RESOLUTION REAPPOINTING TAMMY MAISETTI AND JOE MURATORE TO THE DOWNTOWN IMPROVEMENT DISTRICT BOARD OF DIRECTORS FOR A FOUR YEAR TERM TO EXPIRE JANUARY 1, 2024

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Downtown Improvement District Board of Directors are recommending the reappointments of Tammy Maisetti and Joe Muratore to a term ending January 1, 2024 to the Downtown Improvement District Board of Directors.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto as follows:

SECTION 1. Tammy Maisetti and Joe Muratore are hereby reappointed to the Downtown Improvement District Board of Directors.

SECTION 2. The City Clerk is hereby directed to transmit a copy of this Resolution to the reappointed members of the Downtown Improvement District Board of Directors, and as Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 3rd day of March, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-117

RESOLUTION ACCEPTING THE RESIGNATION OF LAUREN TREVINO FROM THE DOWNTOWN IMPROVEMENTN DISTRICT BOARD OF DIRECTORS

WHEREAS, Lauren Trevino was appointed to serve a member of the Downtown Improvement District Board of Directors in 2018, and

WHEREAS, Lauren Trevino has tendered her resignation from the Downtown Improvement District Board of Directors.

NOW, THEREFORE, BE IT RESOLVED, that the resignation of Lauren Trevino from the Downtown Improvement District Board of Directors.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 3rd day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-118

RESOLUTION REAPPOINTING THOMAS LOPES, PERVEZ KHAN AND CHRIS MURPHY TO THE MODESTO CONVENTION AND VISITORS BUREAU BOARD OF DIRECTORS FOR A SECOND TERM RETROACTIVE TO JANUARY 1, 2020 THROUGH DECEMBER 31, 2021

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, on May 7, 2019, by Resolution No. 2019-202, Council approved the appointment of Thomas Lopes, Pervez Khan and Chris Murphy to the Modesto Convention and Visitors Bureau Board of Directors with a term expiration of December 31, 2019, and

WHEREAS, Thomas Lopes, Pervez Khan and Chris Murphy have expressed a desire to remain on the Modesto Convention and Visitors Bureau Board of Directors, and

WHEREAS, Thomas Lopes, Pervez Khan and Chris Murphy continue to meet the Modesto Convention and Visitors Bureau Board of Directors requirements, and

WHEREAS, the Amended CVB Bylaws adopted on May 7, 2019 by Resolution No. 2019-201 allow for Directors to serve up to three (3) two-year terms.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby reappoints Thomas Lopes, Pervez Khan and Chris Murphy to the Modesto Convention and Visitors Bureau Board of Directors for a second term with a term expiration of December 31, 2021.

BE IT FURTHER RESOLVED that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed members of the Modesto Convention and Visitors Bureau, and the Secretary, thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 3rd day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-119

RESOLUTION APPROVING THE EXTENSION OF TERMINATION DATES OF SEVEN ANNUAL PURCHASING AGREEMENTS; APPROVING TERMINATION DATES FOR THE SERVICES STATED HEREIN; AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO ISSUE THE IDENTIFIED PURCHASE AGREEMENTS TERMINATION DATES APPROVED BY COUNCIL

WHEREAS, City staff continues to review and monitor over 1,000 purchasing items and identify the best and most efficient way to procure the needs of the City, and

WHEREAS, to ensure that goods and services are available to effectively manage the operations of the City, the Purchasing Division is making every attempt to expedite the bidding process and making sure we have new agreements in place before the current agreements expire, and

WHEREAS, the Finance Department has implemented monthly purchasing training to educate City Staff about the standards which govern the City's purchases, including the City's Charter, Municipal Code, implementation of Administrative Directive 7.5 Purchasing Policy, and updated Purchasing Purchase Manual, and

WHEREAS, the Finance Department continues to work with departments to address the on-going procurement needs of the City and strategizing the best solution to ensure a new agreement can be approved by the time the existing annual purchasing and consultant agreements expire, and

WHEREAS, the Finance Department, via the Purchasing Division, has identified a number of agreements that require further time extensions of their termination dates (as shown in **Attachment A** – Purchasing Agreement Extension Dates), and

WHEREAS, the extension of these term dates for existing agreements will not alter the dollar amount of said agreements nor the terms and conditions of the agreements.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the purchasing agreements with various vendors as **attached**; approving the term dates for the services stated herein; and authorizing the Purchasing Manager, or her designee, to issue the identified Annual Purchasing Agreements terms.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 3rd day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-120

RESOLUTION APPROVING A FIRST AMENDMENT TO THE PURCHASING AGREEMENT WITH HARTLEY AND ASSOCIATES, FOR THE FURNISHING OF AFTER-HOURS ON-CALL ANSWERING SERVICES, TO INCREASE THE AMOUNT BY $50,000 FROM $153,000, FOR A NEW TOTAL ESTIMATED AMOUNT OF $203,000 OVER FIVE YEARS, AND AUTHORIZING ALL CITY DEPARTMENTS TO UTILIZE THE AGREEMENT, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS, in 2015 the City Manager authorized the Purchasing Manger to issue a formal Request for Proposals (RFP) for the issuing of after-hours on-call answering services for Citywide departments including Wastewater, Water, Parks and Recreation, and various Public Works divisions, and

WHEREAS, on March 22, 2016, by Resolution No. 2016-114, Council approved the award of proposal and contract for the furnishing of after-hours on-call answering services to Hartley and Associates, Santa Monica, CA, for an estimated annual cost of $30,600, and a total amount not to exceed $153,000 over five years, to the Wastewater and Water Divisions, and did not generally authorize other City divisions to use the agreement, and

WHEREAS, from 2017 to 2019 the Utilities divisions have spent approximately $76,000 on after-hours on-call answering services, and other Citywide divisions have spent approximately $26,000 on the same services during that time period, and

WHEREAS, the current Agreement with Hartley and Associates ends March 21, 2021, and only authorizes Utilities divisions to use the Agreement, and

WHEREAS, the intent of the RFP was to furnish after-hours on-call answering services to all City divisions, rather than limit usage to Utilities divisions only, because

multiple departments have a significant business need for after-hours on-call answering services, and

WHEREAS, sufficient funds are budgeted and available in the budgets for Utilities, Public Works, Parks and Recreation, and other divisions for these services, staff is requesting an increase to the authorized spending limit and an expansion of the authorized users to include all City departments.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the First Amendment increasing the agreement amount with Hartley and Associates, Santa Monica, CA, for after-hours on-call answering services by $50,000 from $153,000, to a new estimated total amount of $203,000 over five years, and authorizing all City departments to utilize the agreement.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, is hereby authorized to execute the Amendment.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 3rd day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-121

RESOLUTION APPROVING AN AMENDMENT TO THE PURCHASE AGREEMENT WITH UNIVAR CHEMICAL, KENT, WA, AND NORTHSTAR CHEMICAL, MODESTO, CA, FOR THE PURCHASE OF WASTEWATER TREATMENT CHEMICALS, INCREASING THE ANNUAL COSTS FROM $34,134 TO $52,845 FOR THE BALANCE OF THE TWO YEARS REMAINING AND A TOTAL AGREEMENT AMOUNT NOT TO EXCEED FROM $170,070 TO $208,091 AND AUTHORIZING THE PURCHASING MANAGER OR HER DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, the City of Modesto, Utilities Department, Wastewater Services Division, uses sodium hypochlorite, sodium hydroxide, sulfuric acid, phosphoric acid and citric acid as part of the treatment process and these chemicals are used for the cleaning of the membrane and ultra violet light disinfection systems at the City's Tertiary Treatment Plant, and

WHEREAS, the Purchasing Division issued RFB No. 1516-21, Chemicals for the Wastewater Treatment, on the city's website under the commodity codes "Chemical and Solvents, Commercial" in 2016 and based on the inability of any one company to provide all chemicals required at the lowest price, staff recommended the split award of bid Univar USA Inc., San Jose CA, was to be for the purchase of sodium hypochlorite, sodium hydroxide, and citric acid, and Northstar Chemical, Modesto, CA would be used for the purchase of sulfuric acid and phosphoric acid to, and

WHEREAS, the original award of bid for the purchase of sodium hypochlorite, sodium hydroxide, and citric acid from Univar USA Inc., San Jose CA and sulfuric acid and phosphoric acid from Northstar Chemical, Modesto CA, was for a two-year agreement with three one-year extension options at the sole discretion of the City, for an estimated annual cost of $34,134, and over five years of $170,070, and

WHEREAS, the need for increased funding is due to the additional chemical usage as a result of adding the Phase 1 Tertiary Treatment (Phase 1) process to the bulk supply tank of chemicals, which is located at the adjacent Phase 2 Tertiary Treatment (Phase 2) facility, and

WHEREAS, previously, it has been difficult to have chemical supply companies that were willing to deliver small bulk quantities (less than 500 gallons) to the Phase 1 chemical tanks; in addition, due to the dusty site conditions at the Jennings Plant, it is necessary to increase the frequency of maintenance cleaning, which requires increased chemical usage. An increase of $52,845 each year for the last two years will provide funding for the remaining 18 months of this agreement.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment to the purchase agreement with Univar Chemical, Kent, WA, and Northstar Chemical, Modesto, CA, for the purchase of wastewater treatment chemicals, increasing the annual costs from $34,134 to $52,845 for the balance of the two years remaining and a total agreement amount not to exceed from $170,070 to $208,091.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, is hereby authorized to execute the amendment.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 3rd day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-122

RESOLUTION APPROVING THE APPOINTMENTS OF LORI SICARD, RICK REID AND EVAN YOSHINO AS VOLUNTEER ADMINISTRATIVE HEARING OFFICERS

WHEREAS, the administrative hearing process is a vital component of the city's administrative enforcement program; and

WHEREAS, appointing additional hearing officers will allow us to schedule hearings in a more efficient manner, have an alternate in case of a conflict interest challenge and take some of the burden off of our only remaining hearing officers; and

WHEREAS, Lori Sicard, Rick Reid and Evan Yoshino have expressed interest in being volunteer hearing officers; and

WHEREAS, Lori Sicard was admitted to the State Bar of California in 2005 and has years of legal experience and specific training in the judge pro tem process; and

WHEREAS, Rick Reid served two Four-Year Terms on the Board of Building Appeals; and

WHEREAS, Evan Yoshino served two Four-Year Terms on the Board of Building Appeals; and

WHEREAS, the years of experience and training between Lori, Rick and Evan make them great candidates to be administrative hearing officers.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the appointments of appointing Lori Sicard, Rick Reid and Evan Yoshino as Volunteer Administrative Hearing Officers.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: /Stephanie Lopez
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: /JMS
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-123

RESOLUTION REAPPOINTING AMIN VOHRA TO THE CITY OF MODESTO PLANNING COMMISSION WITH A TERM EXPIRATION OF JANUARY 1, 2024

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, on September 8, 2015, the City Council for the City of Modesto appointed Amin Vohra to the Planning Commission, by Council Resolution 2015-333, and

WHEREAS, Amin Vohra is eligible for a second, four year term, and

WHEREAS, the Appointments Committee met on February 18, 2020, and recommended reappointment of Amin Vohra to the Modesto Planning Commission.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Council of the City of Modesto that it herby reappoints Amin Vohra to the Modesto Planning Commission with a term expiration of January 1, 2024.

BE IT FURTHER RESOLVED, the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Modesto Planning Commission, and the Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Ridenour
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-124

RESOLUTION APPOINTING ROGER SHANKS TO THE CITY OF MODESTO PLANNING COMMISSION WITH A TERM EXPIRATION OF JANUARY 1, 2024

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Appointments Committee met on February 18, 2020, and recommended appointment of Roger Shanks to the Modesto Planning Commission.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Council of the City of Modesto that it herby reappoints Roger Shanks to the Modesto Planning Commission with a term expiration of January 1, 2024.

BE IT FURTHER RESOLVED, the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Modesto Planning Commission, and the Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Ridenour
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSÉ M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-125

RESOLUTION APPROVING THE APPOINTMENT OF AMIN VOHRA AS THE 2020 PLANNING COMMISSION REPRESENTATIVE TO THE BOARD OF ZONING ADJUSTMENT WITH A TERM EXPIRATION OF DECEMBER 31, 2020

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Planning Commission met on November 4, 2019, and recommended the appointment of Amin Vohra as its representative to the Board of Zoning Adjustment for 2020, and

WHEREAS, Mr. Vohra is qualified and willing to act as the Planning Commission representative to the Board of Zoning Adjustment for 2020.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Modesto that it hereby approves the appointment of Amin Vohra as the 2020 Planning Commission representative to the Board of Zoning Adjustment, with a term expiration of December 31, 2020.

BE IT FURTHER RESOLVED, that the City Clerk is hereby directed to transmit a copy of this resolution to the appointed member of the Board of Zoning Adjustment, and the Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Ridenour
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-126

RESOLUTION APPROVING THE APPOINTMENT OF SEBASTIAN JONES AND SAVANNAH WILLIAMS TO THE BOARD OF BUILDING APPEALS WITH A TERM EXPIRATION OF JANUARY 1, 2024

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Appointments Committee met on September 25, 2019, and recommended the appointment of Sebastian Jones and Adis Bey as board members to the Board of Building Appeals, and

WHEREAS, at the December 10, 2019 Council meeting, the City Council requested this matter return to the Council at a later date for discussion and consideration of all applicants considered by the Appointments Committee.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the appointment of Sebastian Jones and Savannah Williams as board members to the Board of Building Appeals to four-year terms, with a term expiration of January 1, 2024.

BE IT FURTHER RESOLVED, that City Clerk is hereby directed to transmit a copy of this resolution to the appointed members of the Board of Building Appeals, and the Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-127

RESOLUTION ACCEPTING THE 2019 GENERAL PLAN ANNUAL PROGRESS REPORT AND AUTHORIZING STAFF TO SUBMIT IT TO THE STATE OF CALIFORNIA

WHEREAS, California Government Code Section 65400(a)(2) requires that local governments prepare an annual progress report regarding General Plan implementation, including matters related to meeting the applicable share of regional housing needs (California Government Code Section 65584), and

WHEREAS, Section 1104 of the City Charter specifies that appointed commissions shall report on their fiscal year activities to City Council on or before September 1 of each year, and

WHEREAS, said matter was scheduled for the regular City Council meeting of March 10, 2020, in the 10th Street Palace Chambers located at 1010 10th Street, Modesto, California.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the 2019 General Plan Annual Progress Report.

BE IT FURTHER RESOLVED that the Clerk is hereby directed to submit the 2019 General Plan Annual Progress Report to the State of California.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-128

RESOLUTION APPROVING THE FIRST YEAR EXTENSION OPTION FOR THE PURCHASING AGREEMENTS FOR HOT PATCH WORK WITH UNITED PAVEMENT MAINTENANCE, HUGHSON, CA AND PATCH CREW, MODESTO, CA, WITHOUT EXCEEDING THE ANNUAL ESTIMATED COST OF $4,306,500, AND AUTHORIZING THE DIRECTOR OF FINANCE OR HER DESIGNEE TO EXECUTE THE EXTENSION

WHEREAS, the Utilities Departments' Water and Wastewater Divisions request contractual assistance to perform hot patch work throughout the City of Modesto and the outlying areas included in the City's regional water systems; and

WHEREAS, on May 22, 2018, by Resolution 2018-188, the Council approved the award of bids for the furnishing of hot patch work with Garrett Thomson Construction, Inc., Modesto, CA, for an annual cost not to exceed $4,106,500; and United Pavement Maintenance, Hughson, CA, for an annual cost no to exceed $200,000, for two-year agreements with three one-year extension options; the annual combined total costs of the contract were not to exceed $4,306,500, and approval of any of the one year extensions would require approval by Council; and

WHEREAS, upon review of the insurance certification for the hot patch contractors, it was discovered that the insurance had expired on February 28, 2019 for the primary contractor, Garrett Thompson; and

WHEREAS, the delay in proof of insurance coverage, coupled with coverage gap and the performance of work without proper insurance led to the City's decision to terminate the contract with Garett Thompson and immediately engage the secondary provider; and

WHEREAS, with United Pavement Maintenance becoming the primary vendor, it was important to identify and secure a backup provider to avoid service interruptions, the Purchasing Division reached out to all contractors who participated at the bid conference on January 18, 2018 to solicit bids for Hot Patch work; and

WHEREAS, one contractor, Patch Crew responded with a reasonable bid and was recommended as the new secondary contractor; and

WHEREAS, on July 22, 2019 by Resolution 2019-344, Council approved the Purchasing Agreement for the furnishing of hot patch work with Patch Crew, Modesto, CA, for an annual estimated cost not to exceed $400,000 to add as a secondary contractor; and

WHEREAS; Modesto Municipal Code (MMC) Section 8-3.204 9(c), the Purchasing Manager has the authority to recognize the department's current situation as an exigent circumstance; based on the need for availability of a secondary vendor, the Purchasing Manager, within the scope of this authority, recommends staff be allowed to transfer amounts between both contractors in accordance with MMC Section 8-3.204 (c) ensuring hot patch services continue and needed work is not significantly delayed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the first-year extension option for the purchasing agreements for hot patch work with United Pavement Maintenance, Hughson, CA and Patch Crew, Modesto, CA. without exceeding the annual estimated cost of $4,306,500.

BE IT FURTHER RESOLVED, that the Director of Finance or her designee to execute the first-year extension option.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-129

RESOLUTION APPROVING A PURCHASING AGREEMENT FOR THE SECURITY CAMERAS, INSTALLATION, INTEGRATION, AND MAINTENANCE WITH QPCS LLC OF CERES, CA, FOR A TWO-YEAR AGREEMENT WITH THREE ONE YEAR EXTENSION OPTIONS, FOR AN INITIAL COST OF $81,380, AND ESTIMATED ANNUAL COST NOT TO EXCEED $9,416, FOR A TOTAL AMOUNT NOT TO EXCEED $109,628 OVER FIVE YEARS, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO ISSUE THE AGREEMENT

WHEREAS, the City of Modesto currently utilizes a mix of analog and digital security cameras; and

WHEREAS, Staff identified the need to expand and improve its existing remote security camera network with additional high definition cameras to its wastewater treatment, compost and corporation yard facilities, due to multiple thefts, vandalism and poor quality cameras; and

WHEREAS, this Security Cameras, Installation, Integration and Maintenance agreement will create a safer environment for City employees and visitors from the public and minimize vandalism; and

WHEREAS, this Agreement will create an effective line of communication with one service provider for all new cameras, for the duration of this agreement. There is no current agreement in place for this scope of work; and

WHEREAS, on September 19, 2019, the Purchasing Division issued RFB No. 1819-36 for the purchase of security cameras, installation, integration, and maintenance; and

WHEREAS, on October 22, 2019, bids were formally opened in the City Clerk's office. Five companies chose to respond, none of which were local vendors. All five companies provided responsive and responsible bids; and

WHEREAS, prospective bidders were notified online, via email and phone call of the bid opportunity. Thirty-one companies chose to download the RFB document; and

WHEREAS, on October 22, 2019, bids were formally opened in the City Clerk's office. Five companies chose to respond, none of which were local vendors; and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures; and

WHEREAS, the award of RFB No. 1819-36 for the purchase of security cameras, installation, integration, and maintenance, conforms to the Modesto Municipal Code based on providing the overall lowest responsive and responsible bid.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of bid and agreement for Security Cameras, Installation, Integration and Maintenance to QPCS LLC of Ceres, CA, for a two-year agreement with three one-year extension options, for an initial cost of $81,380, and estimated annual cost not to exceed $9,416, for a total amount not to exceed $109,628 over five years.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to execute the agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-130

RESOLUTION APPROVING THE AWARD OF BID AND AGREMEENT FOR BACKGROUND INVESTIGATION SERVICES TO CREATIVE SECURITY COMPANY INC., SAN JOSE, CA AS THE PRIMARY VENDOR AND RANK INVESTIGATIONS, MODESTO, CA AS THE SECONDARY VENDOR FOR A TWO (2) YEAR AGREEMENT WITH THREE (3) ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL ESTIMATED COST OF $180,500 BETWEEN BOTH AGREEMENTS, AND A TOTAL AMOUNT NOT TO EXCEED $902,500 OVER FIVE YEARS AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, Public Safety requires qualified firms to provide background investigation services on all sworn and non-sworn staff, and

WHEREAS, the estimated quantities of background investigations for the Modesto Police Department is 55 per year, Fire Department and I.T. Department anticipate 15 per year), and

WHEREAS, on November 13, 2019 the Purchasing Division issued Request for Bid (RFB) 1920-11 for the procurement of background investigation services for the Modesto Police Department, Fire Department and Information Technology Department, and

WHEREAS, two vendors responded and Rank Investigations, Modesto, CA and Creative Security Company Inc., San Jose, CA were responsible bidders, and

WHEREAS, Creative Security Company Inc will designate as the primary vendor to provide background investigation services for the Modesto Police Department, Fire Department and Information Technology Department on an as-needed basis since they are the lowest bidder and Rank Investigations will be the secondary vendor if the primary vendor is unable to perform the service, complete the specific job within the time frame required, or as deemed necessary by the City, and

WHEREAS, Modesto Municipal Code (MMC) Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures and RFB No. 1920-11 conforms with this MMC.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of bid and agreement for background investigations services to Creative Security Company Inc., San Jose CA as the primary vendor and Rank Investigations, Modesto, CA as the secondary vendor for a two (2) year agreement with three (3) one-year extension options, for an annual estimated cost not to exceed $180,500 between both agreements, and a total amount not to exceed $902,500 over five years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute these agreements, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-131

RESOLUTION AUTHORIZING AN INCREASE OF THE DIRECTOR OF UTILITIES' AUTHORITY TO ISSUE CHANGE ORDERS FOR THE KANSAS AVENUE 12-INCH WATER MAIN UPGRADE PROJECT FROM 20% ($127,783) TO 43.24% ($276,283) OF THE ORIGINAL CONSTRUCTION CONTRACT PRICE OF $638,916 WITH PLATINUM PIPELINE, INC. OF LIVERMORE, CA, AND INCREASING STAFF BUDGET FROM $138,022 TO $148,022

WHEREAS, on February 25, 2020, Council, by Resolution No. 2020-106, awarded a construction contract to Platinum Pipeline, Inc. of Livermore, CA, in the amount of $638,916 for the Kansas Avenue 12-inch Water Main Upgrade project, and

WHEREAS, when Council awarded this construction contract, a contract change order budget of 20 percent (or $127,783) was also approved by Council Resolution No. 2020-107, to address unexpected conditions that require changes in project scope, and

WHEREAS, during development of the Kansas House Development, it was determined that a fire hydrant would need to be installed near the southwest corner of the facility to meet fire hydrant spacing requirement, and

WHEREAS, the extension of a new 8-Inch Water Main and installation of a fire hydrant assembly will part of the additional scope of work performed by Platinum Pipeline, Inc., and

WHEREAS, this scope of work will be funded through Community Development Block Grant (CDBG), and

WHEREAS, City staff is requesting an increase in the Director's authority to issue change orders for the Kansas Avenue 12-inch Water Main Upgrade Project from 20% ($127,783) to 43.24% ($276,283) of the original construction contract price of $638,916 with Platinum Pipeline, Inc. of Livermore, CA, and

WHEREAS, these changes in the construction contract also have a direct impact on staff costs for administering the contract, negotiating change orders and coordinating with operations staff and Kansas House representatives, and

WHEREAS, as a result, staff requests Council authorize additional budget of $10,000 for staff's increased costs for administration, inspection and reporting, thereby revising staff budget from $138,022 to $148,022.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to issue change orders for the Kansas Avenue 12-Inch Water Main Upgrade Project from 20%t ($127,783) to 43.24% ($276,283) of the construction contract price of $638,916 with Platinum Pipeline Inc., of Livermore, CA, and increasing staff budget from $138,022 to $148,022.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-132

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET IN THE AMOUNT OF $148,500 TO BE TRANSFERRED INTO THE PROJECT FROM COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) FUNDS IN ORDER TO FULLY FUND THE CHANGE ORDER WORK ASSOCIATED WITH THE ON-SITE FIRE HYDRANT AS PART OF THE KANSAS AVENUE 12-INCH WATER MAIN UPGRADE PROJECT

WHEREAS, certain budgetary transactions are necessary in the amount of $148,500, in order to fund the change work associated with the on-site fire hydrant as part of the Kansas Avenue 12-Inch Water Main Upgrade Project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended by establishing a transfer from CDBG fund 1130 to this project in the amount of $148,500 and increase the project budget by the same amount in the Contingency task.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget in the amount of $148,500 to be transferred into the project from Community Development Block Grant (CDBG) fund 1130.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-133

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE FLEET MAINTENANCE FACILITY HEAVY BAY ADDITION AND BUS MAINTENANCE FACILITY PARTS STORAGE ROOM PROJECT, ACCEPTING THE BID, AND APPROVING A CONTRACT WITH HARRIS BUILDER'S INC., HILMAR, CA, FOR THE FLEET MAINTENANCE FACILITY HEAVY BAY ADDITION IN THE AMOUNT OF $4,063,948, PLUS $325,116 FOR CONTINGENCY (IF NEEDED) FOR A TOTAL AMOUNT OF $4,389,064 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE CONTRACT

WHEREAS, the Fleet Services Division maintains all City owned vehicles and equipment; and

WHEREAS, there are currently 1,060 pieces of active equipment in the City's fleet used by all City departments in their daily operations as they provide services to the citizens of Modesto; and

WHEREAS, the current fleet facility is extremely outdated, overcrowded and is inadequate in several areas to properly service the City's vehicles and equipment; and

WHEREAS, the current building does not allow lifting of the nearly 200 heavy duty vehicles and pieces of equipment for performing under vehicle maintenance work; and

WHEREAS, the construction of a new maintenance building is crucial to keep Fleet Services operations running smoothly into the future; and

WHEREAS, specifications have been prepared for the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility – Parts Storage Room Project and City staff recommends approval by the City Council; and

WHEREAS, the Project was advertised for bids on September 24, 2019; and

WHERAS, on October 29, 2019, Bids were publicly opened, pursuant to City Charter Section 1307, four bids were received and Harris Builder's Inc. of Hilmar, CA, was the responsible bidder with the lowest responsive bid; and

WHEREAS, MMC 8-3.203 states that all purchases, in excess of fifty thousand dollars ($50,000), or when directed by the City Manager for any purchase of fifty thousand dollars ($50,000) or less, shall follow formal bid procedures; and

WHEREAS, the award of the bid for the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility – Parts Storage Room Project conforms to the Modesto Municipal code based on providing the overall lowest cost, while providing improved service; and

WHEREAS, the Director of Public Works has recommended that the bid of $4,063,947.50 received from Harris Builder's Inc., for the Fleet Maintenance Facility Heavy Bay Addition be accepted as the lowest responsible and responsive bid and the contract be awarded to Harris Builder's Inc.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the specifications for the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility – Parts Storage Room Project, accepts the bid of $4,063,948 and awards Harris Builder's Inc. of Hilmar, CA, the contract for the Fleet Maintenance and Heavy Bay Addition Project plus $325,116 for contingency, if needed, for a total of $4,389,064.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-134

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE FLEET MAINTENANCE FACILITY HEAVY BAY ADDITION AND BUS MAINTENANCE FACILITY PARTS STORAGE ROOM PROJECT, ACCEPTING THE BID, AND APPROVING A CONTRACT WITH HARRIS BUILDER'S INC., HILMAR, CA, FOR THE BUS MAINTENANCE FACILITY PARTS STORAGE ROOM IN THE AMOUNT OF $1,302,044 PLUS $104,164 FOR CONTINGENCY (IF NEEDED) FOR A TOTAL AMOUNT OF $1,406,208 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE CONTRACT

WHEREAS, the construction of a new parts storage room is crucial for the safety and efficiency of the Transit maintenance services; and

WHEREAS, the original facility was constructed in 2012, and the existing parts storage room in no longer large enough to accommodate the current and future needs; and

WHEREAS, in addition to the increased storage capacity that this building will provide, it will also serve as a connecting structure between the existing Bus Maintenance Facility (BMF) and the new Fleet Maintenance Facility Heavy Bay Shop; and

WHEREAS, specifications have been prepared for the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility – Parts Storage Room Project and City staff recommends approval by the City Council; and

WHEREAS, the Project was advertised for bids on September 24, 2019; and

WHERAS, on October 29, 2019, Bids were publicly opened, pursuant to City Charter Section 1307, four bids were received and Harris Builder's Inc. of Hilmar, CA, was the responsible bidder with the lowest responsive bid; and

WHEREAS, MMC 8-3.203 states that all purchases, in excess of fifty thousand dollars ($50,000), or when directed by the City Manager for any purchase of fifty thousand dollars ($50,000) or less, shall follow formal bid procedures; and

WHEREAS, the award of the bid for the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility – Parts Storage Room Project conforms to the Modesto Municipal code based on providing the overall lowest cost, while providing improved service; and

WHEREAS, the Director of Public Works has recommended that the bid of $1,302,044.00 received from Harris Builder's Inc., for the Bus Maintenance Facility – Parts Storage Room be accepted as the lowest responsible and responsive bid and the contract be awarded to Harris Builder's Inc.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the specifications for the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility – Parts Storage Room Project, accepts the bid of $1,302,044 and awards Harris Builder's Inc. of Hilmar, CA, the contract for the Bus Maintenance Facility – Parts Storage Room Project plus $104,164 for contingency, if needed, for a total of $1,406,208.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-135

RESOLUTION APPROVING AN AGREEMENT WITH CONSOLIDATED CM INC., OF OAKLAND, CA, FOR CONSTRUCTION MANAGEMENT, SPECIAL INSPECTION, AND MATERIALS TESTING SERVICES FOR THE FLEET MAINTENANCE FACILITY HEAVY BAY ADDITION IN AN AMOUNT NOT TO EXCEED OF $420,309; AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, the Fleet Services Division maintains all City owned vehicles and equipment; and

WHEREAS, this equipment is used by all City departments in their daily operations as they provide services to the citizens of Modesto; and

WHEREAS, the current fleet facility is extremely outdated, overcrowded and is inadequate in several areas to properly service all of the vehicles and equipment; and

WHEREAS, the current building does not allow lifting of the nearly 200 heavy duty vehicles and pieces of equipment for performing under vehicle maintenance work; and

WHEREAS, the construction of a new maintenance building is crucial to keep Fleet Services operations running smoothly into the future; and

WHEREAS, due to the limited availability of the City's Construction Administration staff and recent staffing transitions, staff recommends utilizing a consultant to provide construction management, inspection and materials testing services through completion of the construction phase; and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," this agreement for professional services is exempt from the bidding requirements of Modesto Municipal Code 8-3.203; and

WHEREAS, for the construction management and inspection services, a Request for Proposals (RFP) was issued to the prequalified list of firms for construction management and inspection services for this project; and

WHEREAS, in accordance with City's policy, Administrative Directive 3.1 Selection Procedures for Professional Consultants Who Provide Architectural and Engineering Services for Capital Projects, Consolidated CM Inc., was selected as the most qualified firm for the project; and

WHEREAS, Consolidated CM Inc. represents that it is qualified, willing and able to provide the requested Construction Management, Special Inspection, and Materials Testing Services to City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an Agreement with Consolidated CM Inc. for Construction Management, Special Inspection, and Materials Testing Services for the Fleet Maintenance Facility Heavy Bay Addition Project in an amount of $420,309 for the identified scope of services.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-136

RESOLUTION APPROVING AN AGREEMENT WITH CONSOLIDATED CM INC., OF OAKLAND, CA, FOR CONSTRUCTION MANAGEMENT, SPECIAL INSPECTION, AND MATERIALS TESTING SERVICES FOR THE BUS MAINTENANCE FACILITY PARTS STORAGE ROOM IN AN AMOUNT NOT TO EXCEED $142,715; AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, the construction of a new parts storage room building is crucial in the safety and efficiency of the Transit maintenance services; and

WHEREAS, the current Bus Maintenance Facility does not allow sufficient storage capacity; and

WHEREAS, the original facility was constructed in 2012, and is no longer large enough to accommodate current and future needs; and

WHEREAS, in addition to the increased storage capacity that this building will provide, it will also serve as a connecting structure between the existing Bus Maintenance Facility (BMF) and the new Fleet Maintenance Facility Heavy Bay Shop; and

WHEREAS, due to the limited availability of the City's Construction Administration staff and recent staffing transitions, staff recommends utilizing a consultant to provide construction management, inspection and materials testing services through the completion of the construction phase; and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," this agreement for professional services is exempt from the bidding requirements of Modesto Municipal Code 8-3.203; and

WHEREAS, for the construction management and inspection services, a Request for Proposals (RFP) was issued to the prequalified list of firms for construction management and inspection services for this project; and

WHEREAS, in accordance with Administrative Directive 3.1 Selection Procedures for Professional Consultants Who Provide Architectural and Engineering Services for Capital Projects, Consolidated CM Inc., was selected as the most qualified firm for the project; and

WHEREAS, Consolidated CM Inc. represents that it is qualified, willing and able to provide the requested Construction Management, Special Inspection, and Materials Testing Services to City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an Agreement with Consolidated CM Inc. for Construction Management, Special Inspection, and Materials Testing Services for the Bus Maintenance Facility Parts Storage Room Project in an amount of $142,715 for the identified scope of services.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-137

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET OF ACCOUNT 100451 – FLEET MAINTENANCE FACILITY IN THE AMOUNT OF $421,930 TO BE TRANSFERRED INTO THE PROJECT FROM THE 5400-FLEET FUND TO FULLY FUND THE CONSTRUCTION, CONTINGENCY, CONSTRUCTION ADMINISTRATION, CITY CONSTRUCTION FORCES AND DESIGN SUPPORT DURING CONSTRUCTION FOR THE FLEET MAINTENANCE FACILITY HEAVY BAY ADDITION

WHEREAS, certain budgetary transactions are necessary in the amount of $421,930, in order to fund construction, contingency, construction administration, city construction forces and design support during construction of the Fleet Maintenance Facility Heave Bay Addition, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Budget as shown in **Exhibit A, attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

101022 BMF - Parts Storage Room Upgrade

	PJTD Budget	PJTD Actual	PJTD Commitment	PJTD Available	AR Request	BA Needed
CA	$ 80,000.00	$ 931.61	$ -	$ 79,068.39	$ 182,286.00	$ 103,217.61
CCF	$ 40,000.00	$ 27,511.83	$ -	$ 12,488.17	$ -	$ (12,488.17)
CON	$ 600,000.00	$ 18,797.55	$ -	$ 581,202.45	$ 1,302,044.00	$ 720,841.55
CTGY	$ 50,000.00	$ -	$ -	$ 50,000.00	$ 104,164.00	$ 54,164.00
EDA	$ 100,000.00	$ 85,463.51	$ 2,107.50	$ 12,428.99	$ 36,002.00	$ 23,573.01
OC	$ 60,000.00	$ -	$ -	$ 60,000.00	$ -	$ (60,000.00)
	$ 930,000.00	**$ 132,704.50**	**$ 2,107.50**	**$ 795,188.00**	**$ 1,624,496.00**	**$ 829,308.00**

100964 - BMF Improvements			$ 113,513.00
101012 - BMF Equipment Requirements			$ 293,950.00
101023 - Bus Stop Improv/Repairs 2017	Subtotal	$ 563,242.00	$ 155,779.00
100451 - Fleet Maintenance Facility	Share of Common Area		$ 266,066.00
			$ 829,308.00
			$ -

100451 - Fleet Maintenance Facility

	PJTD Budget	PJTD Actual	PJTD Commitment	PJTD Available	AR Request	BA Needed
CA	$ 350,681.00	$ 4,561.99	$ -	$ 346,119.01	$ 568,953.00	$ 222,833.99
CCF	$ 50,000.00	$ 1,103.09	$ -	$ 48,896.91	$ -	$ (48,896.91)
CON	$ 4,050,975.00	$ 168,146.65	$ -	$ 3,882,828.35	$ 4,063,948.00	$ 181,119.65
CTGY	$ 280,000.00	$ -	$ -	$ 280,000.00	$ 325,116.00	$ 45,116.00
EDA	$ 700,935.00	$ 633,140.68	$ 14,336.96	$ 53,457.36	$ 75,329.00	$ 21,871.64
LA	$ -	$ -	$ -	$ -	$ -	$ -
UR	$ 100,550.00	$ 100,435.40	$ -	$ 114.60	$ -	$ (114.60)
	$ 5,533,141.00	**$ 907,387.81**	**$ 14,336.96**	**$ 4,611,416.23**	**$ 5,033,346.00**	**$ 421,929.77**

Transfer into Project from Fund Reserves	$ 421,929.77
	$ -

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-138

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROGRAM BUDGET OF PROJECT 100451 – FLEET MAINTENANCE FACILITY IN THE AMOUNT OF $266,066 TO ESTABLISH THE FUNDS NECESSARY FOR A TRANSFER INTO PROJECT 101022 – BMF – PARTS STORAGE ROOM UPGRADE TO COVER COSTS ASSOCIATED WITH A SHARED HALLWAY

WHEREAS, certain budgetary transactions are necessary in the amount of $266,066 to fully fund the construction, contingency, construction administration and design support during construction of the Fleet Maintenance Facility Heavy Bay Addition and Bus Maintenance Facility Parts Storage Room project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget as shown in **Exhibit A**, **attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

101022 BMF - Parts Storage Room Upgrade

	PJTD Budget	PJTD Actual	PJTD Commitment	PJTD Available	AR Request	BA Needed
CA	$ 80,000.00	$ 931.61	$ -	$ 79,068.39	$ 182,286.00	$ 103,217.61
CCF	$ 40,000.00	$ 27,511.83	$ -	$ 12,488.17	$ -	$ (12,488.17)
CON	$ 600,000.00	$ 18,797.55	$ -	$ 581,202.45	$ 1,302,044.00	$ 720,841.55
CTGY	$ 50,000.00	$ -	$ -	$ 50,000.00	$ 104,164.00	$ 54,164.00
EDA	$ 100,000.00	$ 85,463.51	$ 2,107.50	$ 12,428.99	$ 36,002.00	$ 23,573.01
OC	$ 60,000.00	$ -	$ -	$ 60,000.00	$ -	$ (60,000.00)
	$ 930,000.00	**$ 132,704.50**	**$ 2,107.50**	**$ 795,188.00**	**$ 1,624,496.00**	**$ 829,308.00**

100964 - BMF Improvements			$ 113,513.00
101012 - BMF Equipment Requirements			$ 293,950.00
101023 - Bus Stop Improv/Repairs 2017	Subtotal	$ 563,242.00	$ 155,779.00
100451 - Fleet Maintenance Facility	Share of Common Area		$ 266,066.00
			$ 829,308.00

$ -

100451 - Fleet Maintenance Facility

	PJTD Budget	PJTD Actual	PJTD Commitment	PJTD Available	AR Request	BA Needed
CA	$ 350,681.00	$ 4,561.99	$ -	$ 346,119.01	$ 568,953.00	$ 222,833.99
CCF	$ 50,000.00	$ 1,103.09	$ -	$ 48,896.91	$ -	$ (48,896.91)
CON	$ 4,050,975.00	$ 168,146.65	$ -	$ 3,882,828.35	$ 4,063,948.00	$ 181,119.65
CTGY	$ 280,000.00	$ -	$ -	$ 280,000.00	$ 325,116.00	$ 45,116.00
EDA	$ 700,935.00	$ 633,140.68	$ 14,336.96	$ 53,457.36	$ 75,329.00	$ 21,871.64
LA	$ -	$ -	$ -	$ -	$ -	$ -
UR	$ 100,550.00	$ 100,435.40	$ -	$ 114.60	$ -	$ (114.60)
	$ 5,533,141.00	**$ 907,387.81**	**$ 14,336.96**	**$ 4,611,416.23**	**$ 5,033,346.00**	**$ 421,929.77**

Transfer into Project from Fund Reserves	$ 421,929.77

$ -

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-139

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROGRAM BUDGET OF PROJECT 101022 – BMF – PARTS STORAGE ROOM UPGRADE IN THE AMOUNT OF $829,308 AND REDUCING THE PROJECT BUDGETS OF 100964 – BMF IMPROVEMENTS, 101021 – BMF EQUIPMENT REQUIREMENTS AND 101023 – BUS STOP IMPROV/REPAIRS 2017 A TOTAL AMOUNT OF $563,242

WHEREAS, certain budgetary transactions are necessary in the amount of $829,308 to fully fund the construction, contingency, construction administration and design support during construction of the Bus Maintenance Facility Parts Storage Room project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget as shown in **Exhibit A**, **attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 10th day of March, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-140

RESOLUTION RATIFYING THE CITY MANAGER/DIRECTOR OF EMERGENCY SERVICES PROCLAMATION OF EXISTENCE OF A LOCAL EMERGENCY IN RESPONSE TO THE CORONAVIRUS (COVID-19), DATED MARCH 13, 2020

WHEREAS, California Government Code section 8630 and Modesto Municipal Code section 3-4.06 authorize the Director of Emergency Services for the City of Modesto to proclaim the existence of a local emergency when the City is affected or likely to be affected by conditions of extreme peril to the safety of persons and property within the City, and

WHEREAS, Section 8558 of the Government Code defines a local emergency as including an epidemic, and

WHEREAS, Section 3-4.05 of the Modesto Municipal Code designates the City Manager as the Director of Emergency Services, and

WHEREAS, the novel coronavirus (named "SARS-CoV-2" which causes the COVID-19 disease) was first detected in Wuhan City, Hubei Province, China in December of 2019, is now considered to be a serious global public health threat, and

WHEREAS, symptoms of the virus include fever, cough, and shortness of breath, and infected individuals have experienced a range of outcomes, from mild sickness to severe illness and even death, and

WHEREAS, it is essential to slow virus transmission as much as possible to protect the most vulnerable and to prevent the health care system from being overwhelmed. Based on scientific evidence and best practices, the most effective way to

slow the transmission of communicable diseases generally and COVID-19 specifically, is to limit interactions among people to the greatest extent possible, and

WHEREAS, on January 30, 2020, the World Health Organization declared the outbreak a "public health emergency of international concern", and

WHEREAS, on January 31, 2020, the United States Department of Public Health and Human Services Secretary declared a public emergency for COVID-19, and on March 4, 2020 the Governor of the State of California proclaimed a State of Emergency, and

WHEREAS, on March 11, 2020, the World Health Organization declared COVID-19 a pandemic, and

WHEREAS, on March 11, 2020, the Stanislaus County Public Health Officer declared a local health emergency, and

WHEREAS, on March 12, 2020, March 15, 2020 and March 16, 2020, Governor Gavin Newsom issued new executive orders further enhancing state and local government's ability to respond to COVID-19 Pandemic, and

WHEREAS, on March 13, 2020, the County of Stanislaus Director of Emergency Services proclaimed a Local Emergency due to the threat of COVID-19 in the County, and

WHEREAS, on March 13, 2020, the President of the United States, Donald Trump, declared a state of national emergency in response to the COVID-19 outbreak, and

WHEREAS, as of March 13, 2020, it has been reported that COVID-19 has spread to over 90 countries including many parts of the United States, including the City of Modesto, and

WHEREAS, on March 13, 2020, the City Manager, in his capacity as Director of Emergency Services, proclaimed the existence of local emergency in the City of Modesto in response to COVID-19. The proclamation was pursuant to Modesto Municipal Code section 3-4.06, however, the City Council must ratify that declaration within seven (7) days or the declaration of local emergency will not be effective thereafter, and

WHEREAS, the declaration enables the City to more effectively respond to the outbreak, and potentially obtain reimbursement for the response, and

WHEREAS, the City may require additional assistance in the future, and a formal declaration of emergency allows additional resources to flow to the City in a timely fashion. The declaration of emergency also allows needed flexibility in staffing decisions and steps needed to continue to deliver essential services and to protect the City's residents, and

WHEREAS, there will be costs associated with City's emergency response, however the approval of the proclamation of a Local Emergency by the City Council has no direct cost impact and may enable potential external sources for reimbursement to costs associated with the city's emergency response.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby ratifies the Proclamation of the Existence of a Local Emergency issued by the City Manager in his capacity as Director of Emergency Services, dated March 13, 2020, **attached** to this Resolution as **Exhibit A**.

BE IT FURTHER RESOLVED, that because a substantial threat to public health and safety exists that has a substantial likelihood that serious harm will be experienced unless immediate action is taken, the City has altered or ceased certain services other than essential services in response to this emergency. The City Manager is authorized to take any lawful personnel action that protects the health and safety of the workforce or the community. The City is authorized to postpone and/or delay any associated meet and confer obligations when taking actions in response to the emergency.

BE IF FURTHER RESOLVED, that the Council of the City of Modesto advises residents to stay in their home from March 19, 2020 to April 6, 2020, however, it is not mandatory. This means individuals should stay at home to the maximum extent feasible, and practice social distancing when not at home. Social distancing involves maintaining at least six-foot social distancing from other individuals, washing hands with soap and water for at least twenty seconds as frequently as possible or using hand sanitizer, covering coughs or sneezes, regularly cleaning high-touch surfaces, and not shaking hands.

BE IT FURTHER RESOLVED, that the City Manager or his designee is hereby authorized to carry out executive orders and guidance provided by the State and Federal governments as deemed necessary.

BE IT FURTHER RESOLVED, that the City Manager or his designee is hereby authorized to undertake the following actions:

(i) Return any City fees collected for events at City facilities that have been cancelled due to the COVID-19 outbreak;

(ii) To identify locations that could potentially be used by health care providers or other entities to combat the COVID-19 outbreak;

(iii) Prepare policy and procedures to conduct City Council meetings telephonically or through another electronic means in compliance with the Governor's Executive Orders; and

(iv) Explore potenital resources available to the City to potentially minimize the financial impact to our citizens and businesses during this emergency.

BE IT FURTHER RESOLVED, that said local emergency shall be deemed as continuing to exist until proclaimed otherwise by the City Manager/Director of Emergency Services and the City Council.

The foregoing resolution was introduced at a special meeting of the Council of the City of Modesto held on the 19th day of March, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

CITY OF MODESTO

PROCLAMATION OF EXISTENCE OF A LOCAL EMERGENCY BY DIRECTOR OF EMERGENCY SERVICES

WHEREAS, California Government Code section 8630 and Modesto Municipal Code section 3-4.06 authorize the Director of Emergency Services for the City of Modesto to proclaim the existence of a local emergency when the City is affected or likely to be affected by conditions of extreme peril to the safety of persons and property within the City; and

WHEREAS, Government Code section 8558(c) defines a local emergency as "the duly proclaimed existence of conditions of disaster or of extreme peril to the safety of persons and property within the territorial limits of a county, city and county, or city, caused by conditions such as . . . epidemic . . . which are or are likely to be beyond the control of the services, personnel, equipment, and facilities of that political subdivision and require the combined forces of other political subdivisions to combat . . . ,"; and

WHEREAS, Section 3-4.05 of the Modesto Municipal Code designates the City Manager as the Director of Emergency Services; and

WHEREAS, the Novel Coronavirus (COVID-19) is a respiratory disease first identified in China that may result in serious illness or death and is easily transmissible from person to person. As of March 13, 2020, it has been reported that COVID-19 has spread to over 90 countries including the United States, and is spreading to a growing number of California cities and counties; and

WHEREAS, on January 30, 2020 the World Health Organization declared the outbreak a "public health emergency of international concern"; and

WHEREAS, on January 31, 2020, the United States Department of Public Health and Human Services Secretary declared a public emergency for COVID-19, and on March 4, 2020 the Governor of the State of California proclaimed a State of Emergency; and

WHEREAS, the first 2 cases with positive results have been identified in Stanislaus County; and

WHEREAS, on March 11, 2020, the World Health Organization declared COVID-19 a pandemic; and

WHEREAS, on March 11, 2020, the Stanislaus County Public Health Officer declared a local health emergency; and

WHEREAS, on March 12, 2020, Governor Gavin Newsom issued a new executive order further enhancing state and local government's ability to respond to COVID-19 Pandemic; and

WHEREAS, on March 13, 2020, the County of Stanislaus Director of Emergency Services proclaimed a Local Emergency due to the threat of COVID-19 in the County; and

WHEREAS, on March 13, 2020, the President of the United States, Donald Trump, declared a state of national emergency in response to the COVID-19 outbreak; and

WHEREAS, World Health Organization officials report that sustained human-to-human transmission of

the virus is occurring. Transmission from asymptomatic individuals has been documented. Suspected community transmission of the virus is occurring in the United States. Although the majority of individuals infected with COVID-19 recover from the disease without special treatment, there is significant potential for serious infection and death; and

WHEREAS, the health, safety and welfare of Modesto residents, businesses, visitors and staff is of utmost importance to the City and additional future measures may be needed to protect the community; and

WHEREAS, the City may require additional assistance in the future, and a formal declaration of emergency allows additional resources to flow to the City in a timely fashion; and

WHEREAS, existing conditions related to the COVID-19 warrant the proclamation of emergency, as defined by Modesto Municipal Code Chapter 3-4.

NOW THEREFORE, IT IS HEREBY PROCLAIMED by the Director of Emergency Services of the City of Modesto that a local emergency exists.

IT IS FURTHER PROCLAIMED that during the existence of said local emergency, the powers, functions and duties of the Director of Emergency Services shall be those prescribed by state law and the ordinances and resolutions of this City.

IT IS FURTHER PROCLAIMED that this local emergency regarding COVID-19 is declared in order to empower the City to:

- Respond effectively to COVID-19;
- Seek and utilize mutual aid;
- Ensure the City is able to obtain reimbursement for its efforts in dealing with this local emergency, and
- Ensure that City of Modesto Staff has all the necessary tools and powers at their disposal to slow the spread of COVID-19.

IT IS FURTHER PROCLAIMED that this Proclamation shall remain in effect for the next seven (7) days, and hereafter by ratification of the City Council.

Joseph P. Lopez
City Manager and
Director of Emergency Services

3/13/2020
Date

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-141

RESOLUTION ACCEPTING THE RESIGNATIONS OF SUSIE FAGUNDES AND STEVE RANK FROM THE DOWNTOWN IMPROVEMENT DISTRICT BOARD OF DIRECTORS

WHEREAS, Susie Fagundes was appointed to serve as a member of the Downtown Improvement District Board of Directors in May 2013 and

WHEREAS, Susie Fagundes has tendered her resignation from the Downtown Improvement District Board of Directors, and

WHEREAS, Steve Rank was appointed to serve as a member of the Downtown Improvement District Board of Directors in November 2014, and

WHEREAS, Steve Rank has tendered his resignation from the Downtown Improvement Board of Directors.

NOW, THEREFORE, BE IT RESOLVED, that the resignations of Susie Fagundes and Steve Rank from the Downtown Improvement District Board of Directors.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-142

RESOLUTION APPROVING AN AGREEMENT WITH CENTRALSQUARE TECHNOLOGIES (FORMERLY SUPERION), LAKE MARY, FL, FOR THE PURCHASE AND INSTALLATION OF THE TRAKIT SOFTWARE SYSTEM FOR THE CITY OF MODESTO DEVELOPMENT CENTER FOR $474,180, 2ND YEAR MAINTENANCE COST OF $188,000 AND A 3RD YEAR MAINTENANCE COST OF $193,640 FOR A TOTAL AMOUNT NOT TO EXCEED $855,820, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto Building Safety Division, which encompasses all development plan review, permitting, inspection and code enforcement services within the City of Modesto, has an immediate need for new permit software, and

WHEREAS, in January of 2019, the Moss Adams Permitting Efficiency Study recommended "the selection and implementation of a new permitting system" to provide "an opportunity to strengthen internal data and processes", and

WHEREAS, the new software solution will be GIS based so that staff can view inspections and code enforcement cases in the field, which will be in alignment with the recommended approach set forth in the Blight Abatement Strategy, and

WHEREAS, Modesto Municipal Code Section 8-3.203 requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid, and

WHEREAS, the Community and Economic Development Department obtained authorization to issue a formal Request for Proposal (RFP) for a new community development management system in February of 2018, and

WHEREAS, seven (7) companies chose to respond, and

WHEREAS, an evaluation committee comprised of City staff from Information Technology, Building Safety, Planning, and Code Enforcement evaluated the proposals and based upon total evaluation criteria, which included references, qualifications, implementation plan and system ability to meet requirement, the evaluation committee recommends the award of proposal for the purchase, installation, and three-year maintenance of the TrakIt Software to CentralSquare Technologies.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an Agreement with CentralSquare Technologies, Lake Mary, FL., for the purchase and installation of the TrakIt software system for the City of Modesto Development Center for $474,180, 2nd year maintenance cost of $188,000 and a 3rd year maintenance cost of $193,640 for a total amount not to exceed $855,820.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the Agreements, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-143

RESOLUTION APPROVING AN INTERFUND LOAN IN AN AMOUNT NOT TO EXCEED $265,404 FROM THE MULTI-YEAR ABATEMENT FUND TO PURCHASE THE TRAKIT SOFTWARE SYSTEM FROM CENTRALSQUARE TECHNOLOGIES (FORMERLY SUPERION), LAKE MARY, FL, FOR THE CITY OF MODESTO DEVELOPMENT CENTER AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE, IS HEREBY AUTHORIZED TO INPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, the City of Modesto Building Safety Division, which encompasses all development plan review, permitting, inspection and code enforcement services within the City of Modesto, has an immediate need for new permit software, and

WHEREAS, in January of 2019, the Moss Adams Permitting Efficiency Study recommended "the selection and implementation of a new permitting system" to provide "an opportunity to strengthen internal data and processes", and

WHEREAS, the new software solution will be GIS based so that staff can view inspections and code enforcement cases in the field, which will be in alignment with the recommended approach set forth in the Blight Abatement Strategy, and

WHEREAS, the Community and Economic Development Department obtained authorization to issue a formal Request for Proposal (RFP) for a new community development management system in February of 2018, and

WHEREAS, an evaluation committee comprised of City staff from Information Technology, Building Safety, Planning, and Code Enforcement evaluated the proposals and based upon total evaluation criteria, which included references, qualifications, implementation plan and system ability to meet requirement, the evaluation committee recommends the award of proposal for the purchase, installation, and three-year maintenance of TrakIt Software system to CentralSquare Technologies, and

WHEREAS, the purchase and installation of the development management software solution will have an estimated cost of $474,180, and

WHEREAS, Senate Bill 2 grant funds in the amount of $70,000 are to be awarded for the acquisition of the system, and

WHEREAS, the cost for ten Neighborhood Preservation staff licenses and three graffiti abatement staff licenses will be funded by the Multi Year Abatement Fund (4910-14999-53300-100673) at an estimated cost of $51,916.80, and

WHEREAS, the cost for 17 Utilities staff licenses will be funded through the Water and Wastewater Enterprise funds at a cost of $67,891.20, and

WHEREAS, the cost for 5 HUD staff licenses will be funded through CDBG and Infrastructure Financing Program Funds (1130-14010-54500-00000-01330 and 3220-14160-54500) at an estimated cost of $21,568, and

WHEREAS, staff is recommending to borrow the remaining costs of $474,180 from the Multiyear Abatement Fund in the amount of $265,404 as an interfund loan and repay those funds from the Building Safety Technology Fund over the next five fiscal years, and

WHEREAS, the loan from the Multiyear Abatement Fund will be paid back yearly; a principal payment of $52,880.80 plus interest at the rate as required by the City's Financial Policies, the interfund loan will accrue interest based upon the rate of return earned by the City's Investment Pool. The interest will be calculated based on principal outstanding during the prior fiscal year.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves and amends the Fiscal Year 2019-2020 Operating and Multi-Year

budget to loan an amount not to exceed $265,404 from the Multiyear Abatement Fund for the purchase of the TrakIt software system from CentralSquare Technologies, Lake Mary, FL.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-144

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 OPERATING AND MULTIYEAR BUDGET FOR PROJECT 1800-14998-43270-101223 TO INCREASE THE BUDGETED AMOUNT OF $475,180 AND AUTHORIZING THE TRANSFER FROM THE WATER (67,891), HUD-CDBG (21,568), MULTIYEAR ABATEMENT FUND (51,917) AND, SENATE BILL 2 GRANT (70,000) AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, in January of 2019, the Moss Adams Permitting Efficiency Study recommended "the selection and implementation of a new permitting system" to provide "an opportunity to strengthen internal data and processes", and

WHEREAS, the funding for the Trak-It permitting software system was sourced through various funds across the City that would benefit from the efficiencies gained through the systems implementation and use, and

WHEREAS, the General Fund was unable to cover the entire portion of its share of the cost of the software system, and

WHEREAS, the cost per user is approximately $4,000 for the initial installation, licenses and first-year maintenance costs, a total of $474,180

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the budget for the project and amending the Fiscal Year 2019-2020 Operating and Multiyear Budget to the budgeted amount of $474,180 and authoring the transfers from the Water Fund (67,891), HUD-CDBG (21,568)**,** Multiyear Abatement Fund (51,917) and, Senate Bill 2 Grant (70,000).

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-145

RESOLUTION APPROVING THE DESIGNATION OF AUTHORIZED AGENTS DEFINED AS THE CITY MANAGER, DEPUTY CITY MANAGER, AND DIRECTOR OF FINANCE TO FILE RELATED DOCUMENTS WITH THE CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES TO SEEK REIMBURSEMENT FOR THE COVID-19 PANDEMIC

WHEREAS, on January 31, 2020, President Donald J. Trump's Health and Human Services Secretary, Alex Azar, declared a public health emergency in response to the COVID-19 outbreak, and

WHEREAS, President Trump approved California's request for a presidential Major Disaster Declaration on March 22, 2020. This declaration made California, its counties and local municipalities eligible for federal funding and assistance for reimbursement of up to 75% of eligible costs, which has become known as FEMA-4428-DR, and

WHEREAS, beginning in February 2020, City of Modesto officials began meeting in response to the declared public health emergency of COVID-19. Efforts to enact recommended guidelines as outlined by the Center for Disease Control and in accordance with Executive Order N-33-20 issued by California Governor Newsom (originally issued on March 4, 2020 and amended on March 19, 2020 to include Orders of the State Public Health Officer) began taking place city-wide the week of March 16th, 2020, and

WHEREAS, in response to this unprecedented pandemic an Emergency Proclamation for the City was made by the City Manager on March 19, 2020 and was approved by the Mayor and Council the same date.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto

that it hereby approves the Designation of Authorized Agents defined as the City Manager, Deputy City Manager and Director of Finance to file related documents with the California Governor's Office of Emergency Services to seek reimbursement for the COVID-19 Pandemic.

BE IT FURTHER RESOLVED by the Council of the City of Modesto that the Director of Finance and/or Deputy City Manager and/or the City Manager are hereby authorized to execute for and on behalf of the City of Modesto, a public entity established under the laws of the State of California, the application and to file it with the California Governor's Office of Emergency Services for the purpose of obtaining certain federal financial assistance under Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.

BE IT FURTHER RESOLVED that the City of Modesto, a public entity established under the laws of the State of California, hereby authorizes its agent(s) to provide to the Governor's Office of Emergency Services for all matters pertaining to such state disaster assistance the assurances and agreements required.

BE IT FURTHER RESOLVED that this is a universal resolution and is effective for all open and future disasters up to three (3) years following the date of approval below.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-146

RESOLUTION APPROVING THE SUBMISSION OF A GRANT APPLICATION FOR THE LOW CARBON TRANSIT OPERATIONS PROGRAM FOR THE FREE FARES PROJECT IN THE AMOUNT OF $841,048 FOR SPECIFIC DATES AND EVENTS TO ENCOURGE MORE RIDERSHIP ON MODESTO AREA EXPRESS BUSES, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL AGREEMENT DOCUMENTS

WHEREAS, the City of Modesto is an eligible project sponsor and may receive state funding from the Low Carbon Transit Operations Program (LCTOP) for transit projects, and

WHEREAS, the statutes related to state-funded transit projects require a local or regional implementing agency to abide by various regulations, and

WHEREAS, Senate Bill 862 (2014) named the Department of Transportation (Department) as the administrative agency for the LCTOP, and

WHEREAS, the Department has developed guidelines for the purpose of administering and distributing LCTOP funds to eligible project sponsors, and

WHEREAS, the City was allocated a grant from the California Department of Transportation (Caltrans) in local and regional funding under the LCTOP, and

WHEREAS, these funds will be used to provide free fare days on specific dates to everyone riding the Modesto Area Express (MAX) system, and

WHEREAS, this project will provide people an incentive for using the bus more often, thus increasing ridership, and

WHEREAS, these funds will be used as fare revenue to supplement the total local revenue for the system, and

WHEREAS, these funds will enable the City of Modesto to achieve the fare box revenue requirement, and

WHEREAS, the City wishes to implement the following LCTOP project listed above.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto that the fund recipient agrees to comply with all conditions and requirements set forth in the Certification and Assurances and the Authorized Agent documents and applicable statutes, regulations and guidelines for all LCTOP funded transit projects.

BE IT FURTHER RESOLVED, by the Council of the City of Modesto that it hereby authorizes the submittal of the following project nomination and allocation request to the Department in FY19-2020 LCTOP funds.

BE IT FURTHER RESOLVED, by the Council of the City of Modesto that it hereby approves the submission of a grant application for the LCTOP for free transit fares for specific dates and events.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute all grant agreement documents, and to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-147

RESOLUTION APPROVING AND IMPLEMENTING THE PUBLIC TRANSIT AGENCY SAFETY PLAN AS REQUIRED BY THE FEDERAL TRANSIT ADMINISTRATION; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PLAN

WHEREAS, on July 19, 2018, the Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan Final Rule, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, operators of public transportation systems are required to implement the safety plans by July 20, 2020; and

WHEREAS, this rule outlines requirements for Public Transportation Agency Safety Plans that would carry out explicit statutory mandates in the Moving Ahead for Progress in the 21st Century Act (MAP–21), which was reauthorized by the Fixing America's Surface Transportation Act (FAST Act) and codified at 49 U.S.C. 5329, to strengthen the safety of public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53; and

WHEREAS, the Modesto Area Express (MAX) Public Transit Agency Safety Plan was developed in collaboration with city safety staff, with information provided by the city's transit operation contractors, National Express Transit Inc. and Storer Transportation; and

WHEREAS, the MAX Public Transit Agency Safety Plan meets all FTA requirements for the size of the City's transit system.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Public Transit Agency Safety Plan.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to implement the plan.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-148

RESOLUTION ACCEPTING THE GRANT AWARD FOR FEDERAL TRANSIT ADMINISTRATION SECTION 5307 TRANSIT FUNDS IN THE AMOUNT OF $5,380,567; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE AND FILE THE ANNUAL CERTIFICATIONS AND ASSURANCES, AND ALL OTHER NECESSARY DOCUMENTS WITH THE FEDERAL TRANSIT ADMINISTRATION

WHEREAS, the Federal Transit Administration (FTA) has been delegated authority to award federal financial assistance for transportation related projects, and

WHEREAS, the City of Modesto has provided all annual certifications and assurances required by the FTA to be eligible for funding under 49 U.S.C Section 5307, and

WHEREAS, the projects are included in the 2019 Federal Transportation Improvement Program (FTIP) adopted by the Stanislaus Council of Governments (StanCOG), and

WHEREAS, Modesto is eligible to use federally approved Transportation Development Funds, formerly known as “Toll Credits”, in lieu of a local match, and

WHEREAS, these Section 5307 funds will be used for preventative maintenance, operating assistance and the capital cost of contracting for Stanislaus County.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the award of $5,380,567 in FTA Section 5307 funds.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute and file the annual certifications and assurances and other documents the FTA requires for awarding a federal assistance grant.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-149

RESOLUTION APPROVING GRANT APPLICATIONS TO THE CALIFORNIA DEPARTMENT OF RESOURCES, RECYCLING AND RECOVERY (CALRECYCLE) FOR ALL WASTE TIRE ENFORCEMENT GRANTS, ACCEPTING GRANT AWARDS, AMENDING THE ANNUAL BUDGET, RESCINDING RESOLUTION NO. 2015-113 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL GRANT RELATED DOCUMENTS AND AUTHORIZATIONS

WHEREAS, Public Resources Code section s 400000 et seq. authorized the Department of Resources Recycling and Recovery (CalRecycle), to administer various Grant Programs (grants) in furtherance of the state of California's (State) efforts to reduce, recycle, and reuse solid waste generated in the State thereby preserving landfill capacity and protecting public health and safety and the environment, and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the application, awarding, and management of the grants, and

WHEREAS, CalRecycle grant application procedures require, among other things, an applicant's governing body to declare by resolution certain authorizations, related to administration of CalRecycle grants.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorized the submittal of applications(s) to CalRecycle for Local Government Waste Tire Enforcement Grants for which the City of Modesto is eligible.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute all grant documents, including but not limited to, application, agreements, amendments, and requests for payment, necessary to secure grant funds and implement the approved grant project.

BE IT FURTHER RESOLVED the City Manager, or his designee, is authorized

to amend the current budget to reflect increases in revenue from grant awards.

BE IT FURTHER RESOLVED that these authorizations shall remain effective for five years from the date of adoption of this resolution.

BE IT FURTHER RESOLVED that Resolution No. 2015-113 is hereby rescinded.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-150

RESOLUTION ACCEPTING THE WELL 72 (REPLACING WELL 229) PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $497,851 TO NOR-CAL PUMP & WELL DRILLING, INC. OF YUBA CITY, CA

WHEREAS, city Well 229 is strategically important to the City's water supply infrastructure, as it is located near Sutter and Rouse Avenues in southwest Modesto, and

WHEREAS, due to elevated nitrate conditions, Well 229 was taken offline in early 2016, and

WHEREAS, originally drilled in 1950 to a shallow depth of 230 feet, Well 229 is more than 65 years old, and

WHEREAS, the drilling method used was not able to isolate specific water layers and therefore it's easier for certain contaminants to travel into the pumped water source, and

WHERAS, a new, deeper replacement well, built to current well construction standards is proposed to be drilled on the existing site, and

WHEREAS, bids were advertised on October 10, 2018, and

WHEREAS, bids were publicly opened on November 13, 2018, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and Nor-Cal Pump & Well Drilling, Inc. of Yuba City, CA, was the apparent responsible and responsive bidder, and

WHEREAS, on March 12, 2019, by Resolution No. 2019-123, Council awarded a contract to Nor-Cal Pump & Well Drilling, Inc., of Yuba City, CA for the construction of the Well 72 (Replacing Well 229) Project in the amount of $556,906, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of May 13, 2019, and all contract work was completed by September 4, 2019, and

WHEREAS, the total project costs were $774,700 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $1,204,604 which included $696,133 for the construction contract and contingency with Nor-Cal Pump & Well Drilling, Inc., and

WHEREAS, there were four change orders on this project with an overall decrease of $59,055, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Well 72 (Replacing Well 229) Project is hereby accepted as complete from contractor Nor-Cal Pump & Well Drilling, Inc., of Yuba City, CA, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $497,851, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-151

RESOLUTION ACCEPTING THE CLAUS ROAD PAVEMENT REHABILITATION PHASE II PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $1,064,354 DSS COMPANY, DBA KNIFE RIVER CONSTRUCTION, OF STOCKTON, CALIFORNIA

WHEREAS, in November 2016, the voters of Stanislaus County approved the county wide, 25-year, half- cent sales tax increase known as Measure L, and

WHEREAS, on September 4, 2018, by Resolution No. 2018-380, Council amended the approved list of projects to be funded with Measure L tax proceeds in Fiscal Year 2018-2019, and

WHEREAS, the amendment to the list of projects allocated $1,443,773.00 for construction and design to the Claus Road Pavement Rehabilitation – Phase II Project, and

WHEREAS, the Claus Road Pavement Rehabilitation Phase II Project repaired pavement that was deteriorated with an asphalt rubber chip seal and asphalt overlay within the street limits of Briggsmore Avenue to Terminal Avenue, and

WHEREAS, bids were advertised on March 6, 2019, and

WHEREAS, bids were publicly opened on April 2, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and DSS Company, dba Knife River Construction, of Stockton, California, was the apparent responsible and responsive bidder, and

WHEREAS, on May 7, 2019, by Resolution No. 2019-204, Council awarded a contract to DSS Company, dba Knife River Construction, of Stockton, California for the

construction of the Claus Road Pavement Rehabilitation Phase II Project in the amount of $1,036,423, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of July 29, 2019, and all contract work was completed by October 21, 2019, and

WHEREAS, the total project costs were $1,208,746 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $1,443,7734 which included $1,140,065 for the construction contract and contingency with DSS Company, dba Knife River Construction, and

WHEREAS, per Resolution 2019-205, on May 7, 2019, the Directors Authority for Change Orders was increased to 10% contingency, and

WHEREAS, there were three change orders on this project with an overall increase of $27,931, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Claus Road Pavement Rehabilitation – Phase II Project is hereby accepted as complete from contractor DSS Company, dba Knife River Construction, of Stockton, CA, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $1,064,354, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-152

RESOLUTION APPROVING AGREEMENTS FOR ON-CALL LAND SURVEYING SERVICES WITH DELAMARE-FULTZ (DF) ENGINEERING, INC., OF MODESTO, CA, NORTHSTAR ENGINEERING, INC., OF MODESTO, CA, AND O'DELL ENGINEERING OF MODESTO, CA, FOR A ONE-YEAR AGREEMENT WITH TWO (2) ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL AMOUNT NOT TO EXCEED $75,000 PER CONSULTANT, AND A TOTAL AMOUNT NOT TO EXCEED $225,000 PER CONSULTANT OVER THREE YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto has the need for professional Land Surveying services on various projects, and

WHEREAS, the Utilities Department lacks sufficient qualified staff members to satisfy the demand for these services, and

WHEREAS, project workloads and permit workloads require more resources than the City survey staff has available, and

WHEREAS, land surveying support is required on public works projects, and

WHEREAS, land surveying Services are needed for reviewing legal maps, plans and documents for property lines, monuments and subdivisions, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural & Engineering Services for Capital Projects, which follows State of California Government Code, Section 4526-4529, staff issued a Request for Qualifications on September 5, 2019, and

WHEREAS, Staff received Statement of Qualifications from six firms, and

WHEREAS, the three consultants were deemed the most qualified firms and meet or exceeds the standard of work set forth by the City of Modesto for Land Surveying services, and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a) Exceptions to Formal Bidding Requirements, these agreements are for professional services and, therefore, exempt from the bid requirement. However, staff proceeded with the RFP process pursuant to Administrative Directive 3.1. Staff recommends approval of agreements with DF Engineering, Inc., NorthStar Engineering, Inc., and O'Dell Engineering for on-call land surveying services.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves agreements for on-call land surveying services with Delamare-Fultz (DF) Engineering, Inc., of Modesto, CA, NorthStar Engineering, Inc., of Modesto, CA, and O'Dell Engineering of Modesto, CA, for a one-year agreement with two (2) one-year extension options, for an annual amount not to exceed $75,000 per consultant, and a total amount not to exceed $225,000 per consultant over three years.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreements, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-153

RESOLUTION APPROVING AN ON-CALL AGREEMENT WITH KRAZAN & ASSOCIATES, INC., FOR MATERIALS TESTING AND SPECIAL INSPECTION SERVICES, FOR A ONE-YEAR AGREEMENT WITH TWO ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $74,500, AND A TOTAL NOT TO EXCEED AMOUNT OF $223,500 OVER THREE YEARS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, City staff finds it necessary to utilize the services of a materials testing and special inspection firm during the course of administering the construction on public improvement projects; and

WHEREAS, the testing services are required to help achieve compliance with the specification requirements of the various projects; and

WHEREAS, staff does not have the required equipment or certifications to perform all the required materials testing and special inspection services, and

WHEREAS, proposals were opened on February 4, 2020, for the On-call Special Inspection and Material Testing Services; and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," agreements for professional services are exempt from the formal bidding process and requirements, the firm of Krazan & Associates, Inc., was one of three most qualified and responsive firms.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an On-call Agreement with Krazan & Associates, Inc., for Materials Testing and Special Inspection Services, for a one-year agreement with two one-year extension options, for an annual cost not to exceed $74,500, and a total not to

exceed amount of $223,500 over three years, conforming to Modesto Municipal Code 8-3.204, subsection (a) as they are providing professional services.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-154

RESOLUTION APPROVING AN ON-CALL AGREEMENT WITH BSK ASSOCIATES, FOR MATERIALS TESTING AND SPECIAL INSPECTION SERVICES, FOR A ONE-YEAR AGREEMENT WITH TWO ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $74,500, AND A TOTAL NOT TO EXCEED AMOUNT OF $223,500 OVER THREE YEARS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, City staff finds it necessary to utilize the services of a materials testing and special inspection firm during the course of administering the construction on public improvement projects; and

WHEREAS, the testing services are required to help achieve compliance with the specification requirements of the various projects; and

WHEREAS, staff does not have the required equipment or certifications to perform all the required materials testing and special inspection services, and

WHEREAS, proposals were opened on February 4, 2020, for the On-call Special Inspection and Material Testing Services; and

WHEREAS, WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," agreements for professional services are exempt from the formal bidding process and requirements, the firm of BSK Associates, was one of three most qualified and responsive firms.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an On-call Agreement with BSK Associates, for Materials Testing and Special Inspection Services, for a one-year agreement with two one-year extension options, for an annual cost not to exceed $74,500, and a total not to exceed amount of

$223,500 over three years, conforming to Modesto Municipal Code 8-3.204, subsection (a) as they are providing professional services.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-155

RESOLUTION APPROVING AN ON-CALL AGREEMENT WITH TERRACON CONSULTANTS, INC., FOR MATERIALS TESTING AND SPECIAL INSPECTION SERVICES, FOR A ONE-YEAR AGREEMENT WITH TWO ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $74,500, AND A TOTAL NOT TO EXCEED AMOUNT OF $223,500 OVER THREE YEARS AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, City staff finds it necessary to utilize the services of a materials testing and special inspection firm during the course of administering the construction on public improvement projects; and

WHEREAS, the testing services are required to help achieve compliance with the specification requirements of the various projects; and

WHEREAS, staff does not have the required equipment or certifications to perform all the required materials testing and special inspection services, and

WHEREAS, proposals were opened on February 4, 2020, for the On-call Special Inspection and Material Testing Services; and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," agreements for professional services are exempt from the formal bidding process and requirements, the firm of Terracon Consultants, Inc., was one of three most qualified and responsive firms.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an On-call Agreement with Terracon Consultants, Inc., for Materials Testing and Special Inspection Services, for a one-year agreement with two one-year extension options, for an annual cost not to exceed $74,500, and a total not to

exceed amount of $223,500 over three years conforming to Modesto Municipal Code 8-3.204, subsection (a) as they are providing professional services.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-156

RESOLUTION APPROVING THE GRANT OF TEMPORARY CONSTRUCTION EASEMENT WITHIN A PORTION OF APN 083-004-06 FROM SNOW PROPERTIES, MS. JANET LYNN SNOW, MRS. ELIZABETH BARNES, MRS. JENNIFER L. SHIN, AND STAN-SAN PROPERTIES 1, LLC FOR THE SONOMA TRUNK PROJECT, CONSENTING TO THE RECORDATION THEREOF, AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE REQUIRED DOCUMENTS FOR THE TEMPORARY CONSTRUCTION EASEMENT AREA UPON EXPIRATION OCCURRING APRIL 30, 2022

WHEREAS, the City of Modesto provides wastewater collection and treatment service to all City residents, and

WHEREAS, installation of the Sonoma Trunk will promote development within the Tivoli Specific Plan, and

WHEREAS, installation of the Sonoma Trunk will necessitate the relocation of certain Modesto Irrigation District irrigation apparatus, and

WHEREAS, the proposed configuration and location of the relocated MID irrigation apparatus has been reviewed and approved by MID, and

WHEREAS, the City requested from the owners of the APN 083-004-06 a Temporary Construction Easement to facilitate relocation and construction of MID irrigation apparatus, and

WHEREAS, the owners have agreed to grant the temporary construction easement at no financial cost to the City of Modesto, and

WHEREAS, the temporary construction easement will expire on April 30, 2022 and the City will deliver a quit-claim deed to the owners at that time releasing interest in the easement area.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the temporary construction easement granted to the City of Modesto by Snow Properties, Ms. Janet Lynn Snow, Mrs. Elizabeth Barnes, Mrs. Jennifer L. Shin, and Stan-San Properties 1, LLC for the Sonoma Trunk Sewer Project.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the required documents for the Temporary Construction Easement area upon expiration occurring April 30, 2022.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-157

RESOLUTION APPROVING THE GRANT OF TEMPORARY CONSTRUCTION EASEMENT WITHIN PORTIONS OF APN 078-055-023 AND 078-055-024, A PERMANENT ACCESS AND UTILITY EASEMENT WITHIN A PORTION OF APN 078-055-023 FROM THE STANISLAUS UNION SCHOOL DISTRICT FOR THE WELL 64 FLUSH LINE PROJECT, CONSENTING TO THE RECORDATION THEREOF, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE CERTIFICATES OF ACCEPTANCE AND QUIT-CLAIM DEED UPON EXPIRATION OF THE TEMPORARY CONSTRUCTION EASEMENT ON DECEMBER 31, 2020

WHEREAS, municipal wells within the City of Modesto water system provide safe, clean water to all City of Modesto residents and benefit greatly from the use of dedicated flush lines to clear standing sediment, and

WHEREAS, on June 25, 2019 by Resolution number 2019-304, Council approved Capital Improvement Program (CIP) project # 100357 to perform water system improvements, and

WHEREAS, the location of the Well 64 flush line creates a pedestrian obstacle within the designated sidewalk near the Mary Lou Dietrich Elementary School, and

WHEREAS, the City requested from the Stanislaus Union School District a Temporary Construction Easement (TCE) to facilitate relocation and construction of a new flush line for Well 64 and a Permanent Access and Utility Easement (AUE) to provide access and permanent placement of the new Well 64 flush line, and

WHEREAS, the Stanislaus Union School District has agreed to grant the easements at no financial cost to the City of Modesto, and

WHEREAS the Stanislaus Union School District has requested that the City provide quit-claim deeds upon expiration of the temporary construction easements on December 31, 2020.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts both the temporary construction easement and the permanent access and utility easement granted to the City of Modesto by the Stanislaus Union School District.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the Certificates of Acceptance and the quit-claim deed releasing interest in the easement areas upon expiration of the temporary construction easements on December 31, 2020.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-158

RESOLUTION APPROVING AN AMENDMENT INCREASING THE AGREEMENT WITH STORER TRANSIT SYSTEMS, FOR MODESTO AREA DIAL-A-RIDE OPERATIONS BY $900,000 FROM $19,814,653 TO $20,714,653, FOR A NEW TOTAL AMOUNT NOT TO EXCEED $20,714,653, AND APPROVE EXTENDING THE TERM OF THE AGREEMENT FROM JUNE 28, 2020 THROUGH SEPTEMBER 30, 2020, AND AUTHORIZE THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City is in the final year of a six year contract with Storer Transit Systems (Storer) to operate Modesto Area Dial-A-Ride (MADAR) through June 28, 2020, and

WHEREAS, at the March 10, 2020 Council meeting, the Council directed staff to return with more information regarding the impacts to the risks to the funding related to the award of RFP 1920-07, and

WHEREAS, an extension with Storer to continue operating the Modesto Area Dial-A-Ride system for approximately 90 days would be reasonable due to the COVID-19 situation.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes an amendment increasing the agreement with Storer Transit Systems, for Modesto Area Dial-A-Ride operations by $900,000 from $19,814,653 to $20,714,653, for a new total amount not to exceed $20,714,653, an approve extending the term of the agreement from June 28, 2020 through September 30, 2020.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 7th day of April, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Madrigal
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-159

RESOLUTION APOINTING LAUREN TREVINO TO THE DOWNTOWN IMPROVEMENT DISTRICT BOARD OF DIRECTORS FOR A FOUR YEAR TERM TO EXPIRE JANUARY 2024

WHEREAS, Section 1102 of the Charter of the City of Modesto authorizes the City Council to appoint members to various Boards and Commissions, and

WHEREAS, the Downtown Improvement District Board of Directors are recommending the appointment of Lauren Trevino to a term ending January 2024 to the Downtown Improvement District Board of Directors;

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto as follows:

SECTION 1. Lauren Trevino is hereby appointed to the Downtown Improvement District Board of Directors to a term ending January 2024.

SECTION 2. The City Clerk is hereby directed to transmit a copy of this Resolution to the appointed member of the Downtown Improvement District Board of Directors, and as Secretary thereof.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-160

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 ANNUAL OPERATING AND CAPITAL IMPROVEMENT PROJECT FUND BUDGETS

WHEREAS, a financial analysis has been completed and it has been determined that a budget adjustment is required to the Annual and Capital Improvement Budgets of the City of Modesto for Fiscal Year 2019-20.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Fiscal Year 2019-20 Annual Operating and Capital Improvement budget as shown in **Exhibit A**, which is **attached** hereto and incorporated by reference herein.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

FISCAL YEAR 2019-20

HUMAN RESOURCES

- A budget adjustment in the amount of $1.5M is necessary for the Employee Benefit Fund (5510) to increase the Sick Leave Conversion Budget from $1.028M to $2.528M. This is related to the recent retirements of employees with large sick leave balances. Since the Employee Benefit Fund is an Internal Service Fund (ISF), per Governmental Account Standards Board (GASB), it is required to report based on full accrual basis of accounting. .

FIRE DEPARTMENT

- A budget adjustment is necessary to amend the Industrial Fire District budget as approved in Fund 6100, JPA – Industrial Fire Fund, by the Modesto Ceres JPA Industrial Fire board on December 11, 2019. The revenues will need to be increased by $74,910, which will be offset by an increase to the expense of the final disbursement to the JPA members by $74,910

PUBLIC WORKS

- A budget adjustment in the amount of $615,228 to fund 4540-Bus Fixed Route MAX operations, Cost center 53472 – Transit Services is necessary to increase grant revenues from the Low Carbon Transit Operations grant awarded to transit to provide free fares to passengers during Fiscal Year 2019-2020
- A budget adjustment in the amount of $144,769 is necessary to establish the budget and non-capital project 101235 – MAX – Token Validators in fund 4510 – Bus Fixed Route Fund to fund the purchase of Token Validators for the MAX bus fleet. Revenues for this purchase will come from a Prop 1 B grant under the Public Transportation Modernization, Improvement and Service Enhancement Account Program (PTMISEA)
- A budget adjustment in the amount of $181,685 in Fund 4520-Bus Service Fund – DAR is needed to fund the 1 year extension to the agreement with Storer Transit Services to operate Modesto Area Dial A Ride for the approved under resolution 2019-232. Funding for this contract expense will come from a grant from Federal Transit Administration (FTA) $72,674 and Local Transportation Funds (LTF) in the amount of $109,011.

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-161

RESOLUTION APPROVING THE PLANS AND SPECIFICATIONS FOR THE COFFEE ROAD PAVEMENT REHABILITATION PROJECT, ACCEPTING THE BID, AND AWARDING A CONTRACT TO UNITED PAVEMENT MAINTENANCE, INC. OF HUGHSON, CALIFORNIA, IN THE AMOUNT OF $2,630,349 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, plans and specifications have been prepared for the Coffee Road Pavement Rehabilitation Project, and City staff recommends approval by the City Council, and

WHEREAS, the bids received for the Coffee Road Pavement Rehabilitation Project were publicly opened at 11:00 a.m. on March 10, 2020, and later tabulated by the Director of Community and Economic Development for the consideration of Council, and

WHEREAS, the Director of Community and Economic Development has recommended that the bid of $2,630,349 received from United Pavement Maintenance, Inc., of Hughson, California be accepted as the lowest responsible and responsive bid and the contract be awarded to United Pavement Maintenance, Inc., and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow the formal bid procedures, and

WHEREAS, an award of $2,630,349 and agreement for construction for Community and Economic Development Department to use United Pavement Maintenance, Inc., of Hughson, California, conforms to the Modesto Municipal Code

because the City complied with the formal bid procedures and United Pavement Maintenance, Inc., of Hughson, California, was the lowest responsive bidder.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the plans and specifications for the Coffee Road Pavement Rehabilitation Project, accepts the bid of United Pavement Maintenance, Inc., of Hughson, California, in the amount of $2,630,349 and awards United Pavement Maintenance, Inc. the contract for the Coffee Road Pavement Rehabilitation Project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the contract, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Madrigal
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-162

RESOLUTION AUTHORIZING THE DIRECTOR OF UTILITIES TO APPROVE CHANGE ORDERS UP TO THE CUMULATIVE AMOUNT OF $263,035 (10% OF THE ORIGINAL CONTRACT PRICE) FOR THE COFFEE ROAD PAVEMENT REHABILITATION PROJECT

WHEREAS, the Coffee Road Pavement Rehabilitation Project bids were publicly opened on March 10, 2020, and United Pavement Maintenance, Inc., of Hughson, California was the apparent low bidder with the amount of $2,630,349, and

WHEREAS, the contingency cost for the Coffee Road Pavement Rehabilitation Project is estimated to be $263,035 (10% of the original contract price), an amount which exceeds the Director's authority for the project as enacted by Council Resolution No. 2019-326 on July 9, 2019.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the Director of Utilities to approve change orders up to the cumulative amount of $263,035 (10% of the original contract price).

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Madrigal
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-163

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 CAPITAL IMPROVEMENT PROGRAM BUDGET IN THE AMOUNT OF $800,000 AS SHOWN IN EXIBIT A IN ORDER TO FULLY FUND THE COFFEE ROAD PAVEMENT REHABILITATION PROJECT AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, certain budgetary transactions are necessary in the amounts shown in **Exhibit A**, in order to fund the Coffee Road Pavement Rehabilitation Project, and

WHEREAS, the Coffee Road Pavement Rehabilitation Project, has local funds component as approved Measure L Oversite Committee as shown in **Exhibit A**, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget in the amount of $800,000 as shown in the **attached Exhibit A.**

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Madrigal
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

101171 – CED – Coffee Road Pavement Rehabilitation

EXPENSES	**PJTD Budget**	**Increase / Decrease (61410)**	**Proposed New Budget**
CA - Construction Administration	$260,870	$9,130	$270,000
CON - Construction	$1,739,130	$891,219	$2,630,349
CTGY - Contingency - CIP	$173,913	$89,122	$263,035
EDA - Eng/Design/Admin	$326,087	-$189,471	$136,616
CC – Consultant Charges	$0	$0	$0
Total	$2,500,000	$800,000	$3,300,000

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-164

RESOLUTION APPROVING AN AGREEMENT WITH MARK THOMAS & COMPANY, INC., FRESNO, CA, FOR ENGINEERING SERVICES FOR THE GRANGER NEIGHBORHOOD PAVEMENT REHABILITATION PROJECT IN AN AMOUNT NOT TO EXCEED $250,225 FOR THE IDENTIFIED SCOPE OF SERVICES, PLUS $25,022 FOR ADDITIONAL SERVICES (IF NEEDED), FOR A MAXIMUM TOTAL AMOUNT OF $275,247, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, in November of 2016 the voters of Stanislaus County approve the county wide, 25-year, half-cent sales tax increase known as Measure L, and

WHEREAS, on December 12, 2017 by Resolution 2017-505, Council approved a Measure L Master Funding Agreement between the Stanislaus Council of Governments and the City of Modesto, and

WHEREAS, the Granger Neighborhood and Roosevelt Park area has been identified as having pavement in need of rehabilitation, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural and Engineering Services for Capital Projects, which is in compliance with California Government Code Sections 4526-4529, and Council resolution Number 2017-439, staff utilized a pre-qualified list of consultants to solicit proposals to perform engineering services for the Granger Neighborhood Pavement Rehabilitation project, and

WHEREAS, also in accordance with Administrative Directive 3.1, a selection committee made up of Community and Economic Development Department (CEDD) staff members evaluated each of the Proposals based on the firms' qualifications and experience, project understanding, approach and proposed scope of work, organization and individual roles and responsibilities, and project schedule, and

WHEREAS, after careful review, the selection committee determined Mark Thomas & Company, Inc., of Fresno, CA to be the most qualified firm to perform the work for this particular project.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an agreement with Mark Thomas & Company, Inc. (Fresno, CA) for engineering services for the Granger Neighborhood Pavement Rehabilitation project, in an amount not to exceed $250,225 for the identified scope of services, plus $25,022 for additional services (if needed), for a maximum total amount of $275,247.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-165

RESOLUTION APPROVING AN AGREEMENT WITH ALTA PLANNING + DESIGN INC., PORTLAND, OR, FOR ENGINEERING SERVICES FOR THE SCHOOL SAFETY PROGRAM STUDY IN AN AMOUNT NOT TO EXCEED $247,499, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, in November of 2016 the voters of Stanislaus County approve the county wide, 25-year, half-cent sales tax increase known as Measure L, and

WHEREAS, on December 12, 2017 by Resolution 2017-505, Council approved a Measure L Master Funding Agreement between the Stanislaus Council of Governments and the City of Modesto, and

WHEREAS, starting in FY2019-20, the Measure L funded projects for each category were presented to the Citizen's Commission, and subsequently brought forth to Committee and Council with the annual budget review, and

WHEREAS, the City has 68 public schools in 8 districts, consisting of 50 elementary schools, 11 middle schools, and 7 high schools, and

WHEREAS, in Fiscal Year 2017-2018, the City created a task force to establish school safety needs using Measure L local funding, and

WHEREAS, the City schools have more needs than resources available to address them, so safety and traffic flow around schools needs to be evaluated and prioritized for fair, effective and transparent use of funding to make improvements in the public right-of-way, and

WHEREAS, the School Safety Program Study project will provide funding to hire a consultant to evaluate safety and traffic flow around schools throughout Modesto, and prioritize needs. Anticipated deliverables include identification of needs, prioritization of

schools, recommendations for future projects such as safe pedestrian path of travel, ADA upgrades, signage and beacons near schools, and traffic calming, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural and Engineering Services for Capital Projects, which is in compliance with California Government Code Sections 4526-4529, staff solicited and formally advertised a Request for Qualifications (RFQ) and Request for Proposals (RFP) through PlanetBids for transportation planning consultants to provide consulting services for the development of the City's School Safety Program, and

WHEREAS, also in accordance with Administrative Directive 3.1, a selection committee made up of Community and Economic Development Department (CEDD) staff members evaluated each of the SOQs/Proposals based on the firms' qualifications and experience, project understanding, approach and proposed scope of work, organization and individual roles and responsibilities, and project schedule, and

WHEREAS, after careful review, the selection committee determined Alta Planning + Design, Inc., of Portland, OR, to be the most qualified firm to perform the work for this particular project.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an agreement with Alta Planning + Design Inc., Portland, OR for engineering services for the School Safety Program Study, in an amount not to exceed $247,499.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-166

RESOLUTION ACCEPTING A HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) GRANT IN THE AMOUNT OF $75,000 FOR THE DEVELOPMENT OF A LOCAL ROADS AND SAFETY PLAN (LRSP), AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE ALL FUNDING AND GRANT RELATED DOCUMENTS

WHEREAS, federal regulations require each State to have a Strategic Highway Safety Plan (SHSP), which is a state-wide traffic safety plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and all injuries on public roads, and

WHEREAS, the SHSP addresses the 4E's of Traffic Safety: Engineering, Enforcement, Education, Emergency Services, and

WHEREAS, the SHSP is part of a statewide approach to improve traffic safety, whereas a Local Road and Safety Plan (LRSP) provides local road owners, like the City of Modesto, with an opportunity to address unique roadway safety needs while contributing to the success of the SHSP, and

WHEREAS, the process of preparing an LRSP creates a framework to systemically identify and analyze safety problems and recommend safety improvements for local jurisdictions, and

WHEREAS, on October 8, 2019 Caltrans announced a call for LRSP grant applications, and a total of $10 million from the Highway Safety Improvement Program (HSIP) was set aside to assist local agencies in developing a safety plan, and

WHEREAS, agencies like the City of Modesto who have an active Systemic Safety Analysis Report project underway will be considered for funding after January 1, 2020, and

WHEREAS, the grant will allow for 90 percent funding, with a required 10 percent local match, and

WHEREAS, on January 28, 2020, by Resolution 2020-32, Council authorized submittal of an HSIP grant application to seek funds for the development of an LRSP, and

WHEREAS, the City received notification that the grant application submitted to Caltrans in January, 2020 was selected for funding and implementation of an LRSP for the City of Modesto.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the Highway Safety Improvement Program (HSIP) grant in the amount of $75,000 for the development of a Local Roads and Safety Plan (LRSP).

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute all funding and grant related documents

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-167

RESOLUTION APPROVING THE FIRST AMENDMENT INCREASING THE AGREEMENT FOR CONSULTANT SERVICES WITH FEHR AND PEERS, IN THE AMOUNT OF $39,994 WITH A NEW TOTAL NOT TO EXCEED AMOUNT OF $223,234 TO INCLUDE THE DEVELOPMENT OF THE LRSP AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE TO EXECUTE THE FIRST AMENDMENT

WHEREAS, the Systemic Safety Analysis Report Program Grant represents a proactive approach focusing on evaluating roadway networks using a defined set of criteria to identify potential improvements to increase pedestrian and bicyclist safety, and

WHEREAS, on June 5, 2018, by Resolution No. 2018-274, Council approved an agreement with Fehr and Peers of Walnut Creek, CA for consultant services for the Systemic Safety Analysis Report Project in the amount of $183,240 for the identified scope of work for the Systemic Safety Analysis Report (SSAR) Grant, plus $18,324 for additional services (if needed), for a total amount not to exceed $201,564, and

WHEREAS, Federal regulations require each State to have a Strategic Highway Safety Plan (SHSP), which is a state-wide traffic safety plan that coordinates the efforts of a wide range of organizations to reduce traffic accident fatalities and all injuries on public roads, and

WHEREAS, the SHSP is part of a statewide approach to improve traffic safety, whereas a Local Roads and Safety Plan (LRSP) provides local road owners, like the City of Modesto, with an opportunity to address unique roadway safety needs, while contributing to the success of the SHSP, and

WHEREAS, on October 8, 2019 Caltrans announced a call for LRSP grant applications, and that a total of $10 million from Highway Safety Improvement Program (HSIP) funds were set aside to assist local agencies to develop a safety plan, and

WHEREAS, agencies like the City of Modesto who have an active Systemic Safety Analysis Report (SSAR) project underway were considered for funding after January 1, 2020, and

WHEREAS, on January 28, 2020 by Resolution 2020-32, Council authorized submittal of an HSIP application to seek funds for the development of an LRSP, and

WHEREAS, the City was notified that the grant submitted to Caltrans in January 2020 was selected for funding and implementation of an LRSP for the City of Modesto, and

WHEREAS, the City of Modesto currently has an effort underway to develop an SSAR with Fehr and Peers as the Consultant, to receive the most benefit and utilize the majority of the collision pattern information and analysis that has already been performed throughout the City, staff recommends amending the current contract with Fehr and Peers to include additional services that would include the development of the LRSP, and

WHEREAS, on March 19, 2020, Fehr and Peers submitted to the City an amended scope of work to revise the draft SSASR to incorporate the additional elements that make up the LRSP document, and

WHEREAS, the final LRSP document will meet the SSAR reporting requirements while also aligning with the LRSP guidelines, and

WHEREAS, the estimated modified tasks result in increased costs as follows:

1. Progress Meetings: $10,706

2. Collision Analysis: $5,308

3. Preliminary Countermeasures List: $4,574

4. Amended Stakeholder Engagement: $8,594

5. Amended Draft and Final LRSP: $10,812

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the First Amendment increasing the Agreement amount with Fehr and Peers, for consultant services for the City of Modesto Systemic Safety Analysis Report by $39,994 from $183,240 to a total not to exceed amount of $223,234.

BE IT FURTHER RESOLVED, that the City Manager, or his designee is authorized to execute the First Amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-168

RESOLUTION AMENDING THE FISCAL YEAR 2019/20 CAPITAL IMPROVEMENT PROGRAM (CIP) BUDGET, PROJECT #100990 IN THE AMOUNT OF $75,000 TO INCLUDE THE AMENDED SCOPE OF WORK TO INCLUDE THE ELEMENTS OF THE LRSP

WHEREAS, in February, 2016 the State of California released guidelines for the Systemic Safety Analysis Report Program (SSARP), and

WHEREAS, the guidelines were developed in consultation with the California Local Highway Safety Improvement Program (HSIP) Advisory Committee, and

WHEREAS, the SSARP program represents a proactive approach focusing on evaluating roadway networks using a defined set of criteria to identify potential improvements to increase pedestrian and bicycle safety, and

WHEREAS, in March, 2016, staff submitted an application to the State of California, Department of Transportation requesting SSARP funds in the amount of $225,000 with a Local match of $25,000 for Preliminary Engineering (PE), and

WHEREAS, on May 18, 2016, the State of California notified the City of Modesto that the application submitted for the SSARP funds was selected to receive funding, and

WHEREAS, on July 5, 2017, by Resolution No. 2017-269, Council approved the use of $25,000 in Measure L funds to be used as match funds for the City's project, and

WHEREAS, on September 26, 2017, by Resolution No. 2017-359, Council accepted the Systemic Safety Analysis Report Program (SSARP) grant in the amount of $225,000, and

WHEREAS, Federal regulations require each State to have a Strategic Highway Safety Plan (SHSP), which is a state-wide traffic safety plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and all injuries on public roads, and

WHEREAS, the SHSP addresses the 4E's of Traffic Safety: Engineering, Enforcement, Education, Emergency Services, and

WHEREAS, the SHSP is part of a statewide approach to improve traffic safety, whereas a Local Road and Safety Plan (LRSP) provides local road owners, like the City of Modesto, with an opportunity to address unique roadway safety needs while contributing to the success of the SHSP, and

WHEREAS, the process of preparing an LRSP creates a framework to systemically identify and analyze safety problems and recommend safety improvements for local jurisdictions, and

WHEREAS, on October 8, 2019 Caltrans announced a call for LRSP grant applications, and a total of $10 million from the Highway Safety Improvement Program (HSIP) was set aside to assist local agencies in developing a safety plan, and

WHEREAS, agencies like the City of Modesto who have an active Systemic Safety Analysis Report project underway were considered for funding after January 1, 2020, and

WHEREAS, the grant will allow for 90 percent funding, with a required 10 percent local match, and

WHEREAS, on January 28, 2020, by Resolution 2020-32, Council authorized submittal of an HSIP grant application to seek funds for the development of an LRSP, and

WHEREAS, the City received notification that the grant application submitted to Caltrans in January, 2020 was selected for funding and implementation of an LRSP for the City of Modesto.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Fiscal Year 2019/20 Capital Improvement Program (CIP) budget, project #100990 in the amount of $75,000 to include the amended scope of work to include the elements of the LRSP.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting ~~City Attorney~~

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-169

RESOLUTION APPROVING THE FINAL MAP OF VINTAGE UNIT THREE SUBDIVISION, APPROVING THE SUBDIVISION AGREEMENT AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE A SUBDIVISION AGREEMENT WITH THE OWNER / DEVELOPER, MODESTO ROSELLE, LLC, AND AUTHORIZING THE CITY CLERK TO CERTIFY THE FINAL MAP AND RECORD IT WITH THE STANISLAUS COUNTY RECORDER'S OFFICE

WHEREAS, Modesto Roselle, LLC, a California limited liability company ("SUBDIVIDER"), is in possession of a tract of land situated in the City of Modesto, County of Stanislaus, consisting of 10.4 acres, known as the Vintage Unit Three Subdivision ("SUBDIVISION"), and

WHEREAS, a tentative map of said tract was approved by the Planning Commission of the City of Modesto on October 19, 2015 with conditions of approval as noted in Planning Commission resolution Number 2015-26, and

WHEREAS, the Secretary of the Planning Commission and the City Engineer of the City of Modesto have certified that the final map of said tract substantially conforms to the approved tentative map, and

WHEREAS, the project is currently under construction and the public improvements have not been completed, and

WHEREAS, as required by Section 4-4.605 of the Modesto Municipal Code, the SUBDIVIDER has executed a Subdivision Agreement, and

WHEREAS, the City Engineer of the City of Modesto has certified that the final map of said SUBDIVISION meets all of the provisions of the California Subdivision Map Act and the provisions of the Modesto Municipal Code relating to subdivisions, and the City Surveyor has determined that the map is technically correct, and

WHEREAS, the Subdivider has furnished securities, as set forth in Section 4-4.605 of the Modesto Municipal Code, which shall secure the obligations set forth in Section 66499.3 of the Government Code of the State of California. Said securities are in forms acceptable to the City Attorney and in the amounts required by the City Engineer.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that said Final Map be approved; that the dedications for public streets and easements as shown thereon within the boundaries of said tract be accepted on behalf of the public for public use; and approve the subdivision agreement.

BE IT FURTHER RESOLVED, that the City Manager or his designee, is hereby authorized to execute the Subdivision Agreement, in a form approved by the City Attorney.

BE IT FURTHER RESOLVED that the City Clerk be authorized to certify the map of said tract on behalf of the City of Modesto after the fees required by the Modesto Municipal Code in amounts determined by the City Engineer have been paid.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-170

RESOLUTION APPROVING THE FINAL MAP OF VINTAGE UNIT FOUR SUBDIVISION, APPROVING THE SUBDIVISION AGREEMENT AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE A SUBDIVISION AGREEMENT WITH THE OWNER / DEVELOPER, MODESTO ROSELLE, LLC, AND AUTHORIZING THE CITY CLERK TO CERTIFY THE FINAL MAP AND RECORD IT WITH THE STANISLAUS COUNTY RECORDER'S OFFICE

WHEREAS, Modesto Roselle, LLC, a California limited liability company ("SUBDIVIDER"), is in possession of a tract of land situated in the City of Modesto, County of Stanislaus, consisting of 3.6 acres, known as the Vintage Unit Four Subdivision ("SUBDIVISION"), and

WHEREAS, a tentative map of said tract was approved by the Planning Commission of the City of Modesto on October 19, 2015 with conditions of approval as noted in Planning Commission resolution Number 2015-26, and

WHEREAS, the Secretary of the Planning Commission and the City Engineer of the City of Modesto have certified that the final map of said tract substantially conforms to the approved tentative map, and

WHEREAS, the project is currently under construction and the public improvements have not been completed, and

WHEREAS, as required by Section 4-4.605 of the Modesto Municipal Code, the SUBDIVIDER has executed a Subdivision Agreement, and

WHEREAS, the City Engineer of the City of Modesto has certified that the final map of said SUBDIVISION meets all of the provisions of the California Subdivision Map Act and the provisions of the Modesto Municipal Code relating to subdivisions, and the City Surveyor has determined that the map is technically correct, and

WHEREAS, the Subdivider has furnished securities, as set forth in Section 4-4.605 of the Modesto Municipal Code, which shall secure the obligations set forth in Section 66499.3 of the Government Code of the State of California. Said securities are in forms acceptable to the City Attorney and in the amounts required by the City Engineer.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that said Final Map be approved; that the dedications for public streets and easements as shown thereon within the boundaries of said tract be accepted on behalf of the public for public use; and approve the subdivision agreement.

BE IT FURTHER RESOLVED, that the City Manager or his designee, is hereby authorized to execute the Subdivision Agreement, in a form approved by the City Attorney.

BE IT FURTHER RESOLVED that the City Clerk be authorized to certify the map of said tract on behalf of the City of Modesto after the fees required by the Modesto Municipal Code in amounts determined by the City Engineer have been paid.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-171

RESOLUTION ACCEPTING THE PUBLIC IMPROVEMENTS OF OAKDALE ROAD AND SYLVAN AVENUE AS COMPLETE, RELEASE SECURITIES UPON EXPIRATION OF STATUTORY PERIODS, AND INITIATE REIMBURSEMENT FOR IMPROVEMENTS AS OUTLINED IN THE ACQUISITION AND SHORTFALL AGREEMENT

WHEREAS, in January 2008, by Resolution No. 2008-024 the City adopted the Policies and Procedures for the Formation, Annexation, and Administration of Community Facilities Districts Created Pursuant to the Provisions of the Mello-Roos Community Facilities Act of 1982, and

WHEREAS, the policy allows developers to install public improvements which benefit properties within a proposed CFD, and be reimbursed for the work if certain parameters are met, and

WHEREAS, on April 6, 2004, the City formed City of Modesto Community Facilities District No. 2004-1 (CFD No. 2004-1) to pay for various infrastructure improvements as well as the maintenance of parks, parkways and open space, storm drainage basin and related facilities that serve the Village One area, and

WHEREAS, a developer may construct identified improvements for CFD No. 2004-1 and be reimbursed, provided an agreement for such improvements is entered into with the City and CFD No. 2004-1 prior to commencement of the work, and

WHEREAS, Berberian Holdings, L.P. (Applicant) submitted an application to develop an 18-acre neighborhood shopping center, more commonly known as The Marketplace, at the southwest corner of Sylvan Avenue and Oakdale Road, and

WHEREAS, on August 8, 2017, by Resolution 2017-311, the Council approved an Acquisition and Shortfall Agreement with Applicant. Under the terms of the

Acquisition & Shortfall Agreement, the Applicant will be reimbursed for the public capital improvements they make on behalf of the City, and

WHEREAS, the improvements have been completed to the satisfaction of the Director of Utilities, who certifies that the work has been satisfactorily completed, and all fees have been paid, and

WHEREAS, the developer has provided to the City evidence that all of the costs for constructing the improvements have been fully paid, and acceptable to the City Engineer, and

WHEREAS, pursuant to the terms of the Acquisition and Shortfall Agreement, Applicant will be reimbursed for the public improvements it constructs that are eligible for reimbursement. Reimbursement will be based upon actual expenses and have been verified to total $2,635,322, and

WHEREAS, the developer has submitted required documentation and payment of costs including unconditional lien releases, proof of prevailing wage, an executed grant dee dedicating public land to the City, and a warranty securities control account.

NOW, THEREFORE, BE IT RESOLVED the City Clerk is authorized to file the Notice of Completion with County Recorder, release the Faithful Performance Security immediately after filing the Notice of Completion, and release Payment Security sixty days after filing the Notice of Completion, and release the Warranty Security one year and one day after acceptance, and that the Council of the City of Modesto hereby accepts the public improvements of Oakdale Road and Sylvan Avenue as complete, releases the securities upon expiration of statutory periods, and initiates reimbursement for improvements as outlined in the Acquisition and Shortfall Agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-172

RESOLUTION VACATING AND DISPOSING OF TEMPORARY STORM DRAIN EASEMENT LOCATED BETWEEN OAKDALE ROAD AND HASHEM DRIVE

WHEREAS, the City owns a ten foot (10') wide temporary storm drain easement (the "Temporary Easement") located between Oakdale Road and Hashem Drive in the City of Modesto, as further described and depicted in **Exhibit A, attached** hereto in incorporated herein, and

WHEREAS, the Owner of the Property has agreed to grant the City a new public utility easement for storm drain purposes in a new location (the "New Easement"), and the location of the New Easement is more beneficial for the City than the location of the Temporary Easement, and

WHEREAS, upon recordation of the New Easement, the Temporary Easement will no longer be necessary and will be superseded by relocation, and

WHEREAS, the City Council has determined that the Temporary Easement is unnecessary for present or prospective public use, and

WHEREAS, vacation of the Temporary Easement is in the best interests of the City of Modesto, and

WHEREAS, pursuant to the provisions of Section 8330 *et seq*., of the Streets and Highways Code, the City Council desires to summarily vacate the Temporary Easement.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto as follows:

1. Findings and Determinations

The City Council hereby finds and determines that the above recitals are true and correct and have served as the basis, in part, for the findings and actions of the City set forth below.

2. No present or prospective public use

Upon the recordation of the New Easement, the Temporary Easement described and depicted in **Exhibit A, attached** hereto and incorporated herein, will be unnecessary for present or prospective public use and will be superseded by relocation.

3. Vacation of Easement

Pursuant to Chapter 4 of Part 3 of Division 9 of the California Streets and Highways Code, the Temporary Easement is hereby summarily vacated and abandoned. From and after the date this resolution is recorded, the Temporary Easement shall no longer constitute a public service easement.

4. Notification

All entities having any right, title, or interest in the Temporary Easement, if any, have been notified of this action.

5. Certification and Recordation of Resolution

After the New Easement has been recorded, the City Clerk is hereby directed to record a certified copy of this Resolution in the office of the Stanislaus County Recorder pursuant to Streets and Highways Code section 8335.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

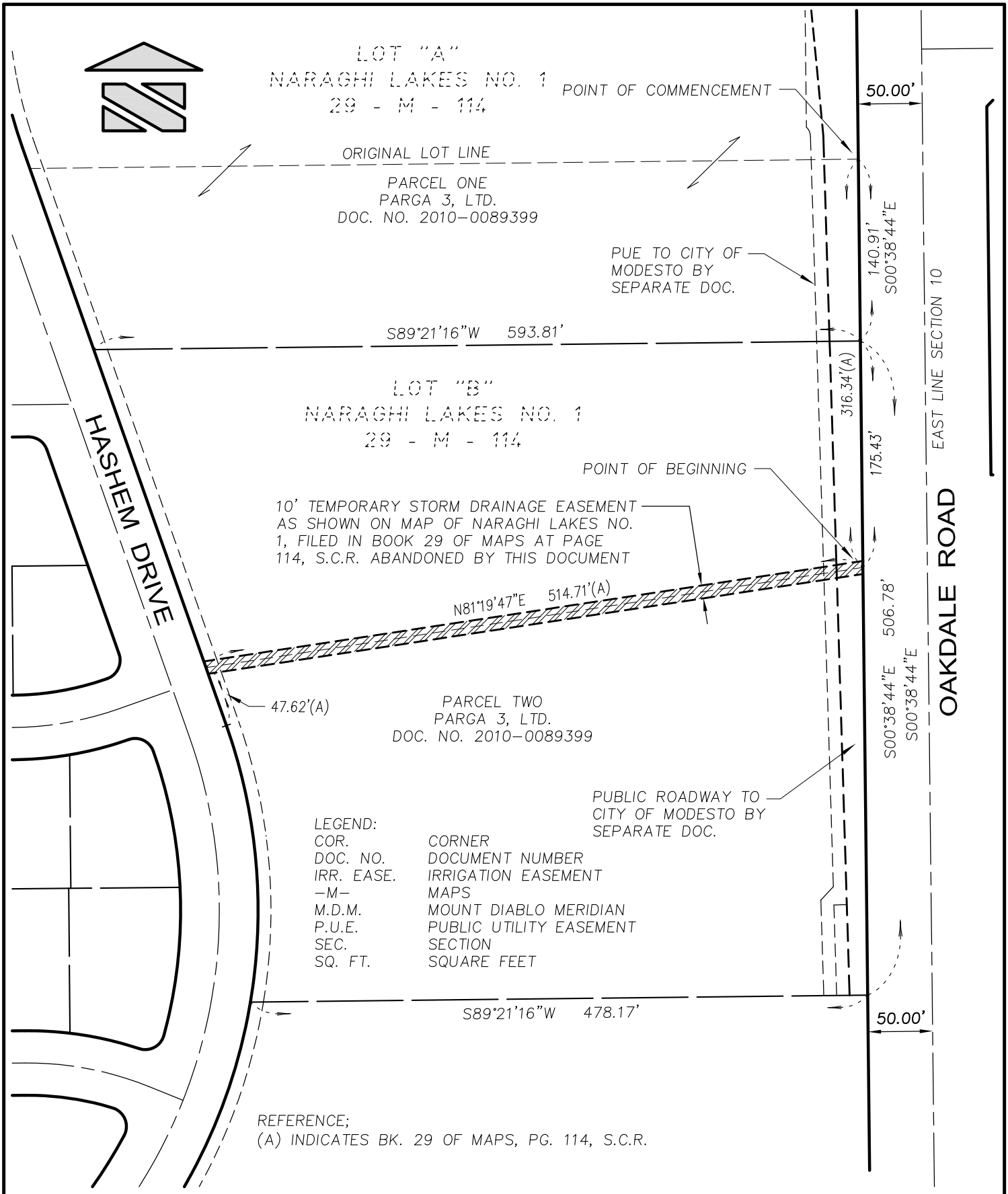
EXHIBIT "A"
LEGAL DESCRIPTION
ABANDONMENT OF 10' TEMPORARY STORM DRAINAGE EASEMENT

ALL that certain piece or parcel of land situate in the City of Modesto, County of Stanislaus, State of California, lying within the Southeast quarter of Section 10, Township 3 South, Range 9 East, Mount Diablo Meridian, described as follows:

ALL of that certain 10.00 foot wide temporary storm drainage easement lying within Lot "B" as illustrated on that certain map entitled "NARAGHI LAKES NO. 1" filed in the Office of the Recorder of the County of Stanislaus on September 16, 1981 in Book 29 of Maps at Page 114 and lying within that portion of Parcel Two, as conveyed to Parga 3 Ltd., a California Limited Partnership by Corporation Grant Deed filed in the Office of the Recorder of the County of Stanislaus on October 5, 2010 as Document number 2010-0089399, the center line of said easement to be abandoned being more particularly described as follows:

COMMENCING at the east corner common to Lots "A" and "B" as shown on that map entitled "NARAGHI LAKES NO. 1" filed in the Office of the Recorder of the County of Stanislaus on September 16, 1981 in Book 29 of Maps at Page 114, said corner lying on the current West right of way line of Oakdale Road and being 50.00 feet west of and measured perpendicular to the East line of said Section 10 and being a point on the East line of said Parga 3, Ltd. Parcel One; thence South 00°38'44" East along said west right of way line and last said east line of Parcel One, a distance of 140.91 feet to the East corner common to said Parga 3 Ltd. Parcel's One and Two; thence continuing South 00°38'44" East along said west right of way line of Oakdale Road and east line of Parga 3, Ltd. Parcel Two, a distance of 175.43 feet to a point on the center line of said 10.00 foot wide temporary storm drainage easement and being the POINT OF BEGINNING of this easement abandonment description; thence South 81°19'47" West along the center line of said 10.00 foot wide temporary storm drainage easement, a distance of 514.71 feet more or less to a point on the easterly right of way line of Hashem Drive as same is illustrated on said map of "NARAGHI LAKES NO. 1" and being the terminating point of this center line easement abandonment description.

Dave Skidmore, P.L.S. 7126
02/04/20



DRAWN:	DLS
DATE:	02/04/20
SCALE:	1"=100'
JOB #:	778B-16
DWG:	XB_SD(aban)

EXHIBIT "B"

ABANDONMENT OF TEMPORARY EASEMENT FOR STORM DRAINAGE PURPOSES

BEING A PORTION OF THE SE. 1/4 OF SECTION 10, T. 3 S., R. 9 E., M.D.M. MODESTO CALIFORNIA

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE: (209) 545-3390 FAX: (209) 545-3875 www.assoceng.com

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-173

RESOLUTION ACCEPTING THE FISCAL YEAR 2020-21 ENGINEER'S ANNUAL REPORT FOR THE SHACKELFORD LANDSCAPE AND LIGHTING DISTRICT; NOTICE OF INTENTION TO LEVY AND COLLECT ASSESSMENTS FOR THE SHACKELFORD LANDSCAPE AND LIGHTING DISTRICT; AND SETTING A PUBLIC HEARING ON THE PROPOSED ASSESSMENTS TO BE HELD ON JUNE 23, 2020 TO CONSIDER THE 2020-21 LEVY AND COLLECTION OF ASSESSMENTS WITHIN SHACKELFORD LANDSCAPE AND LIGHTING DISTRICT

WHEREAS, on June 29, 1999, the County of Stanislaus ("County") formed the Shackelford Landscape and Lighting District ("Shackelford LLD") for the purpose of administering the maintenance of seventy-seven (77) 200-watt high-pressure sodium streetlights, and

WHEREAS, the Shackelford LLD was formed in accordance with the Landscaping and Lighting Act of 1972 (Streets and Highways Code Sections 22500 through 22679), and

WHEREAS, the Shackelford LLD is comprised of approximately 153 acres, includes 494 lots with both residential and commercial development, and is bounded by Crows Landing on the west, E. Hatch Road on the south, Union Pacific Railroad on the east, and State Route 99 on the north, and

WHEREAS, on February 22, 2012, the Stanislaus County Local Agency Formation Commission ("LAFCO") approved the annexation of the Shackelford Area to the City of Modesto ("City"), and

WHEREAS, on April 24, 2012, the City Council approved the Shackelford Landscape and Lighting District Transfer Agreement between the County and City, and

WHEREAS, the City assumed full responsibility and administration of the Shackelford LLD on July 1, 2012, and

WHEREAS, Section 22623 of the California Streets and Highways Code requires the City Engineer, the person designated by this Council as Engineer of Work for the Shackelford LLD, to prepare and file an annual report, and

WHEREAS, the Engineer of Work has prepared and filed said annual report with the City Clerk, and

WHEREAS, California Streets and Highways Code Section 22623 requires the legislative body (the City Council) to adopt a resolution of intention which shall include the following:

a. Declaration of intention of the legislative body (the City Council) to levy and collect assessments within the Shackelford LLD for the fiscal year stated in the annual report.

b. General description of the existing improvements and proposed improvements and any substantial changes proposed to be made in the existing improvements.

c. Reference to the assessment district by its distinctive designation and indication of the general location of the Shackelford LLD.

d. Reference to said annual report, on file with the City Clerk, for a full and detailed description of the improvements, the boundaries of the Shackelford LLD and any zones therein, and the proposed assessments upon assessable lots and parcels of land within the Shackelford LLD.

e. Notice of the time, as fixed by the California Streets and Highways Code Section 22625, and the place for hearing by the legislative body (the City Council) on the levy of the proposed assessment.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the Fiscal Year 2020-21 Engineer's Annual Report for the Shackelford Landscape and Lighting District.

BE IT FURTHER RESOLVED that the City Council hereby finds the following:

1. The City Council intends to levy and collect assessments within the Shackelford LLD during the fiscal year 2020-21.

2. There are no proposed new improvements or any substantial changes in the existing improvements in the Shackelford LLD and the existing improvements to be made in the Shackelford LLD are generally described as follows:

The City shall provide maintenance, operation and servicing, in perpetuity, of streetlights and all improvements required for such maintenance including, but not limited to:

a. Payment to local utility company for monthly power costs of energizing street lights in the Shackelford LLD.

b. Payment to local utility company for maintenance of street lights in the Shackelford LLD that the utility company owns (usually those lights that are mounted on wooden poles).

c. Maintenance provided by the City of Modesto for street lights in the Shackelford LLD that are owned by the City of Modesto (usually those lights that are mounted on steel poles).

3. The Shackelford LLD is located in the County of Stanislaus, within the City Limits of the City of Modesto and is more specifically located North of Hatch Road, South of State Highway 99, and East of Crows Landing Road.

4. Said annual report filed with the City Clerk and approved by the Council by motion does provide a full and detailed description of the improvements, the boundaries of the Shackelford LLD and any zones therein, and the proposed assessments upon assessable lots and parcels of land within the Shackelford LLD.

5. On Tuesday, the 23rd day of June, 2020, at the hour of 5:30 p.m., the City Council will conduct a public hearing on the questions of the levy of the proposed annual assessment. The hearing will be held at the meeting place of the City Council located in the Tenth Street Place Chambers located at 1010 10th Street, Modesto, California.

6. The City Clerk is authorized and directed to give the notice of hearing required by the Landscape and Lighting Act of 1972.

The levy and collection of assessments as set forth in this resolution are exempt from the procedural and substantive requirements of Proposition 218 pursuant to Article XIII, Section 5(a) of the California Constitution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-174

RESOLUTION ACCEPTING FISCAL YEAR 2020-21 ENGINEER'S ANNUAL REPORT FOR LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 1 FOR DRY CREEK MEADOWS SUBDIVISIONS NOS. 1 THROUGH 6; NOTICE OF INTENTION TO LEVY AND COLLECT ASSESSMENTS FOR LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 1 FOR DRY CREEK MEADOWS SUBDIVISIONS NOS. 1 – 6 AND SETTING A PUBLIC HEARING ON JUNE 23, 2020 TO CONSIDER THE FISCAL YEAR 2020-21 LEVY AND COLLECTION OF ASSESSMENTS WITHIN LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 1

WHEREAS, Resolution No. 88-935, adopted by the Council of the City of Modesto on December 13, 1988, initiated proceedings for the formation of Landscape Maintenance Assessment District No. 1 for the purpose of administering the maintenance of landscaping in the public right-of-way within the street medians and adjacent to the access control walls in Dry Creek Meadows Subdivisions Nos. 1-6, and

WHEREAS, said assessment district was formed in accordance with the Landscape and Lighting Act of 1972, (California Streets and Highways Code Sections 22500 through 22679), and

WHEREAS, Section 22623 of the California Streets and Highways Code requires the City Engineer, the person designated by this Council as Engineer of Work for Assessment District No. 1, to prepare and file an annual report, and

WHEREAS, the Engineer of Work, has prepared and filed said annual report with the City Clerk, and

WHEREAS, California Streets and Highways Code Section 22623 requires the legislative body (the City Council) to adopt a resolution of intention which shall include the following:

a. Declaration of intention of the legislative body (the City Council) to levy and collect assessments within the assessment district for the fiscal year stated in the annual report.

b. General description of the existing improvements and proposed improvements and any substantial changes proposed to be made in the existing improvements.

c. Reference to the assessment district by its distinctive designation and indication of the general location of the district.

d. Reference to said annual report, on file with the City Clerk, for a full and detailed description of the improvements, the boundaries of the assessment district and any zones therein, and the proposed assessments upon assessable lots and parcels of land within the district.

e. Notice of the time, as fixed by the California Streets and Highways Code Section 22625, and the place for hearing by the legislative body (the City Council) on the levy of the proposed assessment.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto hereby accepts the Fiscal Year 2020-2021 Engineer's Annual Report for Landscape Maintenance Assessment District No. 1 for Dry Creek Meadows Subdivisions Nos. 1 through 6, which is **attached** hereto and hereinafter incorporated by reference.

BE IT FURTHER RESOLVED that the City Council hereby finds as follows:

1. The City Council intends to levy and collect assessments within Landscape Maintenance Assessment District No. 1 during the fiscal year 2020-21.

2. There are no proposed new improvements or any substantial changes in existing improvements in Landscape Maintenance Assessment District No. 1 and that the existing improvements to be made in said assessment district are generally described as follows:

The City shall provide maintenance, in perpetuity, of landscaping and any and all improvements required for such maintenance including, but not limited to, landscape irrigation systems in the following locations:

a. Street medians in Creekwood Drive

b. Areas adjacent to the access control walls along Creekwood Drive

c. Areas adjacent to the access control walls along Claus Road

3. Landscape Maintenance Assessment District No. 1 is located in the County of Stanislaus, within the City Limits of the City of Modesto and is more specifically located on the west side of Claus Road, between Modesto Irrigation District Lateral No. 2 and State Route 132 (Yosemite Boulevard).

4. Said annual report filed with the City Clerk and approved by the Council does provide a full and detailed description of the improvements, the boundaries of the assessment district and any zones therein, and the proposed assessments upon assessable lots and parcels of land within Landscape Maintenance Assessment District No. 1.

5. On Tuesday, the 23rd day of June, 2020, at the hour of 5:30 p.m., the City Council will conduct a public hearing on the question of the levy of the proposed annual assessment. The hearing will be held at the meeting place of the City Council located in the Tenth Street Place Chambers located at 1010 10th Street, Modesto, California.

6. The City Clerk is authorized and directed to give the notice of hearing required by the Landscape and Lighting Act of 1972.

7. The levy and collection of assessments as set forth in this resolution are exempt from the procedural and substantive requirements of Proposition 218 pursuant to Article XIII, Section 5(a) of the California Constitution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-175

RESOLUTION ACCEPTING FISCAL YEAR 2020-21 ENGINEER'S ANNUAL REPORT FOR LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 2 FOR DRY CREEK MEADOWS SUBDIVISIONS NOS. 7-10, CREEKWOOD MEADOWS SUBDIVISION, AND YOSEMITE MEADOWS SUBDIVISION; NOTICE OF INTENTION TO LEVY AND COLLECT ASSESSMENTS FOR LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 2 FOR DRY CREEK MEADOWS SUBDIVISIONS NOS. 7-10, CREEKWOOD MEADOWS SUBDIVISION, AND YOSEMITE MEADOWS SUBDIVISION AND SETTING A PUBLIC HEARING ON JUNE 23, 2020 TO CONSIDER THE FISCAL YEAR 2020-21 LEVY AND COLLECTION OF ASSESSMENTS WITHIN LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 2

WHEREAS, Resolution No. 89-460, adopted by the Council of the City of Modesto on April 4, 1989, initiated proceedings for the formation of Landscape Maintenance Assessment District No. 2 for the purpose of administering the maintenance of landscaping in the public right of way within the street medians and adjacent to the access control walls in Dry Creek Meadows Subdivisions Nos. 7-10, Creekwood Meadows Subdivision and Yosemite Meadows Subdivision Units Nos. 1 and 2, and

WHEREAS, said assessment district was formed in accordance with the Landscaping and Lighting Act of 1972, (California Streets and Highways Code Sections 22500 through 22679), and

WHEREAS, Section 22623 of the California Streets and Highways Code requires the Community Development Manager, the person designated by the Council as Engineer of Work for Assessment District No. 2, to prepare and file an annual report, and

WHEREAS, the City Engineer, said Engineer of Work, has prepared and filed said annual report with the City Clerk, and

WHEREAS, California Streets and Highways Code Section 22623 requires the Council to adopt a resolution of intention which shall include the following:

a. Declaration of intention of the Council to levy and collect assessments within the assessment district for the fiscal year stated in said annual report.

b. General description of the existing improvements and proposed improvements and any substantial changes proposed to be made in the existing improvements.

c. Reference to the assessment district by its distinctive designation and indication of the general location of the district.

d. Reference to said annual report, on file with the City Clerk, for a full and detailed description of the improvements, the boundaries of the assessment district and any zones therein, and the proposed assessments upon assessable lots and parcels of land within the district.

e. Notice of the time, as fixed by California Streets and Highways Code Section 22625, and the place for hearing by the Council on the levy of the proposed assessment.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the Fiscal Year 2020-2021 Engineer's Annual Report for Landscape Maintenance Assessment District No. 2 for Dry Creek Meadows subdivisions Nos. 7-10, Creekwood Meadows subdivision and Yosemite subdivision.

BE IT FURTHER RESOLVED that the Council hereby finds as follows:

1. The City Council intends to levy and collect assessments within Landscape Maintenance Assessment District No. 2 during the fiscal year 2020-2021.

2. There are no proposed new improvements or any substantial changes in the existing improvements within the existing Landscape Maintenance Assessment District No. 2, and the existing improvements to be made in said assessment district are generally described as follows:

The City shall provide maintenance, in perpetuity, of landscaping and any and all improvements required for such maintenance including, but not limited to, landscape irrigation systems in the following locations:

a. Street medians in Creekwood Drive

b. Areas adjacent to the access control walls along Creekwood Drive

c. Areas adjacent to the access control walls along Claus Road

3. Landscape Maintenance Assessment District No. 2 is located in the County of Stanislaus, within the City limits of the City of Modesto, and is more specifically located on the northeast corner of Yosemite Boulevard and North McClure Road. District 2 is bounded by Yosemite Boulevard on the south, North McClure Road on the west, Yosemite Meadows Drive on the east, and Mechalys Way on the north.

4. Said annual report filed with the City Clerk and approved by the Council does provide a full and detailed description of the improvements, the boundaries of the assessment district and any zones therein, and the proposed assessments upon assessable lots and parcels of land within Landscape Maintenance Assessment District No. 2.

5. On Tuesday, the 23rd day of June, 2020, at the hour of 5:30 p.m., the City Council will conduct a public hearing on the question of the levy of the proposed annual assessment. The hearing will be held at the meeting place of the City Council located in the Tenth Street Place Chambers located at 1010 10th Street, Modesto, California.

6. The City Clerk is authorized and directed to give the notice of hearing required by the Landscaping and Lighting Act of 1972.

7. The levy and collection of assessments as set forth in this resolution shall follow the procedural and substantive requirements of Proposition 218 pursuant to Article 13D, Section 5(a) of the California Constitution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-176

RESOLUTION APPROVING A SECOND AMENDMENT EXTENDING THE TERMINATION DATE WITH OCCU-MED LTD, FRESNO, CA, FOR THE FURNISHING OF OCCUPATIONAL MEDICINE SERVICES THROUGH DECEMBER 31, 2020, AND INCREASING THE AGREEMENT AMOUNT BY $50,000 FOR A TOTAL AMOUNT NOT TO EXCEED $1,017,220 OVER THE TERM OF THE AGREEMENT, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS, on May 15, 2015, by Resolution No. 2015-145, Council approved the award of proposal and contract for the furnishing of occupational medicine services for the Human Resources Department to Occu-Med Ltd., Fresno, CA, for a two (2) year agreement with three (3) one-year extension options at the sole discretion of the City, for an estimated annual cost of $115,444, and over five (5) years of $577,220 with a scheduled termination date of May 11, 2020 based on the City exercising the remaining options for extension, and

WHEREAS, on March 5, 2019, by Resolution 2019-105, Council approved a First Amendment to the agreement increasing the total agreement amount by $390,000 from $577,220 to $967,220, and

WHEREAS, the current agreement is reaching its approved term expiration and the City recognizes the need to renew a full Request for Proposals (RFP) for occupational medicine services to establish a program that meets the needs of all departments based on state and federal regulations and best practice, and

WHEREAS, this amendment will authorize the necessary time and funds to continue to provide occupational medicine services without interruption until proposal and selection process is closed and completed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a second amendment to the agreement with Occu-Med Ltd., to continue providing occupational medicine services to the City through December 31, 2020 and to increase the total agreement amount by $50,000 to an amount not to exceed $1,017,220.

BE IT FURTHER RESOLVED that the City Manager, or designee, is hereby authorized to execute the amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting ~~City Attorney~~

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-177

RESOLUTION ACCEPTING THE 2017 EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT IN THE AMOUNT OF $136,528 FOR THE PURCHASE OF ADDITIONAL LICENSE PLATE READERS AND ASSOCIATED SOFTWARE; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE NECESSARY DOCUMENTS

WHEREAS, the Police Department was awarded a grant in partnership with the Stanislaus County Sheriff' department in the sum of $136,528 from the Department of Justice for the purchase of additional License Plate Readers and the associated software; and

WHEREAS, the Modesto Police Department has sought to reduce the number of crimes and vehicle thefts by implementing an effective License Plate Readers program with modern crime fighting technology; and

WHEREAS, acceptance of said $136,528 grant will assist the department in best utilizing License Plate Readers technology as part of its commitment to intelligence-led policing; and

WHEREAS, the term of this grant will be through September 30, 2020.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the 2017 Edward Byrne Justice Assistant Grant in the amount of $136,528 from the Department of Justice to purchase additional License Plate Readers and the associated software.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the necessary award documents.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-178

RESOLUTION AMENDING THE FISCAL YEAR 19-20 MULTI-YEAR PROJECT BUDGET TO APPROPRIATE REVENUE AND EXPENSES IN THE AMOUNT OF $136,528 RELATED TO THE 2017 EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT FOR THE PURCHASE OF ADDITIONAL LICENSE PLATE READERS AND ASSOCIATED SOFTWARE; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, the Police Department acquired a grant award in the amount of $136,528 from the Department of Justice for the purchase of additional License Plate Readers and associated software, and

WHEREAS, there is no local match required for this grant, and

WHEREAS, certain budgetary adjustments are necessary to account for the programing of revenues and offsetting expenses.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Multi-Year Project Budget by $136,528 to the revenue and expense budget of the 2017 BJAG Project, 101253.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Madrigal
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-179

RESOLUTION APPROVING THE IMPLEMENTATION OF A NEW MODESTO AREA EXPRESS COMMUTER ROUTE TO STOCKTON, CA, AND RESCINDING RESOLUTION 2019-215 TO OPERATE A ROUTE BETWEEN MODESTO AND SACRAMENTO

WHEREAS, the San Joaquin Joint Powers Authority started an early morning Amtrak service that was scheduled to get people to Stockton and Sacramento by 8:00am which stopped operating, and

WHEREAS, on May 7, 2019, by Resolution 2019-215, Council authorized the implementation of a new commuter route to Sacramento, and

WHEREAS, the route was never started due to delays in getting agreements with the City of Stockton and Manteca, and

WHEREAS, in the planning discussions with the San Joaquin Regional Transit District (SJRTD), it would be better to implement a route between Modesto and Stockton, and connect people to the existing service operated by SJRTD between Stockton and Sacramento, and

WHEREAS, it is proposed to start a new route to Manteca and Stockton using a Modesto Area Express (MAX) commuter bus, and

WHEREAS, MAX has received some inquiries to operate a route that provides service between Modesto, Manteca and Stockton to replace the service being stopped by Amtrak.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the implementation of a new Modesto Area Express commuter route to Stockton, CA.

BE IT FURTHER RESOLVED, that Resolution 2019-215 to operate a route between Modesto and Sacramento is rescinded.

BE IT FURTHER RESOLVED, that the Modesto Area Express fares are updated to reflect new fares for the new commuter route as shown on **Exhibit A.**

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO AREA EXPRESS **Urban Service**	**Fare**
Cash Fare (one trip)	
Regular	$2.00
Student	$1.50
Half Fare (Senior/Disabled/Medicare/Veterans/Youth)	$1.00
1 Day Pass (unlimited trips)	
Day Pass (unlimited trips)	$4.00
Half Fare Day Pass (Senior/Disabled/Medicare/Veterans/Youth)	$2.00
7 Day Pass (unlimited trips)	
Day Pass (unlimited trips)	$15.00
Half Fare 7 Day Pass (Senior/Disabled/Medicare/Veterans/Youth)	$7.50
Student Field Trip	
Student Field Trip - One Trip	$0.50
Student Field Trip - Day Pass	$1.00
31 Day Pass (unlimited trips)	
Regular Pass	$58.00
Student Pass	$48.00
Half Fare 31 Day Pass (Senior/Disabled/Medicare/Veterans/Youth)	$29.00
Ticket Book (50 Tickets)	
Regular	$100.00
Student	$75.00
Half Fare (Senior/Disabled/Medicare/Veterans/Youth)	$50.00
BART Express Commuter Service	
31 Day Pass	$175.00
7 Day Pass	$50.00
One-Way	$14.00
Round-Trip	$16.00
20 Trip Ticket	$160.00
ACE Express Commuter Service	
Single Trip (No change proposed)	$3.00
20 Ride Ticket	$42.00
Stockton Express Commuter Service	
31 Day Passes	$100.00
7 Day Passes	$25.00
One-Way	$5.00
Round-Trip	$7.00
20 Trip Ticket	$70.00
MODESTO AREA DIAL-A-RIDE	
Cash	$3.00
Ticket Book (10 Tickets)	$30.00

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-180

RESOLUTION APPROVING A LIST OF PROJECTS TO BE FUNDED WITH ROAD REPAIR AND ACCOUNTABILITY ACT TAX PROCEEDS IN FISCAL YEAR 2020-21

WHEREAS, Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017 (Chapter 5, Statues of 2017) was passed by the Legislation and Signed into law by the Governor in April 2017 to address the significant multi-modal transportation funding shortfalls statewide, and

WHEREAS, SB 1 includes accountability and transparency provisions that will ensure the residents of our City are aware of the projects proposed for funding in our community and which projects have been completed each fiscal year, and

WHEREAS, the City must adopt by resolution a list of projects proposed to receive fiscal year funding from the Road Maintenance and Rehabilitation Account (RMRA), created by SB 1, which must include description and the location of each proposed project, a proposed schedule for projects completion, and the estimated useful life of the improvement, and

WHEREAS, the City will receive an estimated $4,064,467 in RMRA funding in Fiscal Year 2020-21 from SB 1, and

WHEREAS, this is the fourth year in which the City is receiving SB 1 funding and will enable the City to continue essential road maintenance and rehabilitation projects, safety improvements, and increasing access and mobility options for traveling public that would not have otherwise been possible without SB 1 funding, and

WHEREAS, the City has conducted a robust public process to ensure public input, Community outreach meetings and calls received from citizens regarding

THIS RESOLUTION WAS RESCINDED BY MODESTO CITY COUNCIL RESOLUTION NO. 2020-249 ON JUNE 02, 2020

conditions of streets in their neighborhoods were considered in evaluating and developing a list for improvements, and

WHEREAS, the City used a Pavement Management System to develop the SB 1 project list to ensure revenues are being used on the high priority and cost effective projects that also meet the community's priorities for the transportation investment, and

WHEREAS, the funding from SB 1 will help the City maintain and rehabilitate streets that have been targeted for improvements and add active transportation infrastructure throughout the City this year and similar projects into the future. The city's Slurry Seal Program will preserve and increase street life by five to seven years ensuring smoother and safer pavement conditions for vehicle travel, and

WHEREAS, the 2018 California Statewide Local Streets and Roads Needs Assessment found that the City's streets are in fair/good condition and this revenue will help us increase the overall quality of our street and road system and over the next decade will bring our streets into an excellent/good condition, and

WHEREAS, the SB 1 project list and overall investment in our local streets and road infrastructure with a focus on basic maintenance and safety, investing in complete streets infrastructure and using cutting-edge technology, materials and practices, will have significant positive co-benefits statewide.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto, that it hereby adopts the list of projects in **Attachment A** for Fiscal Year 2020-21 and funding by SB1: Road Repair and Accountability Act of 2017.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

Attachment A – FY 2020-21 SB1 Project List

Project Type	FY 2020-21 Project Name	Total Project Cost	Estimated Project Start Date	Estimated Project Completion Date	Community Benefit Summary
Slurry Seal	Slurry Seal	$1,200,044	May 1, 2020	Sept. 30, 2020	Increase Street life by five to seven years
Crack Seal	Crack Seal	$271,810	Oct.1, 2020	May 1, 2021	Preparation for slurry seal product
Asphalt Repairs (Dig Outs)	Asphalt Repairs	$200,000	Oct.1, 2020	May 1, 2021	Preparation for slurry seal product
Traffic Signal & Street Lighting Maintenance	Traffic Signal & Street Lighting Maintenance	$598,690	July 1, 2020	June 30, 2021	LED lighting has ten-year life and is energy efficient
High Voltage Street Light Maintenance	High Voltage Street Light Maintenance	$400,000	July 1, 2020	June 30, 2021	Required for LED fixture, ten-year life
Upgrade Video Detection	Upgrade Video Detection	$1,000,000	July 1, 2020	June 30, 2021	Public Safety, Install new video detection equipment. Ten-year life
Traffic Sign Printer	Traffic sign printer	$40,000	July 1, 2020	June 30, 2021	Public safety, produce improved visible sign in-house. Five-year life
Traffic Sign & Striping Maintenance	Traffic Sign & Striping Maintenance	$554,190	July 1, 2020	June 30, 2021	Two to five-year life for striping and five-year life for signs
	Total FY 20/21	$4,264,734			

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-181

RESOLUTION APPROVING AN AGREEMENT WITH THE HACH COMPANY BY UTILIZING THE COMPETITIVE BID PROCESS WITH THE CITY OF TURLOCK, CA, FOR A WATER INFORMATION MANAGEMENT SOLUTION, FOR A TOTAL AMOUNT NOT TO EXCEED $53,514 AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, the Wastewater Services Division treats an average of 20-million gallons of sewage per day in compliance with permits issued by the State of California Central Valley Regional Water Quality Control Board (CVRWQCB). To maintain compliance with these permits, the City has to 1) maintain accurate records of water quality data collected by the Supervisory Control and Data Acquisition (SCADA) system and 2) generate reports to be submitted to the CVRWQCB for review on a monthly, quarterly and annual basis, and

WHEREAS, currently, the City utilizes a combination of the SCADA system and field operators to collect permit-required field data and the LabWorks Laboratory Management System for aggregation of results of permit-required water quality tests; this data is compiled manually from the various isolated databases or field sheets to then be submitted to the CVRWQCB, and

WHEREAS, the Wastewater Services Division is currently limited in its access to reliable performance reports because of a large data-footprint and data is stored in multiple databases, manually generated spreadsheets, hand-written forms and logs or is not being collected due to the inability to centralize the data to create useable, comprehensible performance reports, and

WHEREAS, staff requires access to multiple databases, sources and methods of data collection to provide a data-oriented decision-making process for plant process control, budgeting and planning, and

WHEREAS, the Wastewater Division worked with the Information Technology Department to determine the program best suited to the Wastewater Division's needs and the Hach Water Information Management Solution (WIMS) product was determined to be the best software to meet the City's needs and is designed to integrate water or wastewater treatment facilities databases, and allow for instant and easy report generation, and

WHEREAS, this data management software will allow the user access to multiple databases and provide a mechanism for cross-referencing data and using Hach WIMS software will allow the City to save labor hours and prevent inevitable human errors that can occur during manual data aggregation, and

WHEREAS, the software will allow for generation of proper performance reports and the combining of the facility's Operation's Log with site-specific dashboards and relevant plant performance metrics, which will assist the Operations and Maintenance staff by optimizing the facility's operation, and

WHEREAS, this software will become an integral part of planning, budgeting and day-to-day operations by providing complex data analytics to the staff in a simple, user-friendly format, and

WHEREAS, on April 17, 2019 the City of Turlock's – Purchasing Office issued Request for Proposal Bid No. 19-019 for a Data Management System; a notice of

solicitation was posted on the City of Turlock's website and advertised in the Turlock Journal, and

WHEREAS, on May 1, 2019 bids were formally opened at the City of Turlock Municipal Services Department Purchasing Office; two companies chose to respond, and

WHEREAS, Hach Company, Loveland, CO was the successful bidder based on being the lowest responsive and responsible bidder and awarded a one-year agreement from July 23, 2019 through June 22, 2020 with two additional one-year extension options, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid; however, exceptions to the formal bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in his or her discretion, determines that a process other than the formal bid procedure set for in Section 8-3.203 will result in procurement for the City at the lowest possible cost commensurate with the desired quality," and

WHEREAS, in addition, MMC 8-3.202(d) encourages the Purchasing Manager to join with the State of California and other units of government in cooperative purchasing plans when the best cost savings for the City's interest would be served; this exception is satisfied because the City of Turlock did complete a competitive process for a Data Management System.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an agreement with the Hach Company by utilizing the competitive bid process with the City of Turlock, CA, for a Water Information Management Solution, for a total amount not to exceed $53,514.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-182

RESOLUTION APPROVING AMENDMENT #2 TO THE CITY OF MODESTO PROGRAM YEAR 2019-2020 ANNUAL ACTION PLAN AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ANY RELATED DOCUMENTS AND/OR AGREEMENTS

WHEREAS, as a U.S. Department of Housing and Urban Development (HUD) entitlement community, the City of Modesto is required to develop a Substantial Amendment to the Annual Action Plan when it makes changes to its planned or actual activities funded with Community Development Block Grant (CDBG), HOME Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funds, and

WHEREAS, HUD requires the City of Modesto develop, in consultation with its citizens and community-based service providers, a funding strategy that furthers its housing and community development goals as described in the City's Five-Year Consolidated Plan for FY 2015-2020, and

WHEREAS, citizen participation is a key component of the Substantial Amendment to the Annual Action Plan process, and

WHEREAS, HUD regulations require the City provide ample opportunity and means for the populations served by the grants, as well as the general citizenry, to provide input on the goals and priorities and the specific type of activities to be funded in the City's Substantial Amendment to the Program Year 2019-2020 Annual Action Plan, and

WHEREAS, on March 19, 2020 the State of California issued an Order of the State Public Health Officer that ordered all individuals to stay at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure

sectors and on March 19, 2020, the City Council adopted the proclamation of existence of a local emergency in response to the Coronavirus creating a hardship on local industries, and

WHEREAS, to assist with the threat to our local economy, the City is amending the Program Year 2019-2020 Annual Action, and

WHEREAS, the purpose of this second amendment is to create an Economic Development program to assist local business in the retention and creation of full-time equivalent jobs for low to moderate income persons. Assistance will be provided in the form of a forgivable loan. This program is being created in direct response to the COVID-19 pandemic that is putting a strain on the local economy, and

WHEREAS, in order to fund the development of this program, the City will be converting $300,000 in NSP program income to CDBG funds and as a result of this emergent need within the community, the following modifications are proposed as part of Amendment #2, and

WHEREAS, in compliance with the HUD approved waiver for the Citizen Participation Plan requirements, a 5-day public period to review and comment on the draft amendment opened April 9, 2020 and will close with a public hearing at the City Council meeting on April 14, 2020 and citizen participation was conducted completely online and Plan is available on the City of Modesto Website.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves Amendment #2 to City of Modesto Program Year 2019-2020 Annual Action Plan, a copy of which in on file with the City Clerk.

BE IT FURTHER RESOLVED that the City Manager or his designee his hereby authorized to execute any documents and/or agreements necessary to carry out the intent of this Resolution in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-183

RESOLUTION APPROVING THE CDBG SMALL BUSINESS ASSISTANCE PROGRAM AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ANY RELATED DOCUMENTS AND/OR AGREEMENTS

WHEREAS, on March 19, 2020 the State of California issued an Order of the State Public Health Officer that ordered all individuals to stay at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors and on March 19, 2020, the City Council adopted the proclamation of existence of a local emergency in response to the Coronavirus creating a hardship on local industries, and

WHEREAS, to assist with the threat to our local economy, the city developed a CDBG Small Business Assistance Program is designed to stimulate economic growth and help sustain employment within the City of Modesto, and

WHEREAS, the Economic Development program will assist local business in the retention and creation of full-time equivalent jobs for low to moderate income persons. Assistance will be provided in the form of a forgivable loan. This program is being created in direct response to the COVID-19 pandemic that is putting a strain on the local economy, and

WHEREAS, businesses receiving these funds will in turn be required to create new jobs, retain existing jobs, benefit a residential neighborhood, or assist a business where 51 percent of its clients are considered low- to moderate-income, and

WHEREAS, through the underwriting of this program City staff will review proposals and determine the type of assistance based on the applicant's project proposal.

Proposals will be assessed in accordance with 24 CFR § 570.209- Guidelines for evaluating and selecting economic development projects, and

WHEREAS, Businesses receiving this type of assistance will be required to meet a national objective as described in 24 CFR Part 570.208; the national objective will determine the goal outcome the business will be responsible to complete, and

WHEREAS, all assistance will start as a loan and will be converted to a forgivable loan if the terms and goals as listed in the loan agreement is fulfilled, and

WHEREAS, businesses that receive assistance must demonstrate the creation or retention of at least one (1) low- to moderate-income FTE job per $35,000 of CDBG funds used in order to qualify for loan forgiveness.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Modesto hereby approves the CDBG Small Business Assistance Program and the CDBG Small Business Assistance Program Regulations on file with the City Clerk.

BE IT FURTHER RESOLVED that the City Manager or his designee is authorized to execute any documents and/or agreements necessary to carry out the CDBG Small Business Assistance Program in such form as approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-184

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 OPERATING, TRANSFER AND MULTI-YEAR PROJECT BUDGETS TO RE-ALLOCATE COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS AS PROPOSED IN THE PROGRAM YEAR 2019-20 ANNUAL ACTION PLAN AMENDMENT NO. 2 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO TAKE THE NECESSARY STEPS TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, the City of Modesto receives annual entitlements from HUD based on its population size, number of households living below poverty level and number of sub-standard housing units, and

WHEREAS, on May 14, 2019, by Resolution 2019-240, City Council approved the Program Year 2019 Annual Action Plan, and

WHEREAS, on September 10, 2019, by Resolution 2019-404, City Council approved the Program Year 2019 Annual Action Plan Amendment No. 1, and

WHEREAS, certain budgetary transactions are necessary to reallocate funds during the course of the Consolidated Plan cycle when there is a change in allocation priorities, or method of distribution, carrying out new activities with CPD funds, change in purpose, scope, location or beneficiaries of an activity, and

WHEREAS, the Fiscal year 2019-20 operating, transfer, and multi-year budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein to reflect an approved reallocation of funds as set forth in the Integrated Disbursement and Information System (IDIS) reporting system.

NOW, THEREFORE, BE IT RESOLVED, that the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-20 Budget as shown in **Exhibit A attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provision of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

Amendment #2 Program Year 2019 Annual Action Plan						
Project / Account	**Task**	**IDIS Activity**	**Adjustment**	**Funding Source**	**PY**	**Description**
101256	Professional Services	1359	$250,000	CDBG PI	NSP 2	Small Business Assistance Program
101256	Services City Forces - Interfund	1359	$50,000	CDBG PI	NSP 2	Small Business Assistance Program
1130-14998-61101-101256			$300,000	CDBG PI	NSP 2	Budget Transfer of NSP Program Income to CDBG Fund to fund Project
1101-71101-71130			$300,000	CDBG PI	NSP 2	Transfer of NSP Program Income to CDBG Fund to fund Project

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-185

RESOLUTION APPROVING THE COVID-19 SMALL BUSINESS ASSISTANCE PROGRAM TO SUPPORT MODESTO'S SMALL BUSINESS COMMUNITY TO HELP THEM RETAIN EMPLOYEES AND REDUCE BUSINESS CLOSURES IN THE WAKE OF THE COVID-19 PANDEMIC AND REALLOCATING FUND FOR THIS PURPOSE

WHEREAS, on March 4, 2020, Governor Gavin Newsom proclaimed a State of Emergency to exist in California as a result of the threat of the COVID-19 virus; and

WHEREAS, on March 11, 2020, the Stanislaus County Public Health Officer declared a local health emergency, and

WHEREAS, on March 12, 2020, March 15, 2020 and March 16, 2020, Governor Gavin Newsom issued new executive orders further enhancing state and local government's ability to respond to COVID-19 Pandemic, and

WHEREAS, on March 13, 2020, the County of Stanislaus Director of Emergency Services proclaimed a Local Emergency due to the threat of COVID-19 in the County, and

WHEREAS, on March 13, 2020, the President of the United States, Donald Trump, declared a state of national emergency in response to the COVID-19 outbreak, and

WHEREAS, on March 13, 2020, the City Manager, in his capacity as Director of Emergency Services, proclaimed the existence of local emergency in the City of Modesto in response to COVID-19. The proclamation advising the community to remain in their homes and direct staff to explore potential resources to potentially minimize the financial impact to our citizens and businesses was ratified through Resolution 2020-140 by the City Council, and

WHEREAS, on March 19, 2020, the Governor issued Executive Order N-33-20, ordering all residents of the State of California to stay home or at their place of residence in accordance with the current State public health directives; and

WHEREAS, on March 31, Stanislaus County's Health Services Agency released the order directing all individuals living in the county to stay at home or place of residence except that they may leave to provide or receive certain essential services or engage in certain essential activities and work for essential businesses or governmental services; and

WHEREAS, in order to alleviate the economic impacts of the COVID-19 virus, the City seeks to implement the COVID-19 Small Business Assistance Program to encourage economic relief and stimulus, and reduce financial hardship for impacted businesses in the City, including a small business incentive fund, and

WHEREAS, the proposed COVID-19 Small Business Assistance program includes assistance to small business by deferring City fees, taxes and utility bills, reallocate Economic Development Incentive Program for Downtown funds and Community Development Block Grant funds to the Business Assistance Program, and coordinate with community partners to run multiple social media campaigns and other campaigns to encourage residents and others to support Modesto's small businesses during this time.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that if hereby approves the COVID-19 Small Business Assistance Program to support Modesto's small business community to help them retain employees and reduce business closures in the wake of the COVID-19 pandemic and reallocating funds for this purpose.

BE IT FURTHER RESOLVED, that as part of the COVID-19 Small Business Assistance Program City Manager or his designee is hereby authorized to:

1. Allow the deferral of business-related Mill Tax for businesses that have a quarterly gross receipt of up to $500,000 for up to 90 calendar days.
2. Allow the deferral of small business water and sewer bills for up to 90 calendar days.
3. Reallocate Economic Development Incentive Program for Downtown funds and Community Development Block Grant funds to the Business Assistance Program.

BE IT FURTHER RESOLVED, that said local emergency and Business Assistance Program shall be deemed as continuing to exist until proclaimed otherwise by the City Manager/Director of Emergency Services and the City Council.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-186

RESOLUTION APPROVING AN AGREEMENT WITH THE CITY OF CERES TO OPERATE THE PUBLIC TRANSIT SERVICES IN CERES, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Ceres has requested that the City of Modesto operate transit services in Ceres as an extension of the Modesto Area Express system (MAX), and

WHEREAS, Ceres operates Ceres Area Transit (CAT) fixed route service and Ceres Area Dial-A-Ride (CDAR) demand-response service, and

WHEREAS, Modesto operates the MAX fixed-route and Modesto Area Dial-A-Ride (MADAR) paratransit demand response services that serve the Modesto urban area, and

WHEREAS, this agreement with the City of Ceres authorizes the City of Modesto to operate transit services in Ceres, and

WHEREAS, Ceres will provide their existing vehicles, bus stops and other bus stop assets to Modesto to use for the service, and

WHEREAS, all funding for this service would come from the Transportation Development Act (TDA), which include operations, maintenance and administrative functions.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves an agreement with the City of Ceres to operate the public transit services in Ceres.

NOW, THERE BE IT FURTHER RESOLVED, that the City Manager, or his designee, execute the agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-187

RESOLUTION APPROVING THE AGREEMENT WITH THE CITY OF ESCALON TO OPERATE THE ESCALON TRANSIT SYSTEM; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Escalon has requested that the City of Modesto operate their transit system, and

WHEREAS, the Escalon transit system is named "eTrans" and provides door-to-door dial-a-ride service within the City of Escalon, and

WHEREAS, it also provides deviated fixed route service between the Downtown Escalon Park and Ride Lot and Northwest Modesto, and

WHEREAS, Escalon understands that their city is better linked regionally to Modesto than Stockton, as the eTrans route operates to Modesto, and

WHEREAS, operating this system would not impact the farebox recovery requirements of Modesto, as the City of Escalon would retain the administrative functions and responsibility for the Transportation Development Act (TDA), and

WHEREAS, all funding for this service would come from Escalon, which include operations, maintenance and administrative functions.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the agreement with the City of Escalon to operate the Escalon Transit System.

THEREFORE, BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to execute the agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 14th day of April, 2020, by Councilmember Grewal, who moved its adoption, which motion being duly seconded by Councilmember Kenoyer, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-188

RESOLUTION ADOPTING THE 2020 STATE AND FEDERAL LEGISLATIVE PLATFORM, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO CARRY OUT THE NECESSARY STEPS TO HELP THE CITY ACHIEVE THE PRIORITIES IDENTIFIED IN THE PLATFORM

WHEREAS, the State and Federal Governments allocate several million dollars for cities for programs and support with policy adoption on an annual basis, and

WHEREAS, best practices show that cities and organizations alike need to proactively engage with legislature by taking positions, providing testimony, monitoring legislation, and employing strategic advocacy to receive favorable legislation or funding, and

WHEREAS, in light of increasing local obligations with issues such as COVID-19 (Coronavirus), homelessness, public pensions, housing development, and increasing expectations from residents, cities are actively seeking additional support from the State and Federal government to help meet these obligations, and

WHEREAS, the City intends to update the Legislative Platform to educate and inform the State and Federal Government of the legislative priorities for the City to help ensure the City is proactively tackling some of its most pressing issues.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby adopts the 2020 State and Federal Legislative Platform for the City of Modesto.

BE IT FURTHER RESOLVED, the City Manager, or his designee, is hereby authorized, to carry out the necessary steps to help the city achieve the priorities identified in the platform.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-189

RESOLUTION APPROVING THE AWARD OF PROPOSALS AND AGREEMENT FOR CONSULTANT SUPPORT WITH STATE ADVOCACY SERVICES TO TOWNSEND PUBLIC AFFAIRS FOR A TWO-YEAR AGREEMENT WITH ONE 1-YEAR EXTENSION FOR AN ANNUAL COST NOT TO EXCEED $60,000, AND FOR A TOTAL AGREEMENT AMOUNT NOT TO EXCEED $180,000, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the state government allocates several million dollars for cities for programs and support with policy adoption on an annual basis, and

WHEREAS, local government agencies rely on the expertise of state and federal government consultants to represent their respective government agencies in Sacramento and Washington DC, and

WHEREAS, best practices show that cities and organizations alike need to proactively engage with legislature by taking positions, providing testimony, monitoring legislation, and employing strategic advocacy to receive favorable legislation and funding, and

WHEREAS, state advocacy services provide support with identifying legislation and agency policies that may affect cities and reflect how the proposed policy or legislation may supplement or hinder the progress of initiatives or issues, and

WHEREAS, the City most recently had an agreement with Pillsbury, Winthrop, Shaw, Pittman, LLP for federal advocacy services through 2016, as approved by Resolution 2014-245, and

WHEREAS, in light of the increasing local demands on cities related to such challenges as COVID-19 (Coronavirus), homelessness, deferred maintenance of critical

infrastructure, emission standards, orders to reduce water usage, and others, the City is seeking to re-establish an agreement for state advocacy services, and

WHEREAS, the City Manager authorized the Purchasing Manager to issue formal Request for Proposals (RFP) for consultants to perform state advocacy services on behalf of the City, and

WHEREAS, on September 3, 2019, proposals were formally opened by the City Clerk's Office, and the City received 4 responsive and responsible proposals for this RFP, none of which were from local vendors, and

WHEREAS, scope of work will primarily include support for the City to secure additional funding and favorable legislation through the following methods:

- Identifying funding opportunities and providing support to the City in securing these funds;
- Providing support with creating a comprehensive legislative strategy that is designed to help City departments leverage support from the State and Federal governments;
- Providing detailed analysis of government activity on issues that affect the City, and offer recommendations for the City; and
- Arranging meetings and advising staff and Council through meetings with key legislators and government departments to help position the City for funding opportunities, favorable legislation, or support with defeating unfavorable legislation,

WHEREAS, based on the recommendations provided by an interdepartmental evaluation committee, the award of the RFP for state advocacy services is recommended to be awarded to Townsend Public Affairs, for an annual amount not to exceed $60,000, and

WHEREAS, the City intends to enter into a two-year agreement with one 1-year extension for total cost not-to-exceed $180,000.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of proposals and agreement for consultant support with state advocacy services to Townsend Public Affairs for two-year agreement with one 1-year extension for an annual cost not to exceed $60,000, and for a total agreement amount not to exceed $180,000.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-190

RESOLUTION APPROVING THE AWARD OF PROPOSALS AND AGREEMENT FOR CONSULTANT SUPPORT WITH FEDERAL ADVOCACY SERVICES TO VAN SCOYOC AND ASSOCIATES FOR A TWO-YEAR AGREEMENT WITH ONE 1-YEAR EXTENSION FOR AN ANNUAL COST NOT TO EXCEED $90,000, AND FOR A TOTAL AGREEMENT AMOUNT NOT TO EXCEED $270,000, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the federal government allocates several million dollars for cities for programs and support with policy adoption on an annual basis, and

WHEREAS, local government agencies rely on the expertise of state and federal government consultants to represent their respective government agencies in Sacramento and Washington DC, and

WHEREAS, best practices show that cities and organizations alike need to proactively engage with legislature by taking positions, providing testimony, monitoring legislation, and employing strategic advocacy to receive favorable legislation and funding, and

WHEREAS, federal advocacy services provide support with identifying legislation and agency policies that may affect cities to and reflect how the proposed policy or legislation may supplement or hinder the progress of an existing initiative or issue, and

WHEREAS, the City most recently had an agreement with Pillsbury, Winthrop, Shaw, Pittman, LLP for federal advocacy services through 2016, as approved by Resolution 2014-245, and

WHEREAS, in light of the increasing local demands on cities related to such challenges as COVID-19 (Coronavirus), homelessness, deferred maintenance of critical

infrastructure, emission standards, orders to reduce water usage, and others, the City is seeking to re-establish an agreement for federal advocacy services, and

WHEREAS, the City Manager authorized the Purchasing Manager to issue formal Request for Proposals (RFP) for consultants to perform federal advocacy services on behalf of the City, and

WHEREAS, on September 3, 2019, proposals were formally opened by the City Clerk's Office, and the City received 4 responsive and responsible proposals for this RFP, none of which were from local vendors, and

WHEREAS, scope of work will primarily include support for the City to secure additional funding and favorable legislation through the following methods:

- Identifying funding opportunities and providing support to the City in securing these funds;
- Providing support with creating a comprehensive legislative strategy that is designed to help City departments leverage support from the State and Federal governments;
- Providing detailed analysis of government activity on issues that affect the City, and offer recommendations for the City; and
- Arranging meetings and advising staff and Council through meetings with key legislators and government departments to help position the City for funding opportunities, favorable legislation, or support with defeating unfavorable legislation,

WHEREAS, based on the recommendations provided by an interdepartmental committee, the award of the RFP for federal advocacy services is recommended to be awarded to Van Scoyoc and Associates, for an annual amount not to exceed $90,000, and

WHEREAS, the City intends to enter into a two-year agreement with one 1-year extension for total cost not-to-exceed $270,000.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of proposals and agreement for consultant support with

federal advocacy services to Van Scoyoc and Associates for a two-year agreement with one 1-year extension for an annual cost not to exceed $90,000, and for a total agreement amount not to exceed $270,000.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-191

RESOLUTION APPROVING A THIRD AMENDMENT TO THE LEGAL SERVICES AGREEMENT WITH KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD (KRONICK) FOR PERSONNEL AND ADMINISTRATIVE INVESTIGATION SUPPORT, FOR A 3-MONTH EXTENSION SET TO EXPIRE ON SEPTEMBER 30, 2020 AND INCREASING THE AGREEMENT AMOUNT BY $25,000, FROM $50,000 TO $75,000, AND AUTHORIZING DEPUTY CITY MANAGER, CALUHA BARNES, TO EXECUTE THE AGREEMENT

WHEREAS, in 2019, Kronick, Moskovitz, Tiedemann & Girard was retained to provide advice to the City Council in a labor and personnel matter that could not be performed in-house, and

WHEREAS, the scope of work has included the review of personnel and administrative investigations and the provision of independent legal advice concerning appropriate courses of action based on the results of such investigations, and

WHEREAS, the firm was originally retained for $25,000, which is within the spending authority of the City Manager and the need for services and support from Kronick continued, which required the following amendments that are also within the spending authority of the City Manager, and

WHEREAS, the First Amendment increased the spending authority by $5,000 to a not-to-exceed amount of $30,000, and

WHEREAS, the Second Amendment increased the spending authority by $20,000 for a not-to-exceed amount of $50,000, and

WHEREAS, the need for Kronick continues and requires an additional amendment for an additional estimated cost of $25,000 for a total not to exceed amount of $75,000 with a term expiring on September 30, 2020, and

WHEREAS, the total cost is not to exceed $75,000 and is budgeted within the City's General Liability Fund.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a Third Amendment to the Legal Services Agreement with Kronick, Moskovitz, Tiedemann & Girard in an amount not to exceed $75,000 with a term expiring on September 30, 2020 to continue providing services to the City Council. BE IT FURTHER RESOLVED, that Deputy City Manager, Caluha Barnes, is hereby authorized to execute the agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-192

RESOLUTION APPROVING AN UPDATE ON THE CITY'S DEBT MANAGEMENT POLICY

WHEREAS, pursuant to the City of Modesto Debt Management Policy, last adopted on May 28, 2019, the City of Modesto is required to periodically review and update its Debt Management Policy to address changes to the primary objectives related to the City's debt and financing related activities, and

WHEREAS, staff has identified the need to update the City's Debt Management Policy in order to continue to maintain cost-effective access to the capital markets through prudent yet flexible policies; moderate principal and debt service payments through effective planning and project cash management; achieve the lowest cost of borrowing; and achieve the highest practical credit ratings, and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto, that it hereby adopts the revised Debt Management Policy.

BE IT FURTHER RESOLVED that City staff is hereby authorized and directed to proceed with any and all actions deemed necessary or advisable, following the adopted policy guidelines pursuant to this Resolution, in connection with the future issuances of the City Debt, for future consideration by this City Council.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting ~~City Attorney~~

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-193

RESOLUTION APPROVING AN UPDATE ON THE CITY'S INVESTMENT POLICY

WHEREAS, staff has identified the need to update the City's Annual Investment Policy in order to continue to effectively invest funds in accordance with the principles of sound treasury management and applicable laws, and

WHEREAS, the City desires to adopt the Annual Investment Policy.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto, that it hereby adopts the Annual Investment Policy.

BE IT FURTHER RESOLVED that City staff is hereby authorized and directed to proceed with any and all actions deemed necessary or advisable, following the adopted policy guidelines pursuant to this Resolution, in connection with the future investments of funds, for future consideration by this City Council.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-194

RESOLUTION APPROVING THE AWARD OF BID AND SERVICE AGREEMENT FOR THE PORTABLE TOILET RENTAL SERVICES TO UNITED SITE SERVICES, INC., MODESTO, CA, AND TO SUN VALLEY PORTABLE RESTROOMS, INC., TURLOCK, CA, FOR A TWO-YEAR AGREEMENT WITH THREE ONE-YEAR OPTIONS, FOR AN ESTIMATED ANNUAL COST OF $54,888 IN THE FIRST YEAR AND TOTAL AMOUNT NOT TO EXCEED $274,440 OVER FIVE YEARS TO ALLOW FOR POTENTIAL CPI INCREASES FOR YEARS 3-5 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto requires the use of portable toilet rental services on a regular basis across multiple departments, and

WHEREAS, the uses range from temporary services for construction projects, special events such as Concerts in the Park and Earth Day, to regular monthly service at the Mary E. Grogan Soccer Complex, and

WHEREAS, the needs for these services include but are not limited to compliance with health and safety codes for personnel, providing ADA accessible units on sites where ADA accessibility does not exist, and increasing the count of available units to meet the demand of high use facilities and locations, and

WHEREAS, on January 10, 2020 the Purchasing Division issued Request for Bid (RFB) 1819-22 for the portable toilet rental services, and

WHEREAS, two vendors responded and United Site Services, Inc., Modesto, CA and Sun Valley Portable Restrooms, Inc., were responsible bidders, and

WHEREAS, selecting a primary and an alternate provides a backup against services interruptions if the primary is unable to provide the rental services based on the demand of the City, and

WHEREAS, Modesto Municipal Code (MMC) Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures and RFB No. 1819-22 conforms with this MMC.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of bid and agreement for Portable Toilet Rental Services to United Site Services, Inc., Modesto, CA as the primary supplier for daily, weekly and monthly rentals and the secondary supplier for yearly rentals and Sun Valley Portable Restrooms, Inc., Turlock, CA as the primary supplier for yearly rentals and secondary supplier for daily, weekly and monthly rentals for a two (2) year agreement with three (3) one-year extension options, for an annual estimated cost of $54,888 between both agreements, and a total amount not to exceed $274, 440 over five years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-195

RESOLUTION APPROVING THE AWARD OF BID AND PURCHASE OF TWO (2) 6" TRAILER MOUNTED PUMPS TO WESTERN OILFIELDS SUPPLY CO. DBA RAIN FOR RENT, BAKERSFIELD CA, FOR A TOTAL AMOUNT NOT TO EXCEED $84,394 AND AUTHORIZING THE PURCHASING MANAGER OR HER DESIGNEE, TO ISSUE THE PURCHASE ORDER

WHEREAS, the City Manager authorized the Purchasing Division to issue formal Request for Bids (RFB) 1920-20 for the purchase of two (2) 6" trailer mounted pumps; and

WHEREAS, on September 19, 2019, the Purchasing Division issued RFB No. 1920-20 for the purchase of two (2) 6" trailer mounted pumps; and

WHEREAS, Prospective bidders were notified online, via email and phone call of the bid opportunity. Fifteen (15) companies chose to download the RFB document; and

WHEREAS, on October 22, 2019, bids were formally opened in the City Clerk's office. Nine (9) companies chose to respond, none of which were local vendors; and

WHEREAS, four (4) companies provided responsive and responsible bids, five (5) companies were deemed non-responsive; and

WHEREAS, based on providing the overall lowest responsive and responsible bid, City staff recommends the award for the purchase of two (2) 6" trailer mounted pumps to Western Oilfields Supply Co. DBA Rain For Rent, of Bakersfield, CA for a total cost not to exceed $84,394. The vendor is awarded the bid based on the lowest responsive and responsible bid per the **attached** cost abstract, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures. The award of RFB No. 1920-20 for the purchase of two

(2) 6" trailer mounted pumps, conforms to the Modesto Municipal Code based on providing the overall lowest responsive and responsible bid.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of bid for the purchase of two (2) 6" trailer mounted pumps to Western Oilfields Supply Co. DBA Rain For Rent, of Bakersfield, CA for an amount not to exceed $ 84,394.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee is hereby authorized to issue the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

CITY OF MODESTO

PO BOX 642 MODESTO CA 95353

RFB NO. 1920-20 - Purchase of Two (2) 6 " Trailer Mounted Pumps

ITEM/DESCRIPTION	QTY	UNIT OF ISSUE	Charlotte, NC		Edgewater, FL		Signal Hill, CA		Houston, TX		Sacramento, CA		Bakersfield, CA		Scottsdale, AZ		Tustin, CA		Novato, CA	
			Primax USA, Inc		CDPW Inc.		Charles King Co.		Amco Pump Mfg.		PAC MACHINE		Western Oilfields Supply Co, dba Rain For Rent		Global Pump Co.		Rockwell Engineering & Equipment		Thomas & Assoc	
			UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION	UN PRC	EXTENSION
6" Diesel Power, Trailer Mounted Centrifugal Pump	2	EA		NR		NR		NR		NR		NR	$39,115.94	$78,231.88	$42,028.00	$84,056.00	$48,625.00	$97,250.00	$56,437.00	$112,874.00
SUB-TOTAL:														$78,231.88		$84,056.00		$97,250.00		$112,874.00
SALES TAX 7.875%:														$6,160.76		$6,619.41		$7,658.44		$8,888.83
TOTAL:														$84,392.64		$90,675.41		$104,908.44		$121,762.83
LEAD TIME													12-16 WEEKS IF NO INV AVAIL		35 DAYS ARO		70 DAYS ARO		90 DAYS ARO	
MAKE / MODEL													CORNELL PUMP		GLOBAL PUMP		PIONEER MODEL		GORMAN RUPP	
ENGINE TYPE													CUMMINS		CATERPILLAR		JOHN DEERE		JOHN DEERE	
PAYMENT													0% NET10		1% DISC. Net 10		1/2% DISC. 15 DAYS		0%, NET 30	

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-196

RESOLUTION REJECTING ALL BIDS RECEIVED FOR RFB 1819-43 FOR RADIO AND COMMUNICATION EQUIPMENT SERVICE, REPAIR AND PREVENTATIVE MAINTENANCE; AND AUTHORIZING STAFF TO REISSUE AN RFB AT FUTURE DATE, WITH AN AMENDED SCOPE OF SERVICE

WHEREAS, various divisions throughout the city of Modesto including departments of Police, Fire and Utilities require that the use of mobile radios, portable radios and fixed radios to communicate during the work day; and

WHEREAS, these radios require service and repair on an as-needed basis to ensure that they are working properly for emergency situations and daily operations; and

WHEREAS, the City Manager authorized the Purchasing Division to issue a Request for Bid (RFB) for Radio and Communication Equipment Services, Repair and Preventative Maintenance; and

WHEREAS, on November 14, 2019 the Purchasing Division issued RFB 1819-43 on the City's website and 28 vendors downloaded the RFB; and

WHEREAS, bids were formally opened in the City Clerk's office on December 10. 2019, three vendors chose to respond, one of which was a local vendor; and

WHEREAS, after careful review, staff felt it was in the City's best interest to reject all bids in order to review and amend the RFB scope of services and pricing schedule to request more specific information from prospective bidders; and

WHEREAS, in accordance with Modesto Municipal Code Section 8-3.203(e), Formal Bid Procedures, the Council has the authority to accept or reject any or all bids, and the rejection of all bids for the Radio and Communication Equipment Service, Repair

and Preventative Maintenance compliance to the Modesto Municipal Code 8-3.203, subsection (e).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the rejection of all bids received for Request for Bid 1819-43 for Radio and Communication Equipment Service, Repair and Preventative Maintenance.

BE IT FURTHER RESOLVED, that staff is authorized to reissue an amended Request for Bids at a later date.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-197

RESOLUTION APPROVING THE PURCHASE ORDER FOR ELECTRONIC CITATION PRINTERS AND ACCESSORIES TO MSA SYSTEMS, SAN JOSE, CA, BY UTILIZING THE COMPETITIVE BID PROCESS WITH THE STATE OF CALIFORNIA, FOR A TOTAL AMOUNT NOT TO EXCEED $133,622, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE PURCHASE ORDER

WHEREAS, the City of Modesto utilizes Crossroads Software products for the Modesto Police Department and Public Works, Traffic Operations Division; and

WHEREAS, the Modesto Police Department is implementing the Crossroads e-Citation software that requires hand-held printers; and

WHEREAS, the printers must adhere to the California Judicial council printing specs and fonts, and Racial Identity Profiling Act AB953 (RIPA) requirements, and must be preloaded with the Crossroads Software; and

WHEREAS, MSA Systems has the only State of California Multiple Award Schedule (CMAS) Contract which allows local governments to use CMAS without further bidding; and

WHEREAS, the Finance Department's Purchasing Division recommended utilizing the agreement from the State of California Contract to MSA Systems, Inc, San Jose, CA. Contract No. 3-18-70-2117H for Information Technology Goods and Services; and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases which meet or exceed $50,000 for material, equipment or contractual service to be formally bid; however, there are exceptions to the rule set forth in the Modesto Municipal Code; and

WHEREAS, exceptions to the bidding process are granted in MMC 8-3.204(d) "Where the Purchasing Manager, in her discretion determines that a process other than the formal bid procedure set fourth in section 8-3.203 will result in a procurement for the City at the lowest possible cost commensurate with the desired quality; and

WHEREAS, in addition in MMC 8-3.202(h) encourages the Purchasing Manager to join with the State of California and other units of government in cooperative purchasing plans where the best cost savings interest of the City would be served; and

WHEREAS, MSA Systems is the exclusive vendor that can provide the printers preloaded with the printer configurations and fonts that are compliant with the Judicial Council.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the purchase of the electronic printers and accessories from MSA Systems, San Jose, CA, for a total amount not to exceed $133,622.

BE IT FURTHER RESOLVED, that the Purchasing Manager, or her designee, is hereby authorized to execute the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-198

RESOLUTION APPROVING THE RENEWAL OF THE CITY'S MICROSOFT "ENTERPRISE AGREEMENT" (EA) FOR MICROSOFT LICENSES BY UTILIZING THE COUNTY OF RIVERSIDE COOPERATIVE AGREEMENT NO. RIVCO- 2020-RFQ-000048 WITH DELL TECHNOLOGIES INC., OF ROUND ROCK, TX, FOR A THREE-YEAR AGREEMENT, FOR AN ANNUAL ESTIMATED COST OF $600,000 AND A TOTAL AMOUNT NOT TO EXCEED $1.8M OVER THREE YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto has standardized on Microsoft products to conduct city business, and

WHEREAS, Microsoft licenses are required for users and devices that access Microsoft systems and resources, and

WHEREAS, the Microsoft Enterprise Agreement is a compressive volume licensing program that offers substantial cost savings over standard license pricing, and

WHEREAS, on May 2nd 2017 by resolution 2017-166 the Council approved a three-year Microsoft Enterprise Agreement with Insight Public Sector through the County of Riverside cooperative agreement, and

WHEREAS, the current Microsoft Enterprise Agreement expires April 30th 2020 and requires renewal, and

WHEREAS, the County of Riverside has completed a recent formal Request for Quotation process for Microsoft Enterprise Agreement licensing, and

WHEREAS, the County of Riverside Cooperative Agreement (RIVCO-2020-RFQ-000048) is intended to be available and leveraged by government agencies throughout the State of California as a cooperative agreement, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid, and

WHEREAS, MMC 8-3.202(h) states that "With the approval of Council, join with the State of California and other units of government in cooperative purchasing plans when the best interest of the City would be served thereby", and

WHEREAS, this purchase conforms to the Modesto Municipal Codes.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approved the renewal of the City's Microsoft Enterprise Agreement by utilizing the County of Riverside Cooperative Agreement No. RIVCO-2020-RFQ-000048 with Dell Technologies Inc., of Round Rock, TX, for a three-year agreement, for an annual estimated cost of $600,000 and a total amount not to exceed $1.8M over three years.

BE IT FURTHER RESOLVED, that the City Manager or his designee is hereby authorized to execute the agreement in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-199

RESOLUTION APPROVING AN AMENDMENT TO THE PURCHASING AGREEMENT WITH SCOTO FARMING FOR DISCING AND FLAIL MOWING SERVICES AND EXTENDING THE TERM OF THE AGREEMENT FROM MARCH 2, 2020 TO SEPTEMBER 2, 2020, AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto requires discing and flail mowing services to be performed on nineteen (19) City-owned locations consisting of 564 acres as part of the weed abatement program to for fire breaks and to control the over-growth of weeds and grasses, and

WHEREAS, in 2015, the Purchasing Division issued Request for Bids (RFB) No. 1415-17 for Discing and Flail Mowing Services, and

WHEREAS, by Resolution No. 2015-063, Council awarded SCOTO Farming, Modesto, CA a two-year agreement (Purchasing Agreement) with three (3) one-year extensions, and

WHEREAS, the -Purchasing Agreement was executed in compliance with Modesto Municipal Code Section 8-3.20, and

WHEREAS, the estimated annual cost for the Purchasing Agreement was $42,000 and $210,000 over five (5) years, and

WHEREAS, Purchasing Agreement expired on March 2, 2020 with a remaining contract balance of $74,040, and

WHEREAS, issuance of a new Request for Bids for discing and flair mowing services is delayed, and

WHEREAS, interim discing and flail mowing services are needed for the Parks, Recreation and Neighborhoods Department, the Fire Department, and the Public Works Department, and

WHEREAS, staff desires and SCOTO Farming has agreed to provide interim service under the same terms and conditions as originally approved by Council until the new Request for Bids is issued later this year, and

WHEREAS, payment for interim services will be funded by the remaining agreement balance and shall not exceed the five-year total set forth in the Purchase Agreement, and

WHEREAS, staff recommends amending the Purchasing Agreement and extending the term of the agreement from March 2, 2020 through September 2, 2020.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment to the Purchasing Agreement with SCOTO Farming for discing and flail mowing services and extending the term of the agreement from March 2, 2020 through September 2, 2020.

BE IT FURTHER RESOLVED that the Purchasing Manager, or her designee, has the authority to execute the agreement.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-200

RESOLUTION APPROVING FREE FARES ON MODESTO AREA EXPRESS BUSES DURING THE COVID-19 OUTBREAK BETWEEN APRIL 6, 2020 AND MAY 10, 2020, AND APPROVING FREE FARES ON MODESTO AREA DIAL-A-RIDE BETWEEN APRIL 23, 2020 AND MAY 10,2020, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXTEND THE SUSPENSION OF THE COLLECTION OF FARES ON MODESTO AREA EXPRESS BUSES AND MODESTO AREA DIAL-A-RIDE THROUGH JUNE 30, 2020 IF RESIDENTS OF MODESTO REMAIN SUBJECT TO A SHELTER AT HOME ORDER

WHEREAS, due to the public health emergency of the COVID-19 pandemic the Modesto Area Express (MAX) system has reduced service to Saturday service on Weekdays, and

WHERAS, the service hours for Modesto Area Dial-A-Ride (MADAR) have not been affected, and

WHEREAS, MAX and MADAR are committed to the collective well-being and health of the riders and employees, and

WHEREAS, MAX and MADAR have provided signage and social media posts to encourage riders to only make essential trips, maintain social distancing and other health recommendations issued by the Centers for Disease Control and Prevention (CDC), and

WHEREAS, MAX and MADAR are deemed to provide an essential service during the coronavirus (COVID-19) pandemic, and

WHEREAS, providing free fares on MAX and MADAR would provide several benefits to riders and drivers, and

WHEREAS, on March 13, 2020, the City Manager, in his capacity as Director of Emergency Services, proclaimed the existence of local emergency in the City of Modesto

in response to COVID-19 pursuant to Government Code section 8630 and Modesto Municipal Code section 3-4.06; and

WHEREAS, on March 19, 2020, the City Council adopted Resolution 2020-140 ratifying the proclamation of a local emergency; and

WHEREAS, Government Code section 8634 and Modesto Municipal Code section 3-4.06 authorize the City Manager to take actions reasonably related to the protection of life and property as affected by the COVID-19 emergency; and

WHEREAS, in order to ensure compliance with the recommendations and orders of State and County health officials regarding social distancing, the City Manager used his emergency powers to suspend the collection of MAX fares effective April 6, 2020 and MADAR fares effective April 23, 2020; and

WHEREAS, the CARES Act will provide operating expenses of transit agencies related to the response to a coronavirus public health emergency as described in section 319 of the Public Health Service Act, beginning on January 20, 2020, and

WHEREAS, reimbursement for operating costs to maintain service and lost revenue due to the coronavirus public health emergency are eligible expenses.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves free fares on Modesto Area Express buses during the COVID-19 outbreak between April 6, 2020 and May 10, 2020, and approves free fares on Modesto Area Dial-A-Ride between April 23, 2020 and May 10, 2020.

BE IF FURTHER RESOLVED that the City Manager, or his designee, is authorized to extend the suspension of the collection of fares on Modesto Area Express

buses and Modesto Area Dial-A-Ride through June 30, 2020 if residents of Modesto remain subject to a shelter at home order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-201

RESOLUTION APPROVING THE PRE-QUALIFIED CONSULTANT LIST FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR VARIOUS CAPITAL IMPROVEMENT PROGRAM (CIP) PROJECTS FOR A PERIOD OF ONE YEAR, WITH TWO (2) ONE-YEAR EXTENSIONS AT THE WRITTEN APPROVAL OF THE DIRECTOR OF UTILITIES

WHEREAS, the Construction Administration group for the City of Modesto is housed within the Utilities Department, and is responsible for construction management and inspection services for nearly all capital projects over $50,000, emergency projects, and inspection of all encroachment permits issued by the City, and

WHEREAS, from time to time, project workload and permit workload requires more resources than the City has available internally, and

WHEREAS, retaining a pre-qualified list with consultants allows the Utilities Department to have accelerated access to specific construction management and inspection services, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural & Engineering Services for Capital Projects, which is in compliance with State of California Government Code, Sections 4526-4529, staff solicited and formally advertised a Request for Qualifications (RFQ) through PlanetBids website, and

WHEREAS, staff received Statements of Qualifications (SOQs) and Proposals from sixteen firms, one of which were considered local firms, and

WHEREAS, after careful review of the qualifications it was determined that each of the firms exhibited unique strengths in the different fields of construction

management, but only the top five most qualified firms were selected to be placed on the prequalified list, and

WHEREAS, these firms are NV5, Inc., West Yost and Associates, TRC Companies, and HDR Inc., and

WHEREAS, when construction management and inspection are required for a particular project, an RFP with a specific scope of work will be issued to either all or select firms from the List, depending on the strengths of the firm and the needs of the project, and

WHEREAS, following proposal evaluation, interviews may be conducted to select the most qualified firm, and

WHEREAS, an agreement for construction management and inspection services will then be presented to City Council for approval, if the total amount of the agreement exceeds $50,000, and

WHEREAS, the Prequalified Consultant List will be active for one year from the date of Council approval, after which the List may be extended via two additional one-year extensions at the written approval of the Director of Utilities, and

WHEREAS, in the event the firms listed are deemed to lack experience or expertise for specific projects, the City may recruit other consultants for individual projects and not be restricted to only using the approved List, and

WHEREAS, the Director will have the authority to request a separate solicitation process and add more firms to this list of pre-qualified firms through a formal selection procedure per Administrative Directive 3.1, and

WHEREAS, City staff recommends approving the Pre-Qualified List for on-call construction management and inspection services.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a Pre-qualified Consultant List for Construction Management and Inspection Services for various Capital Improvement Projects for a period of one year, with two additional one-year extensions at the written approval of the Director of Utilities.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-202

RESOLUTION APPROVING A PREQUALIFIED CONSULTANT LIST CONSISTING OF CAROLLO ENGINEERS, WALNUT CREEK, CA, WOODARD AND CURRAN, SACRAMENTO, CA, WEST YOST ASSOCIATES, INC., DAVIS, CA, PROVOST & PRITCHARD CONSULTING GROUP, MODESTO, CA, AND HAZEN AND SAWYER, SAN FRANCISCO, CA FOR WATER ENGINEERING DESIGN SERVICES FOR VARIOUS CAPITAL IMPROVEMENT PROGRAM PROJECTS FOR A PERIOD OF ONE YEAR, WITH THE POSSIBILITY OF TWO ADDITIONAL ONE-YEAR EXTENSIONS AT THE WRITTEN APPROVAL OF THE DIRECTOR OF UTILITIES

WHEREAS, there are a number of Capital Improvement Program (CIP) projects that may require outside consultant services for efficient project delivery, and

WHEREAS, retaining a prequalified, as-needed list of consultants, allows the Utilities Department to have accelerated access to specific water engineering design services, when necessary, and this will eliminate the need to send out repetitive Requests for Qualifications (RFQ) for projects of similar scope and/or type, saving staff time and project costs, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural & Engineering Services for Capital Projects, which is in compliance with State of California Government Code, Sections 4526-4529, staff solicited and formally advertised an RFQ through Planet Bids for water engineering design services, and

WHEREAS, on January 10, 2020, staff received ten (10) Statements of Qualifications (SOQs), two (2) of which were considered local firms, and

WHEREAS, after careful review of the SOQs, the following firms were selected as the five most qualified, none of which were local: 1) Carollo Engineers; 2) Hazen and

Sawyer; 3) Provost & Pritchard Consulting Group; 4) West Yost Associates Inc.; and 5) Woodard and Curran, and

WHEREAS, the prequalified engineering design consultant list would be used for CIP projects with a total budget of $2 million or more, and

WHEREAS, generally, the scope of work to be provided by engineering consultants would include preparation of preliminary design reports (PDR), final design and potentially peer review for projects such as, but not limited to, water wells, wellhead treatment, and water pump stations, and

WHEREAS, when services are needed for water engineering design, a Request for Proposals (RFP) with a specific scope of work may be issued to these firms, and

WHEREAS, following an evaluation process, City staff will then select the most qualified firm, and

WHEREAS, an agreement for services will then be presented to City Council for approval, and

WHEREAS, all of the selected firms have proposed the use of various local firms as subconsultants, with participation depending on scope of project, and

WHEREAS, this prequalified consultant list will be active for one year from the date of Council approval, at which time the City may extend the list, and

WHEREAS, staff requests approval of two additional one-year extensions at the written approval of the Director of Utilities, and

WHEREAS, in the event the firms listed on the prequalified list are deemed to lack experience or expertise for specific projects, the City retains the right to recruit

consultants for individual projects and not be restricted to only using the approved list, and

WHEREAS, a formal process will be conducted should this situation occur.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the prequalified consultant list, consisting of Carollo, Walnut Creek, CA, Woodard and Curran, Sacramento, CA, West Yost Associates, Inc., Davis, CA, Provost & Pritchard Consulting Group, Modesto, CA, and Hazen and Sawyer, San Francisco, CA for water engineering design services for various Capital Improvement Program projects for a period of one year, with the possibility of two additional one-year extensions at the written approval of the Director of Utilities.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-203

RESOLUTION APPROVING A PREQUALIFIED CONSULTANT LIST CONSISTING OF CAROLLO ENGINEERS, WALNUT CREEK, CA, BROWN & CALDWELL, WALNUT CREEK, CA, WOODARD AND CURRAN SACRAMENTO, CA, AND WEST YOST ASSOCIATES, DAVIS, CA FOR WASTEWATER AND STORM DRAIN ENGINEERING DESIGN SERVICES FOR VARIOUS CAPITAL IMPROVEMENT PROGRAM PROJECTS FOR A PERIOD OF ONE YEAR, WITH THE POSSIBILITY OF TWO ADDITIONAL ONE-YEAR EXTENSIONS AT THE WRITTEN APPROVAL OF THE DIRECTOR OF UTILITIES

WHEREAS, there are a number of Capital Improvement Program (CIP) projects that may require outside consultant services for efficient project delivery, and

WHEREAS, retaining a prequalified, as-needed list of consultants allows the Utilities Department to have accelerated access to specific wastewater and storm drain engineering design services, when needed, and

WHEREAS, this will eliminate the need to send out repetitive Requests for Qualifications (RFQ) for projects of similar scope and/or type, saving staff time and project costs, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural & Engineering Services for Capital Projects, which is in compliance with State of California Government Code, Sections 4526-4529, staff solicited and formally advertised an RFQ through Planet Bids for wastewater and storm drain engineering design services, and

WHEREAS, on January 10, 2020, staff received ten (10) Statements of Qualifications (SOQs), two (2) of which were considered local firms, and

WHEREAS, after careful review of the SOQs by Utilities Department staff, the following firms were selected as the four most qualified, none of which were local: 1)

Carollo Engineers; 2) Brown & Caldwell; 3) Woodard and Curran; 4) West Yost Associates, Inc., and

WHEREAS, this prequalified engineering design consultant list would be used for CIP projects with a total budget of $2 million or more, and

WHEREAS, generally, the scope of work to be provided by engineering consultants would include preparation of preliminary design reports (PDR), final design and potentially peer review for projects such as, but not limited to, larger sewer trunk lines (36" in diameter or larger), wastewater pump stations and lift stations, and wastewater treatment plant improvements, and

WHEREAS, when services are needed for wastewater and storm drain engineering design, a Request for Proposals (RFP) with a specific scope of work may be issued to these firms, and

WHEREAS, following an evaluation process, City staff will then select the most qualified firm, and

WHEREAS, an agreement for services will then be presented to City Council for approval, and

WHEREAS, all of the selected firms have proposed the use of various local firms as subconsultants, with participation depending on scope of project, and

WHEREAS, this prequalified consultant list will be active for one year from the date of Council approval, at which time the City may extend the list, and

WHEREAS, staff requests approval of two additional one-year extensions at the written approval of the Director of Utilities, and

WHEREAS, in the event the firms listed on the prequalified list are deemed to lack experience or expertise for specific projects, the City retains the right to recruit consultants for individual projects and not be restricted to only using the approved list, and

WHEREAS, a formal process will be conducted should this situation occur.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the prequalified consultant list, consisting of Carollo Engineers, Walnut Creek, CA, Brown & Caldwell, Walnut Creek, CA, Woodard and Curran Sacramento, CA, and West Yost Associates, Davis, CA for wastewater and storm drain engineering design services for various Capital Improvement Program projects for a period of one year, with the possibility of two additional one-year extensions at the written approval of the Director of Utilities.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-204

RESOLUTION APPROVING AN ON-CALL AGREEMENT FOR ARCHITECTURAL DESIGN SERVICES, WITH REDD INC. ARCHITECTS, MODESTO, CA, FOR A ONE-YEAR AGREEMENT, WITH TWO ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $100,000, AND A TOTAL COST NOT TO EXCEED $300,000 OVER THREE YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, there are a number of Capital Improvement Program (CIP) projects that may require outside consultant services for efficient project delivery, and

WHEREAS, retaining on-call professional services consultants allows the department to have quick access to specific architectural engineering services, when needed, and

WHEREAS, on-call professional services consultants can provide designs for small projects using experienced staff and offer a quick turnaround, which is essential to efficient implementation of the City's CIP projects, and

WHEREAS, this will eliminate the need to send out repetitive Requests for Qualifications (RFQ) for projects of similar scope and/or type, saving staff time and project costs, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural & Engineering Services for Capital Projects, which is in compliance with State of California Government Code, Sections 4526-4529, staff solicited and formally advertised an RFQ through Planet Bids for architectural engineering services for on-call services, and

WHEREAS, on January 1, 2020, staff received three (3) Statement of Qualifications (SOQ) for architectural design services, and

WHEREAS, after careful review of the SOQ/Proposal by Utilities Department staff, Redd Inc. Architects, Modesto, CA., was selected as the most qualified firm to provide on-call architectural design services, and

WHEREAS, when on-call architectural design services are required on an "as needed" basis, written task orders will be issued to the consultant identifying the scope, cost, and schedule to complete specific task, and

WHEREAS, to fund consultant work for project-specific task orders, funds will be budgeted and encumbered against each specific CIP project account as the project is assigned, and

WHEREAS, consultant invoices will be paid from each specific CIP project on a task order basis received and verified by Capital Improvement Services (CIS) staff, and

WHEREAS, when on-call professional services are required, staff will prepare task order(s), and

WHEREAS, the consultant will not perform any services until CIS management has approved the proposed specific task order and a written Notice to Proceed is prepared and sent to the consultant, prior to commencement of services, and

WHEREAS, costs for on-call architectural design services are not expected to exceed $100,000 per year and the total cost for the proposed three-year contract term (initial one-year term, with two one-year extensions) is not to exceed $300,000.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an On-call Agreement for Architectural Design Services with Redd Inc. Architects, Modesto, CA, for a one-year agreement, with two one-year

extension options, for an annual cost not to exceed $100,000, and a total cost not to exceed $300,000 over three years.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute said Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-205

RESOLUTION APPROVING AN ON-CALL AGREEMENT FOR STRUCTURAL ENGINEERING SERVICES, WITH KENNEDY JENKS CONSULTANTS, INC., FRESNO, CA, FOR A ONE-YEAR AGREEMENT, WITH TWO ONE-YEAR EXTENSION OPTIONS, FOR AN ANNUAL COST NOT TO EXCEED $100,000, AND A TOTAL COST NOT TO EXCEED $300,000 OVER THREE YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, there are a number of Capital Improvement Program (CIP) projects that may require outside consultant services for efficient project delivery, and

WHEREAS, retaining on-call professional services consultants allows the department to have quick access to specific structural engineering services, when needed, and

WHEREAS, on-call professional services consultants can provide designs for small projects using experienced staff and offer a quick turnaround, which is essential to efficient implementation of the City's CIP projects, and

WHEREAS, this will eliminate the need to send out repetitive Requests for Qualifications (RFQ) for projects of similar scope and/or type, saving staff time and project costs, and

WHEREAS, in accordance with Administrative Directive 3.1, Selection Procedures for Professional Consultants Who Provide Architectural & Engineering Services for Capital Projects, which is in compliance with State of California Government Code, Sections 4526-4529, staff solicited and formally advertised an RFQ through Planet Bids for structural engineering services for on-call services, and

WHEREAS, on January 1, 2020, staff received three (3) Statement of Qualifications (SOQ) for structural engineering services, and

WHEREAS, after careful review of the SOQ/Proposal by Utilities Department staff, Kennedy Jenks Consultants Inc., was selected as the most qualified firm to provide on-call structural engineering services, and

WHEREAS, when on-call professional services are required on an "as needed" basis, written task orders will be issued to the consultant identifying the scope, cost, and schedule to complete specific task, and

WHEREAS, to fund consultant work for project-specific task orders, funds will be budgeted and encumbered against each specific CIP project account as the project is assigned, and

WHEREAS, consultant invoices will be paid from each specific CIP project on a task order basis received and verified by Capital Improvement Services (CIS) staff, and

WHEREAS, when on-call professional services are required, staff will prepare task order(s), and

WHEREAS, the consultant will not perform any services until CIS management has approved the proposed specific task order and a written Notice to Proceed is prepared and sent to the consultant, prior to commencement of services, and

WHEREAS, costs for on-call structural engineering are not expected to exceed $100,000 per year and the total cost for the proposed three-year contract term (initial one-year term, with two one-year extensions) is not to exceed $300,000.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves an On-Call Agreement for Structural Engineering Services, with Kennedy Jenks Consultants Inc., Fresno, CA, for a one-year agreement,

with two one-year extension options, for an annual cost not to exceed $100,000, and a total cost not to exceed $300,000 over three years.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute said Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSÉ M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-206

RESOLUTION APPROVING AN AMENDMENT TO THE CITY OF MODESTO FISCAL YEAR 2015-2020 CONSOLIDATED PLAN, AMENDMENT #3 TO THE PROGRAM YEAR 2019-2020 ANNUAL ACTION PLAN, AN AMENDMENT TO THE CITIZEN PARTICIPATION PLAN TO IDENTIFY AND ALLOCATE ADDITIONAL FUNDS MADE AVAILABLE THROUGH THE CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ANY RELATED DOCUMENTS AND/OR AGREEMENTS

WHEREAS, as a U.S. Department of Housing and Urban Development (HUD) entitlement community, the City of Modesto is required to develop a Substantial Amendment to the Annual Action Plan when it makes changes to its planned or actual activities funded with Community Development Block Grant (CDBG), HOME Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funds, and

WHEREAS, HUD requires the City of Modesto develop, in consultation with its citizens and community-based service providers, a funding strategy that furthers its housing and community development goals as described in the City's Five-Year Consolidated Plan for FY 2015-2020, and

WHEREAS, citizen participation is a key component of the Substantial Amendment to the Annual Action Plan process, and

WHEREAS, HUD regulations require the City provide ample opportunity and means for the populations served by the grants, as well as the general citizenry, to provide input on the goals and priorities and the specific type of activities to be funded in the City's Substantial Amendment to the Program Year 2019-2020 Annual Action Plan, and

WHEREAS, on March 19, 2020 the State of California issued an Order of the State Public Health Officer that ordered all individuals to stay at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors and on March 19, 2020, the City Council adopted the proclamation of existence of a local emergency in response to the Coronavirus creating a hardship on local industries, and

WHEREAS, on March 27, 2020, the United States Congress passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act – H.R. 748), and

WHEREAS, the bill under CDBG-CV waives the 30-day comment period for a substantial amendment and reduces it to five (5) days, it eliminates the in-person public hearing and allows grantees the option of holding virtual hearings, it suspends the 15 percent cap on public services, including FY19 and FY20 CDBG funds, it allows HUD to waive further requirements (except related to fair housing, nondiscrimination, labor standards, and the environment), and it allows grantees to be reimbursed for COVID-19 response activities regardless of the date the costs were incurred, and

WHEREAS, the bill under ESG-CV allows recipients to deviate from regular procurement standards when procuring goods and services to prevent, prepare for, and respond to COVID-19, it allows recipients to use up to 10 percent of the allocation for administrative purposes. In addition to the 10 percent for admin, these funds can be used to provide hazard pay, including for time worked prior to the date of this bill, for staff working directly to prevent, prepare for, and respond to COVID-19 among the homeless or persons at-risk of homelessness, it allows funds to not be subject to the Citizen Participation requirements, it removes a match requirement, it removes a cap on

emergency shelter activities, it allows funds to be used to provide temporary shelters (through leasing of existing property, temporary structures, or other means) to prevent, prepare for, and respond to COVID-19, and it removes the application of environmental reviews, and

WHEREAS, on April 1, 2020, HUD released the Community Development Block Grant – Coronavirus (CDBG-CV) funding allocation for the City of Modesto in the amount of $1,118,269, and

WHEREAS, on April 1, 2020, HUD released the Emergency Solutions Grants – Coronavirus (ESG-CV) funding allocation for the City of Modesto in the amount of $567,410, and

WHEREAS, on April 14, 2020, in direct response to the COVID-19 pandemic that is putting a strain on the local economy, the City created the Small Business Assistance Program (SBAP) to provide assistance to local business in the retention and creation of full-time equivalent jobs for low to moderate income persons, and

WHEREAS, in order to fund the development of this program, the City converted $300,000 in NSP program income to CDBG funds and the following modification are proposed as part of Amendment #3, and

WHEREAS, CDBG-CV funding will replace CDBG funding initially allocated to the Small Business Assistance Program and increase the amounts from $300,000 to $800,000, and

WHEREAS, $94,615 of CDBG-CV funding will allocated to the Public Services Project, and

WHEREAS, $223,653 of CDBG-CV funding will allocated to Planning and Administration, and

WHEREAS, $250,000 of ESG-CV funding will allocated to Emergency Shelter and Outreach Project support in response to COVID-19, and

WHEREAS, $40,669 of ESG-CV funding will allocated to the Homeless Prevention Project in relation to COVID-19, and

WHEREAS, $20,000 of ESG-CV funding will allocated to the Administration and Activity Delivery costs associated with the Homeless Prevention Project, and

WHEREAS, $200,000 of ESG-CV funding will allocated to the HMIS Project towards the COVID-19 System Update and the Administration and Compliance with FEMA requirements, and

WHEREAS, in compliance with the HUD approved waiver for the Citizen Participation Plan requirements, a 5-day public period to review and comment on the draft amendment opened April 23, 2020 and will close with a public hearing at the City Council meeting on April 28, 2020 and citizen participation was conducted completely online and Plan is available on the City of Modesto Website.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves Amendment #3 to City of Modesto Program Year 2019-2020 Annual Action Plan, a copy of which in on file with the City Clerk.

BE IT FURTHER RESOLVED; that the City Manager or his designee to execute any documents and/or agreements necessary to carry out the intent of this Resolution in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Ah You, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-207

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 OPERATING AND MULTI-YEAR PROJECT BUDGETS TO RE-ALLOCATE COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) FUNDS AND EMERGENCY SOLUTIONS GRANT (ESG) FUNDS AS PROPOSED IN THE PROGRAM YEAR 2019-20 ANNUAL ACTION PLAN AMENDMENT NO. 3 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO TAKE THE NECESSARY STEPS TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, the City of Modesto receives annual entitlements from HUD based on its population size, number of households living below poverty level and number of sub-standard housing units, and

WHEREAS, on May 14, 2019, by Resolution 2019-240, City Council approved the Program Year 2019 Annual Action Plan, and

WHEREAS, on September 10, 2019, by Resolution 2019-404, City Council approved the Program Year 2019 Annual Action Plan Amendment No. 1, and

WHEREAS, on April 14, 2020, by Resolution 2020-182, City Council approved the Program Year 2019 Annual Action Plan Amendment No. 2, and

WHEREAS, on March 27, 2020 the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was signed by President Trump to respond to the public health crisis, and

WHEREAS, the CARES Act immediately provides a special allocation of CDBG funds and ESG funds to be used to prevent, prepare for, and respond to the coronavirus pandemic (COVID-19), and

WHEREAS, certain budgetary transactions are necessary to reallocate funds during the course of the Consolidated Plan cycle when there is a change in allocation priorities, or method of distribution, carrying out new activities with CPD funds, change

in purpose, scope, location or beneficiaries of an activity, and

WHEREAS, the Fiscal year 2019-20 operating and multi-year budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein to reflect an approved reallocation of funds as set forth in the Integrated Disbursement and Information System (IDIS) reporting system.

NOW, THEREFORE, BE IT RESOLVED, that the Council of the City of Modesto that it hereby approves the amendment of the Fiscal year 2019-20 Budget as shown in **Exhibit A attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provision of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Ah You, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

Amendment #3 Program Year 2019 Annual Action Plan

Project / Account	Task	IDIS Activity	Adjustment	Funding Source	PY	Description
101256	Direct Grant	1359	$ 500,000.00	CDBG-CV	19	Increase Current Budget - Small Business Assistance Program - CARES Act
1130-14998-42030-101256-1359	Revenue	1359	$ 800,000.00	CDBG-CV	19	Budget Revenue - Small Business Assistance Program - CARES Act
101256	Professional Services	1359	$ (250,000.00)	CDBG PI	NSP 2	Reduce - Budget transfer of NSP PI from CDBG fund to CDBG CARES Act
101256	Services City Forces - Interfund	1359	$ (50,000.00)	CDBG PI	NSP 2	Reduce - Budget transfer of NSP PI from CDBG fund to CDBG CARES Act
101257	Services City Forces - Interfund	1363	$ 223,653.00	CDBG-CV	19	CDBG Admin for CARES Act
101257	Direct Grant	1364	$ 94,615.00	CDBG-CV	19	Public Services for CARES Act
1130-14998-42030-101257	Revenue	1363	$ 318,268.00	CDBG-CV	19	Budget Revenue - CDBG CARES Act
101258	Services City Forces - Interfund	1348	$ 56,741.00	ESG-CV	19	ESG Admin for CARES Act
101258	Direct Grant	1352	$ 250,000.00	ESG-CV	19	Emerency Shelter and Outreach for CARES Act
101258	Direct Grant	1350	$ 200,000.00	ESG-CV	19	Homeless Prevention for CARES Act
101258	Services City Forces - Interfund	1350	$ 20,000.00	ESG-CV	19	Homeless Prevention for CARES Act
101258	Direct Grant	1348	$ 40,669.00	ESG-CV	19	HMIS for CARES Act
1180-14998-42030-101258	Revenue	1348	$ 567,410.00	ESG-CV	19	Budget Revenue - ESG CARES Act

SUBSTANTIAL AMENDMENT

City of Modesto

2019 Annual Action Plan

Substantial Amendment #3

City Council April 28, 2019:

On March 27, 2020 the United States Congress passed the Coronavirus Aid, Relief, and Economic Security Act (H.R. 748). The bill provided $5 billion for CDBG and $4 billion for ESG to rapidly respond to COVID-19 and the economic, housing, and homelessness impacts caused by it.

The City of Modesto will receive $1,118,269 in Community Development Block Grant – Coronavirus (CDBG-CV) and $567,410 in Emergency Solutions Grants – Coronavirus (ESG-CV). A substantial Amendment to the FY 2019-2020 Annual Action Plan is required, and usually a 30-day public comment period is required; however, the U.S. Department of Housing and Urban Development (HUD) has waived this requirement provided that no less than five (5) days are provided for public comments on each substantial amendment.

The purpose of the Substantial Amendment is to reallocate, add, and define the following Eligible Uses caused by COVID-19:

1. **Economic Development**

   Funding: $800,000 From the CARES Act - CDBG-CV Allocation

   Description: To assist local business in the retention and creation of full-time equivalent jobs for low to moderate income persons. Assistance will be provided in the form of grant, loan, and/or rebate. $50,000 of the $800,000 will be utilized for activity delivery costs. It is projected for the City to assist in the retention and/or creation of 22 low- to moderate-income full-time equivalent jobs.
   Target Area: City-Wide
   Goals Supported: CD-2 Promote Economic Development Activity
   Needs Addressed: CD-2 Promote Economic Development Activity
   Target Date: 06/30/2020
   Estimated Number of Persons served: 22 low/mod income Full-Time Equivalent Jobs
   Location Description: City-Wide
   National Objective: Low/Mod Jobs
   Citation: 570.208 (a)(4)
   Matrix Code: 17D,18A
   Citation: 24 CFR 570.203 (a), 24 CFR 570.203 (b)
   Funding Source: Community Development Block Grant – Coronavirus (CDBG-CV);

OMB Control No: 2506-0117 (exp. 06/30/2018)

Fiscal Year: 2019-20 funds
HUD ID #:

2. **Public Services**

   Funding: $94,615 From the CARES Act - CDBG-CV Allocation

   Description: To assist public service activities affected by COVID-19; for example, assisting public service providers that offer job training, diagnosis, health services, equipment, and supplies for public services.
   Target Area: City-Wide
   Goals Supported: Services - Anti-Poverty
   Needs Addressed: CD-3 Provide Public Services for Residents
   Target Date: 06/30/2020
   Estimated Number of Persons served: TBD
   Location Description: City-Wide
   National Objective: Low/Mod Clients
   Citation: 570.208 (a)(2)
   Matrix Code: TBD
   Citation: 24 CFR 570.201(e)
   Funding Source: Community Development Block Grant – Coronavirus (CDBG-CV);
   Fiscal Year: 2019-20 funds
   HUD ID #:

3. **CDBG-CV Planning & Administration**

   Funding: $223,653 From the CARES Act - CDBG-CV Allocation

   Description: This project will fund administrative expenses related to the planning and administration of CDBG-CV projects and activities including but not limited to development of HUD plans, contract development, project monitoring, and enforcement of federal regulations.
   Target Area: N/A
   Goals Supported: N/A
   Needs Addressed: N/A
   Target Date: 06/30/2020
   Estimated Number of Persons served: N/A
   Location Description: 1010 10th Street, Modesto, CA 95354
   National Objective: N/A
   Citation: 570.206
   Matrix Code: 21A
   Funding Source: Community Development Block Grant – Coronavirus (CDBG-CV);
   Fiscal Year: 2019-20 funds
   HUD ID #:

4. **Emergency Shelter Support and Outreach**

   Funding: $250,000 From the CARES Act - ESG-CV Allocation

   Description: Individuals experiencing homelessness are at greater risk of exposure to a variety of infectious diseases including COVID-19. Taking effective sanitation measures can reduce the spread of COVID-19 for people who are unsheltered or living in emergency shelters. This Emergency Shelter Outreach Project will be

utilized to provide street outreach - equipping staff with masks, disposable gloves, etc. and hire additional staff to support infectious disease preparedness.
Target Area: City-Wide
Goals Supported: HM-1 Address Chronic Homelessness
Needs Addressed: HM-5 Coordinated Case Management
Target Date: 06/30/2020
Estimated Number of Persons served: 500 low/mod income persons
Location Description: City-Wide
National Objective: Low- and Moderate-Income Individuals
Citation: 570.208 (a)(1)
Matrix Code: TBD
Citation: TBD
Funding Source: Emergency Solutions Grants - Coronavirus (ESG-CV);
Fiscal Year: 2019-20 funds
HUD ID #:

5. **Homeless Prevention Rental Assistance**

   Funding: $220,000 From the CARES Act - ESG-CV Allocation

   Description: The City will provide Homeless Prevention short-term rental assistance to those affected by COVID-19. The objective of the Homeless Prevention Rental Assistance project is to prevent homelessness by paying for rent, utilities, arears, etc. This assistance will be in the form of a grant.
   Target Area: City-Wide
   Goals Supported: Services – Anti-Poverty
   Needs Addressed: HM-4 Prevent Homelessness for those At-risk & Rapid Rehousing
   Target Date: 06/30/2020
   Estimated Number of Persons served: 65 low/mod income persons
   Location Description: City-Wide
   National Objective: Low- and Moderate-Income Individuals
   Citation: 570.208 (a)(1)
   Matrix Code: TBD
   Citation: TBD
   Funding Source: Emergency Solutions Grants - Coronavirus (ESG-CV);
   Fiscal Year: 2019-20 funds
   HUD ID #:

6. **HMIS**

   Funding: $40,669 From the CARES Act - ESG-CV Allocation

   Description: To assist with updating the City's system and staff time associated with COVID-19 FEMA requirements.
   Target Area: N/A
   Goals Supported: N/A
   Needs Addressed: N/A
   Target Date: 06/30/2020
   Estimated Number of Persons served: N/A
   Location Description: 1010 10th Street, Modesto, CA 95354
   National Objective: N/A
   Citation: 570.107
   Matrix Code: TBD

Citation: §58.34(a)(9); §58.34(a)(3); §58.35(b)(3); and §58.35(a)(5);
Funding Source: Emergency Solutions Grants - Coronavirus (ESG-CV);
Fiscal Year: 2019-20 funds
HUD ID #:

In addition, for purposes of an expedited use of the CDBG-CV and ESG-CV the bill:

CDBG-CV

- Suspends the 15% cap on public services, including FY19 and FY20 CDBG funds;
- Eliminates in-person public hearings and allows grantees the option of holding virtual hearings;
- Allows HUD to waive further program requirements (except for requirements related to fair housing, nondiscrimination, labor standards, and the environment); and,
- Allows grantees to be reimbursed for COVID-19 response activities regardless of the date the costs were incurred.

ESG-CV

- Allows recipients to deviate from regular procurement standards when procuring goods and services to prevent, prepare for, and respond to the coronavirus;
- Recipients can use up to 10 percent of the allocation for administrative purposes. In addition to the 10 percent for admin, these funds can be used to provide hazard pay, including for time worked prior to the date of this bill, for staff working directly to prevent, prepare for, and respond to coronavirus among the homeless or persons at-risk of homelessness;
- The funds are not subject to the Citizen Participation requirements;
- No match requirement;
- No cap on emergency shelter activities;
- Funds can be used to provide temporary shelters (through leasing of existing property, temporary structures, or other means) to prevent, prepare for, and respond to the coronavirus; and,
- Environmental review standards will no apply to these funds.

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-208

RESOLUTION CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF MODESTO WATER MASTER PLAN (SCH # 2016082069) IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; ALONG WITH MAKING CERTAIN FINDINGS REGARDING SIGNIFICANT IMPACTS, FINDINGS SUPPORTING REJECTION OF ALTERNATIVES, ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM; ALL IN CONNECTION WITH APPROVAL OF THE PROJECT CONTEMPLATED BY THE FINAL ENVIRONMENTAL IMPACT REPORT

WHEREAS, the City's Utilities Department ("City") on August 26, 2016, published a Notice of Preparation for the City of Modesto Water Master Plan (Project), which identified potentially significant environmental impacts attributable to the improvements included in the proposed project, on which the City determined that an Environmental Impact Report ("EIR") was required, and

WHEREAS, the City published and distributed a Draft EIR dated October 2019 for the City of Modesto Water Master Plan (SCH # 2016082069) for public comment on October 15, 2019, in accordance with Section 15168 of the California Environmental Quality Act ("CEQA Guidelines"), and

WHEREAS, the Draft EIR was available for public comment for a period of 45 days as required by Section 21091 of CEQA, the close of the public comment period being December 2, 2019, in accordance with Section 21091 of the CEQA Guidelines, and

WHEREAS, during the 45-day public comment period the City received five letters commenting on the Draft EIR, and

WHEREAS, the City prepared written responses to all written comments received on the Draft EIR, said responses being contained in a Final EIR for the City of Modesto

Water Master Plan (SCH # 2016082069) ("Final EIR") prepared pursuant to Section 15089 of the CEQA Guidelines, and

WHEREAS, the Final EIR was published and distributed on April 13, 2020, and consists of the Draft EIR, a list of commenters, copies of written comments received, and responses to those comments that raise environmental issues, revisions to the text of the Draft EIR, as required by Section 15132 of the CEQA Guidelines, and

WHEREAS, CEQA requires that, in connection with the approval of a project for which an EIR has been prepared which identifies one or more significant environmental effects the lead agency make certain findings regarding those effects, and

WHEREAS, the City Council has received and considered the Final EIR that analyzed the potential environmental effects of the proposed Project.

NOW, THEREFORE BE IT RESOLVED by the City Council that it hereby has reviewed and analyzed the Final EIR and other information in the record, and has taken such other actions as are necessary and appropriate to make the following findings in respect to the Final EIR, and makes said findings:

1. That the Final EIR has been completed in compliance with CEQA; that the City Council has reviewed and analyzed the Final EIR and other information in the record and has considered the information contained therein, including the written and oral comments received at the public hearings on the Final EIR and the Project, prior to acting upon or approving the Project; and that the Final EIR represents the independent judgment of the City of Modesto; and

2. That the Findings and recommendations set forth in **Exhibit A**, and incorporated herein by reference, are made by the City Council as the City's findings under the California Environmental Quality Act ("CEQA") (Pub. Resources Code § 21000 *et seq.*) and the CEQA Guidelines (Cal. Code Regs., title 14 § 15000 *et seq.*) relating to the Project. The Findings provide the written analysis and conclusions of the City Council regarding the Project's environmental impacts and mitigation measures to the Project; and

3. That pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15093, the City Council of Modesto adopts and makes the following statement of overriding considerations regarding the remaining unavoidable impacts of the Project and the anticipated economic, social and other benefits of the Project.

a. Significant Unavoidable Impacts

With respect to the foregoing findings, as set forth in **Exhibit A**, and in recognition of those facts which are included in the record, the City has determined the following:

i. that the Project will contribute to significant and unavoidable cumulative impacts to Agricultural Resources (including cumulative impacts), Air Quality (including cumulative impacts), Greenhouse Gas Emissions and Energy Resources (including cumulative impacts), and Hydrology and Water Quality (including cumulative impacts), as described in **Exhibit B**.

These impacts cannot be avoided or substantially reduced by feasible changes or alterations to the Project, other than the changes or alterations already adopted.

b. Overriding Considerations

The City Council specifically adopts and makes this Statement of Overriding Considerations that this Project includes all feasible measures that would eliminate or substantially lessen the significant impacts of the Project on the environment, and that the remaining significant, unavoidable impacts of the Project are acceptable in light of the environmental, economic, social, and other considerations set forth herein because the benefits of the Project outweigh the significant and adverse impacts of the Project. The City Council finds that each of the overriding considerations set forth below, and each of the overriding considerations set forth in **Exhibit B**, constitutes a separate and independent ground for finding that the benefits of the Project outweigh its significant adverse environmental impacts and sets forth an overriding consideration warranting approval of the Project. These matters are supported by evidence in the record.

c. Benefits of the Proposed Project

The City Council has considered the Final EIR, the public record of proceedings on the proposed Project and other written materials presented to the City as well as oral and written testimony at all public hearings related to the Project, and does hereby determine that implementation of the Project as specifically provided in the Project documents would result in the substantial public benefits set forth below and in **Exhibit B**. The Proposed Program will:

i. Implement and support the City's economic goals and General Plan by planning for and providing water infrastructure in a timely and cost-effective manner to serve new and existing development;

ii. Clearly define the City's long-term water supply needs (from both groundwater and the Modesto Irrigation District's [MID's] surface water supplies) and identify the associated infrastructure required to deliver these supplies to existing and future customers;

iii. Provide the flexibility, system redundancy, and reliability at a reasonable cost to accommodate possible changing future conditions (regulatory, climate, additional conservation, etc.);

iv. Repair and replace aging water infrastructure;

v. Ensure adequate water infrastructure and services are available to serve new growth within the General Plan area, the City's sphere of influence (SOI), and the outlying service areas;

vi. Plan for state-of-the-art facilities that reliably and economically meet changing regulatory requirements;

vii. Provide safe and reliable water supply by planning for and constructing appropriately sized storage facilities, redundancies, and alternate (back up) power supplies for key facilities;

viii. Provide adequate storage capacity to meet operational, fire flow, and emergency storage needs;

ix. Maintain system pressures that meet regulatory requirements and peak demand conditions;

x. Provide transmission and distribution pipelines to safely and reliably convey water throughout the water system;

xi. Provide safe and reliable water that meets regulatory water quality requirements;

xii. Evaluate a groundwater aquifer storage and recovery program; and

xiii. Sustainably utilize and protect groundwater resources

The City Council has weighed the benefits of the proposed Project against its unavoidable environmental risks and adverse environmental effects identified in the Final EIR and hereby determines that those benefits outweigh the risks and adverse environmental effects and, therefore, further determines that these risks and adverse environmental effects are acceptable.

4. That the City Council finds that the Final EIR describes a range of reasonable alternatives to the project. However, none of the alternatives to the Project that

were determined to be potentially feasible in the EIR will avoid or substantially lessen the significant and unavoidable impacts of the project to a level of insignificance. Further, specific economic, legal, social, technological, or other considerations make infeasible the alternatives identified in the EIR which would reduce these impacts to a level of insignificance. The City Council finds and determines that these significant and unavoidable adverse impacts are acceptable and that the Project may be approved despite these impacts for the reasons specified in the Statement of Overriding Considerations. The City Council further finds that there are no additional feasible alternatives that the City Council could adopt at this time that would reduce the impacts summarized in **Exhibit B** to a less-than-significant level.

5. The City Council does hereby designate the Director of Utilities Department of the City of Modesto, at his office at 1010 Tenth Street, Modesto, California 95354, as the custodian of documents and the record of proceedings on which the decision is based.

6. The City Council does hereby make the foregoing findings with respect to the significant effects on the environment of such Project, as identified in the Final EIR, with the stipulations that all information in these findings is intended as a summary of the full administrative record supporting the Final EIR, which full administrative record should be consulted for the full details supporting these findings, and that any mitigation measures and/or alternatives that were suggested by commenters to the Draft EIR and were not adopted as part of the Final EIR are hereby expressly rejected for the reasons stated in the responses to comments set forth in the Final EIR and elsewhere in the record.

7. In compliance with the California Environmental Quality Act (CEQA Guidelines Section 15097), if the City Council has made findings required under paragraph (1) of subdivision (a) of Section 15091, where mitigation measures are required to avoid, substantially lessen, or reduce to a less-than-significant level the environmental effects of certain elements of the Project, as identified in the EIR, the lead agency must adopt a Mitigation Monitoring and Reporting Program to ensure that the Project mitigation measures identified in the EIR are implemented and the party responsible for their implementation is identified.

BE IT FURTHER RESOLVED, by the City Council that it hereby certifies the Final Environmental Impact Report for the City of Modesto Water Master Plan (SCH # 2016082069), **attached** as **Exhibits C1 & C2;** adopts the associated Mitigation Monitoring and Reporting Program, **attached** as **Exhibit D;** approves the Proposed Project; and directs staff to file a Notice of Determination.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Zoslocki, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT "A"

STATEMENT OF FINDINGS OF SIGNIFICANT IMPACTS

STATEMENT OF FINDINGS OF SIGNIFICANT IMPACTS AND REJECTION OF ALTERNATIVES

Pursuant to Public Resources Code Section 21081 and Section 15091 of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations 15000, et seq.), the City of Modesto cannot approve a project for which an Environmental Impact Report (EIR) has been certified which identifies significant effects on the environment unless it adopts findings with respect to each significant effect. Prior to approving the project, the City of Modesto (City) must also find that there are specific considerations that make infeasible the project alternatives identified in the EIR.

In Section A below, the City will make one or more of the following findings for each of the significant effects identified in the EIR, pursuant to Section 15091 of the State CEQA Guidelines:

1. Changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

2. Such changes or alterations are within the responsibility of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures identified in the EIR.

In Section B below, the City will make the following finding regarding each of the alternatives identified in the EIR:

> Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the program EIR.

SECTION A. FINDINGS REGARDING SIGNIFICANT IMPACTS

AESTHETICS

Impact AES-3: Degradation of Visual Character or Quality of Site and Surroundings During Construction

Finding:

Construction of proposed City of Modesto Water Master Plan (WMP) components, including new storage tanks, groundwater wells, pipelines, generators, and other capital improvement projects (CIPs) involving ground disturbing activities would be visible to various receptors near the construction work areas. For the various WMP components, nearby residents, patrons at nearby businesses, motorists, and recreationists using public roads would have temporary views of construction activities including heavy equipment operation, materials stockpiling of pipeline and other water system-related materials, and earth movement associated with trenching and grading. Views of pipeline construction activities would be likely be limited to several days at any given location since pipeline construction would likely progress at a rate of 200 to 400 feet per day. In contrast, construction of new and replacement wells would typically occur over a 1- to 1.5-year timeframe, and construction of new water storage tanks would extend over a longer period (typically several months up to 1.5 years, depending on size, construction method, site specific requirements, etc.). Depending on the size, wellhead treatment improvements typically require 3-12 months of construction and tank maintenance and repairs typically require 3-6 months of construction. Depending on where individual CIPs get built, views of these operations may be perceived as a degradation of the surrounding area's visual character. While such activities would be temporary and effects on the area's visual character would cease after construction is complete for a given CIP, disturbance could be significant for individual projects particularly if construction extends for over a year in a given area. Therefore, this impact would be significant.

Implementation of Mitigation Measure AES-1, which requires that staging areas be sited away from public areas and that work areas are maintained as clean as practical, would reduce this impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure AES-1: Locate Staging Areas Away from Public Areas and Install Screening.

For components located in residential areas and near public parks or trails, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences,

major roadways, parks and other public areas. To the extent practicable, staging areas shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials.

Impact AES-4: Degradation of Visual Character or Quality of Site and Surroundings During Program Operations

Finding:

Once constructed, all proposed pipeline components including fire flow improvements and grid improvements, extended and replaced water mains would be underground and would not be visible. Underground components would therefore have no impacts on the visual character of the surrounding area.

Aboveground components that would be constructed include new storage tanks, buildings to house booster pump stations and groundwater wells, and new or replacement water pumps at wells and/or booster pump stations. Wellhead treatment facilities will depend on the treatment method, and typically will include (but are not limited to) piping, treatment tanks approximately 15 feet high, monitoring equipment and appurtenances, structures and enclosures. Emergency generator sizing is dependent on the application but can be 20 feet long by 9 feet wide by up to 15 feet high with fuel storage. In addition, ongoing system security enhancements would involve aboveground improvements such as new fencing, security signage, lighting and other security measures at well and tank sites. These facilities would be visible from surrounding areas and could alter the visual character of each individual site. Aboveground storage tanks could be as high as 35 feet and have a diameter up to 250 feet, while partially buried tanks could have an aboveground height between 10 and 15 feet and a diameter up to 250 feet. Based on other pump station buildings seen throughout the Modesto region, associated pump station buildings may be approximately 20 feet tall and encompass an area of 2,000 to 2,500 square feet. Other ancillary features that may be visible include new outdoor lighting and fencing and gates around the perimeter of new water infrastructure. Views of these facilities may be available from residential and agricultural areas, public roadways, parks, and other public areas.

While these facilities are unlikely to degrade the visual character or quality of views from agricultural areas along the outskirts of Modesto (northern, eastern and western areas of Modesto), they have potential to degrade the visual character or quality of views from public recreation and residential areas as these viewers tend to have longer duration views and have an expectation of higher quality views. While the new water storage tanks would be constructed on parcels in predominantly agricultural areas, limited views would also be available from nearby residences that typically have a higher visual sensitivity. These tanks would also be visible from adjacent public roads and due to the large size of these facilities, would likely obscure views of orchard row crops and, depending on the vantage point, the Sierra Nevada mountain range in the distance. For this reason, impacts related to degradation of the visual character or quality of the site and surrounding area would be considered significant.

Implementation of design considerations as described in Mitigation Measures AES-2 would reduce this impact. Therefore, this impact would be considered less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure AES-2: Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Setting.

Where wells, tanks, pump stations and other above-ground facilities are located in proximity to or are readily visible from residential areas, recreational areas, or public roadways, the facility and fencing shall be designed to be consistent with the surrounding setting, to the maximum extent feasible. The following design elements shall be used to enhance the aesthetic appearance of proposed facilities and to integrate them with the existing visual setting:

- New storage tanks and pump station buildings shall be set back from public views and, upon completing Mitigation Measure AES-2, the City and/or contractor shall consider partially burying tanks to minimize view obstructions.
- Proposed facility designs shall integrate elements such as color, materials, and pattern of the surrounding landscape.
- The exterior of aboveground facilities shall be painted or include appropriate concrete admixtures to achieve low-glare, earth-tone colors that blend with the surrounding terrain and visual setting.
- Wherever possible, use of unpainted metallic surfaces and other reflective sources that may cause increased levels of reflectivity shall be eliminated.
- Wherever possible, install native landscaping and/or fencing to help screen views of the water treatment plant, pump station, and water storage tanks from public roads and adjacent residences.
- Any outdoor night lighting shall be motion-activated and include baffles that direct lighting onto the facility and minimize light spillage onto adjoining properties.

Impact AES-5: Permanent Source of Substantial Light or Glare

Finding:

As described above under Impact AES-4, once constructed, all pipelines would be underground and would therefore not result in a new source of substantial light or glare.

New aboveground facilities that require on-site exterior lighting include new or replacement booster pump stations, storage tanks, wells, wellhead treatment facilities, generators, and water system security enhancements. New lighting at these facilities would be consistent with outdoor lighting currently used at similar facilities found throughout the Modesto area. Exterior coating of new pump stations and tanks would appear similar to existing structures seen throughout Modesto, and earth tones with non-reflective finishes would be used to coat aboveground components. However, because the exterior coating of proposed facilities has not been determined for aboveground facilities and there could be light spillage onto adjoining properties, permanent light or glare impacts would be considered significant.

Implementation of Mitigation Measure AES-2 would ensure that outdoor lighting is motion-activated and directed downward, and that the exterior of new facilities use non-reflective finishes, reducing this impact to less than significant with mitigation.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure AES-2: Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Setting.

See the description under Impact AES-4 above.

AGRICULTURAL RESOURCES

Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use

Finding:

For the purpose of this analysis, Program components preliminarily located in or near Farmland areas were evaluated as if they would be located in Farmland, despite the potential for changes in their actual location or land use designation. Therefore, the evaluated impact area and potential impacts discussed below may overstate the Proposed Program's actual impact. Program components located within the Baseline Developed Area or Downtown Area as identified in the *City of Modesto Urban Area General Plan* (City of Modesto 2019a) are considered to have minimal effect on agricultural lands and do not require mitigation for conversion of Farmland (City of Modesto 2019a).

The impacts of development of the urban area of Modesto have been previously considered in the City of Modesto's General Plan Master EIR (City of Modesto 2019b) and were found to be significant and unavoidable. While the majority of

proposed pipelines would be constructed within existing roadways or in urban/developed areas, some proposed build-out pipelines and grid improvements in Del Rio would be installed on land that is designated as Prime Farmland. Some build-out pipelines in the northeastern portion of the study area would be installed on land designated as Unique Farmland. Prior to constructing build-out pipelines on agricultural or undeveloped lands, the City typically requires developers to provide right-of-way dedications for utility improvements. Ground disturbing activities associated with these improvements would temporarily affect lands designated as Farmland. All of these pipeline improvements would be installed to serve areas planned for growth and would involve either open trench methods or trenchless methods at irrigation or utility crossings (e.g., jack and bore methods). Since the pipeline components would be underground, any disturbance to Farmland would be temporary, Farmland could be returned to pre-construction conditions after construction is complete, and land could continue to be used for agricultural purposes.

Aside from build-out pipelines, several water storage tanks and groundwater wells would be constructed on Prime Farmland or Unique Farmland. The proposed wells and tanks would result in the permanent conversion of approximately 10 acres of Farmland. This impact would be significant.

Considering the Stanislaus Local Area Formation Commission's (LAFCO's) Agricultural Preservation Policy (2015) and pursuant to Policy 2.15 in the *Stanislaus County General Plan* (Stanislaus County 2016), the County policy requires that agricultural land converted to residential use be replaced at a 1:1 ratio with agricultural land of equal quality in Stanislaus County. However, since the Proposed Program is not a residential project, these policies do not apply to the Program. While Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing agricultural easements, the City has determined that this program is infeasible for the following reasons: (1) Stanislaus County policy is to mitigate the loss of and preserve Prime Farmland through the County's Farmland Mitigation Program, which is designed to address loss of farmland resulting from impacts of residential development, and the County policy is not to burden and increase the cost of new and improved public infrastructure that is needed by the community; and (2) the purchase of an agricultural conservation easement over other off-site agricultural land would not ultimately avoid or reduce the impact of converting Prime Farmland to non-agricultural uses caused by the Proposed Program because there still would be a net reduction in the total amount of Prime Farmland and therefore the easement over other land would not reduce the impact to a level of insignificance. No other feasible mitigation measures, such as restoration of Prime Farmland that has been previously converted or participation in another agricultural conservation easement program, have been identified to further reduce this impact.

As such, the City finds that no feasible changes or alterations have been identified which would lessen the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

Considering all of the WMP components as a whole, while construction-related impacts of several components would be temporary, some WMP components (e.g., wells and water storage tanks) would result in permanent conversion of Farmland. As described above, Stanislaus County's Farmland Mitigation Program is infeasible because it was intended to provide a mechanism for residential projects (not public infrastructures projects) to mitigate impacts associated with loss of Prime Farmland. No further feasible mitigation has been identified that could further reduce the Proposed Program's impacts related to permanent conversion of Farmland. Restoration and/or recovery of Farmland from existing urban uses to offset the loss of Farmland could mitigate the loss caused by the Proposed Program. However, such a measure would be unreasonably costly and inefficient and would, therefore, be infeasible. Therefore, the Proposed Program's overall impact would be significant and unavoidable.

Impact AG-3: Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use

Finding:

The Proposed Program would not directly or indirectly induce substantial population growth during construction but could result in the conversion of farmland to non-agricultural uses. The impacts of development of the urban area of Modesto have been previously considered in the City of Modesto General Plan Master EIR (City of Modesto 2019b) and were found to be significant and unavoidable.

As such, the City finds that no feasible changes or alterations have been identified which would lessen the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

This impact is discussed in more detail under Impact PH-3 below. Mitigation for specific development proposals that involve conversion of agricultural land, such as Mitigation Measure AG-1, would compensate for this impact; however, it would not avoid the conversion and reduce the impact to a less-than-significant level. In addition, the specifics regarding future development that may result in agricultural conversion are not known at this time, and implementation of this mitigation measure for such development is not considered feasible within the scope of the Proposed Program. Therefore, the Proposed Program's overall impact would be significant and unavoidable.

<u>AIR QUALITY</u>

Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan

Finding:

The San Joaquin Valley Air Pollution Control District (SJVAPCD) established mass emission thresholds of significance for criteria pollutant emissions to be consistent with levels required to be consistent with the SJVAPCD air quality plans. Thus,

projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the applicable air quality plans provided there are no individual measures listed in the air quality plans that the project would conflict or obstruct.

The Proposed Program would follow all federal, state, and local regulations and policies related to sources of air pollutants, including applicable general plan policies. In addition, construction of the Proposed Program would follow local air district regulations for fugitive dust, volatile organic compounds (VOCs), and nitrogen oxide (NO_X) emissions. Construction of various program-level CIPs may result in NO_X emissions that exceed the 10 tons per year emission threshold and could result in other criteria pollutant emissions that exceed SJVAPCD's thresholds; therefore, such components could obstruct implementation of applicable air quality plans, which would be a significant impact. It is also unknown at this time if the amount of operational emissions would exceed any significance threshold. This impact would be significant. Mitigation measures that would address construction emissions and operational emissions are discussed under Impact AQ-2. It is assumed that emissions from permitted sources would be addressed under the applicable permit process and any excess emissions would purchase offsets as required to obtain permits; however, this would not address construction or operational emissions which do not require permits.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Mitigation measures that would address construction emissions and operational emissions are discussed under Impact AQ-2. It is assumed that emissions from permitted sources would be addressed under the applicable permit process and any excess emissions would purchase offsets as required to obtain permits; however, this would not address construction or operational emissions which do not require permits.

For the reasons described above, the overall Proposed Program and the various CIPs could generate emissions greater than those accounted for in the applicable air quality plans. Therefore, the Proposed Program could obstruct or conflict with applicable air quality plans and would have a significant and unavoidable impact.

Impact AQ-2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation

Finding:

The SJVAPCD considers emissions of particulate matter of aerodynamic radius of 10 micrometers or less (PM10) to be the greatest pollutant of concern when assessing construction-related air quality impacts. The SJVAPCD has determined that compliance with its Regulation VIII and the implementation of all feasible control measures specified in its *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI; San Joaquin Valley Air Pollution Control District 2015), constitute sufficient mitigation to reduce construction-related PM10 emissions to less-than-

significant levels and to minimize adverse air quality effects. Construction activities for individual program-level components would generate emissions of criteria air pollutants via the use of heavy equipment, worker vehicle trips, and material hauling truck trips.

Operation of the program-level components would include the operation, inspection, and maintenance of new tanks, emergency generators, well stations, pump stations, lift stations and water treatment facilities. These activities would result in the direct emission of criteria air pollutants through employee vehicle trips and infrequent use of backup generators primarily during emergencies or power outages, and emissions of VOCs and combustion products associated with vehicle trips, maintenance equipment, generator use, and water treatment operation. The operation and maintenance of other WMP facilities would not require a substantial change in employees compared to existing conditions. Emissions from the operation of emergency generator sources would not be substantial since any new or modified emergency generators would go through the SJVAPCD permit process to ensure that project emissions are below the appropriate significance threshold for permitted sources and offsets provided if required.

All construction projects must abide by Regulation VIII. Consequently, the air quality analysis assumes that the City and its contractors will comply with Regulation VIII and such compliance will be sufficient to eliminate any potentially significant air quality effects generated by construction activities. Implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 would reduce this impact to a less-than-significant level. In addition, the SJVAPCD recommends the measures listed below to reduce exhaust pollutant emissions from heavy construction equipment to less-than-significant levels:

- Water exposed surfaces three times daily.
- Cover soil stockpiles with a tarp.
- Water unpaved haul roads three times daily.
- Apply soil stabilizers to inactive areas.
- Replace ground cover in disturbed areas quickly.
- Use aqueous diesel fuel in diesel equipment.
- Use diesel particulate filters on diesel equipment.
- Use cooled exhaust gas recirculation on diesel equipment.

Adherence to these mitigation measure and requirements would reduce pollutant emissions below significance thresholds and would ensure that impacts would be less than significant.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the Proposed Program's overall impacts would be less than significant with mitigation.

<u>Mitigation Measure AQ-1: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM10</u>

The following controls are required to be implemented by the City or its contractor at all construction sites.

- All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant.

- All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of water during work or by presoaking.

- When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.

- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant.

- Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

- Any site with 150 or more vehicle trips per day will prevent carryout and trackout.

<u>Mitigation Measure AQ-2: Implement Enhanced Control Measures for Construction Emissions of PM10</u>

The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM10 impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements).

1. Limit traffic speeds on unpaved roads to 15 miles per hour (mph).

2. Install sandbags or other erosion-control measures to prevent silt runoff.

The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason.

1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
2. Install wind breaks at windward sides of construction areas.
3. Suspend excavation and grading activity when winds exceed 20 mph.
4. Limit the area subject to excavation, grading, and other construction activity at any one time.
5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.

Mitigation Measure AQ-3: Implement Control Measures for Operation Emissions of PM10 and for Ozone Precursors (Reactive Organic Gases [ROG] and NO_X)

In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified water system sites when required to mitigate significant PM10 and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.

Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard

Finding:

No single CIP would be sufficient in size, by itself, to cause nonattainment of the regional air quality standards. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, none of the program-level components would result in mass emissions above the significance threshold. However, these measures would not completely avoid emissions; therefore, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Program-level components would be located in an area that is in non-attainment for federal and state standards for ozone and particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5) and state standards for PM10. Thus, the

combined emissions of past, present, and probable future projects would have a significant cumulative impact on air quality in the project area. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 (described above for Impact AQ-2), none of the program-level components would result in mass emissions above the significance threshold. However, because these measures would not completely avoid emissions, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain significant and unavoidable.

Impact AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations

Finding:

During construction activities for the proposed components, construction emissions have the potential to affect sensitive receptors located at and near program-level component sites. These sensitive receptors include single-family residential units and schools around proposed improvement sites. Therefore, nuisances associated with fugitive dust and construction activity emissions would affect adjacent residences. During operational activities, stationary emission sources would also emit pollutants. This would be a significant impact. Implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 (described above for Impact AQ-2) would reduce the impact on sensitive receptors from fugitive dust and other pollutants to a less-than-significant level.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 (described above for Impact AQ-2), the impact on sensitive receptors from fugitive dust and other pollutants would be less than significant with mitigation.

<u>BIOLOGICAL RESOURCES</u>

Impact BIO-1: Impacts on Special-Status Plants

Finding:

Special-status plants may occur in the vicinity of Program components in habitats such as grassland, wetlands, vernal pools, and valley and foothill riparian. Valley and foothill riparian habitat occurs along Dry Creek and the Tuolumne River. Several buildout pipelines, such as those in North Modesto near Cottonwood Drive or South Modesto near Ironside Drive, and a fire flow improvement pipeline in South Modesto near Crows Landing Road and El Paso Avenue, occur in ruderal grasslands. Wetlands may occur in riparian habitat associated with Dry Creek and the Tuolumne River, as well as potentially in some agricultural lands. Impacts to special-status plants could include removal of individuals, and indirect effects from sedimentation or changes to hydrology. Impacts to special-status plants during construction of certain Program components would be minimized by using trenchless or other non-open cut construction method pipeline construction for crossings of the Tuolumne River and Dry Creek, where wetland and riparian habitat

is located. The only Program components that would cross the Tuolumne River and Dry Creek are components FTGRID-01 and FTGRID-04, which are both new 16-inch diameter pipelines for future grid improvements. A frac-out[1] during trenchless pipeline construction could result in impacts to special-status plants such as removal of individuals or reduction in special-status plant habitat quality. These impacts would be significant.

Several mitigation measures are proposed to avoid, reduce, or compensate for impacts to special-status plants. Mitigation Measure BIO-1 would minimize the area of disturbance to habitat for special-status plants. Where disturbance within special-status plant habitat cannot be avoided, Mitigation Measure BIO-2 would identify the extent to which special-status plants are present and could be adversely affected by the project. For special-status plants found to be present, Mitigation Measure BIO-3 would require monitoring to confirm avoidance of identified special-status plant populations, and compensatory mitigation should special-status plants be adversely affected. Implementation of these measures would reduce this impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels:

Mitigation Measure BIO-1: Perform Focused Surveys for Special-status Plant Species.

Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species. Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site as determined by the botanist. If special-status plants may be directly or indirectly affected, then Mitigation Measure BIO-2 shall be implemented.

Mitigation Measure BIO-2: Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species.

If special-status plants are detected, the City shall implement the following measures to avoid, minimize, and compensate for impacts on special-status plant species:

[1] "Frac-out" is the inadvertent return and release to the environment of drilling lubricant during HDD. This is a potential concern when HDD is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD procedure uses bentonite slurry, which is a fine clay material that is used as a drilling lubricant. Bentonite is non-toxic and is commonly used farming practices, but benthic invertebrates, aquatic plants, and fish and their eggs can be smothered by the fine particles if bentonite is discharged to waterways (California Public Utilities Commission [CPUC] 2003).

- The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area.

- If avoidance is not feasible, the Program proponent will consult with either California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS), or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival.

- The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the Rare Plant Plan. If success criteria are not met at that time, then mitigation activities and monitoring will continue until success criteria are met.

- As part of the Rare Plant Plan, the program proponent, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation,

maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.

Impact BIO-2: Impacts on Vernal Pool Branchiopods and Western Spadefoot

Finding:

Vernal pool branchiopods with the potential to occur in the study area include vernal pool fairy shrimp and vernal pool tadpole shrimp (*Lepidurus packardi*). These species could potentially occur within vernal pools located in the study area. Western spadefoot (*Spea hammondii*) also has the potential to occur in the study area and uses vernal pools as breeding habitat. Proposed Program components that are not located in grasslands and pastures are not anticipated to have impacts on vernal pool habitat or inhabitants. If construction of WMP components occurs in the microwatershed of vernal pools, such activity could result in sedimentation and alteration of hydrology and drainage patterns, which could impact habitat for vernal pool branchiopods and breeding habitat for western spadefoot.

Many water quality impacts associated with Proposed Program construction activities would be minimized or avoided through compliance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a stormwater pollution prevention plan (SWPPP). Compliance with this permit and implementation of a SWPPP would reduce the potential for sediments and contaminants to enter pools or depressions where vernal pool branchiopods may occur and western spadefoot may breed, but construction impacts of individual Program components could nevertheless be significant. Implementation of Mitigation Measures BIO-3 and BIO-4 would minimize potential adverse effects to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels:

<u>Mitigation Measure BIO-3: Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.</u>

Prior to implementation of proposed projects in areas that could contain habitat for vernal pool branchiopods, a qualified biologist will conduct surveys to determine

whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City will avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.

Mitigation Measure BIO-4: Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat.

If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided, the City shall implement the following measures:

- After construction, restore surface topography and drainage to pre-construction conditions; and
- Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.

Impact BIO-3: Impacts on Valley Elderberry Longhorn Beetle

Finding:

Valley elderberry longhorn beetle (VELB) is a federally threated species, which is dependent on its host plant, elderberry. Elderberry shrubs may occur in riparian areas and along canals, or occasionally in non-riparian areas. Impacts of Proposed Program components located where elderberry shrubs are growing could include removal of elderberry shrubs, or ground disturbance within the rooting zone of these shrubs. If these shrubs were occupied by VELB, shrub removal or mortality could result in adverse effects on VELB. This would be considered a significant impact. Trimming of elderberry shrubs could result in injury or death of eggs, larva, or adults depending on the timing and extent of the trimming, a significant impact. No adverse impacts to the VELB would occur if trimming does not remove stems/branches that are ≥1 inch in diameter and is conducted between November and February (USFWS 2017).

Based on the above, the Proposed Program could affect elderberry shrubs which provide habitat for VELB. If the shrubs are occupied and affected during construction, adverse effects on this federally listed species could occur Implementation of Mitigation Measure BIO-1 would identify the location of elderberry shrubs on a project-specific basis. Implementation of Mitigation Measures BIO-5 through BIO-7 would reduce impacts on VELB to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels:

Mitigation Measure BIO-1: Perform Focused Surveys for Special-status Plant Species.

See the description under Impact BIO-1 above.

Mitigation Measure BIO-5: Avoid Impacts on VELB Habitat.

The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed components that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017). This shall include the following avoidance measures:

- If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal.

- The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities.

- No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level.

- A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.

- A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and should be discussed with USFWS.

- As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March – July).

- If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter.

- Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method.

- Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry.

- Erosion control shall be implemented, and the affected area shall be re-vegetated with appropriate native plants.

If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.

Mitigation Measure BIO-6: Implement VELB Compensatory Mitigation, if Necessary.

The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per Mitigation Measure BIO-7.

Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS.

Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used.

Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.

Mitigation Measure BIO-7: Transplant Elderberry Shrubs if Avoidance Is Not Feasible.

The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to Mitigation Measure BIO-6, the shrub shall be transplanted.

Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed:

- A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.

- Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, global positioning system (GPS) location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the California Natural Diversity Database (CNDDB).

- Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves.

- Transplanting shall follow the most current version of the American National Standards Institute (ANSI) A300 (Part 6) guidelines for transplanting (www.tcia.org).

Impact BIO-4: Impacts on Special-status Fishes

Finding:

Habitat in the study area for special-status fish species is limited to the Tuolumne River and Dry Creek. Special-status fish that are known to occur in the Tuolumne River include Chinook salmon (Central Valley fall- and late fall-run evolutionarily significant unit [ESU]), Central Valley steelhead, Sacramento splittail, and hardhead. These species may also be present in Dry Creek. Adult steelhead and Chinook salmon migrate through the Tuolumne River to reach spawning habitat upstream. Juvenile salmonids pass through the study area on their way out to the Pacific Ocean. Sacramento splittail may be present in this portion of the Tuolumne River in wet years. Hardhead are also known be present.

Program Components (except Future Grid Pipelines FTGRID-01 and FTGRID-04). Construction of these Proposed Program components would not occur in

suitable habitat for special-status fishes. However, impacts to water quality in the Tuolumne River, Dry Creek, the Stanislaus River, and the San Joaquin River could adversely affect special-status fishes. Construction of proposed components would include grading, excavation, trenching, or other construction-related activities that could loosen soils and increase the risk of erosion or sediment transport. Increases in sedimentation and turbidity have been shown to adversely affect fish physiology, behavior, and habitat. The effects of turbidity on fish include gill trauma, avoidance of habitat, changes in forage ability, increased predation risk, and reduced territoriality. The deposition of excessive fine sediment on the stream bottom could eliminate habitat for aquatic insects (a food source for fish); reduce density, biomass, numbers, and diversity of aquatic insects and aquatic vegetation; and reduce the quality of spawning habitat for fish. Impacts to special-status fish from water quality include reduction in habitat quality, injury, or mortality. These impacts would be considered significant.

Construction activities that take place near these creeks and rivers, such as existing grid improvement pipelines EXGRID-02, EXGRID-05, and EXGRID-06, could result in discharges of hazardous materials if adequate precautions are not taken. The City would comply with all local, state, and federal regulations concerning hazardous materials handling and containment during construction of Program components. This includes standards for any secondary containment and countermeasures for hazardous materials used in construction and operation, and spill response procedures in case of an accidental release. Implementation of these requirements would prevent substantial hazardous materials-related water quality impacts from occurring during construction activities.

Water quality impacts of Program activities would be avoided or minimized through implementation of best management practices (BMPs) and compliance with the NPDES General Construction Permit and SWPPP requirements. Implementation of Mitigation Measure HYD/WQ-1 would further reduce soil erosion. Implementation of Mitigation Measure HYD/WQ-1 would reduce this impact to a level that is less than significant with mitigation.

Future Grid Pipelines FTGRID-01 and FTGRID-04. Construction-related impacts to special-status fish and their habitat would be minimized by using trenchless or other non-open cut construction techniques for these future grid components crossing the Tuolumne River and Dry Creek. Impacts to special-status fish and their habitat may result from a frac-out of drilling fluids during trenchless construction. Drilling fluids typically consist of bentonite, which is non-toxic to aquatic life. However, a frac-out may result in a temporary increase in turbidity or sedimentation that can adversely affect aquatic organisms by covering spawning and feeding areas and clogging fish gills. These impacts are considered significant. Mitigation Measure HYD/WQ-1 would be implemented to reduce impacts in the event of a frac-out. With implementation of Mitigation Measure HYD/WQ-1, this impact would be less than significant with mitigation.

Trenchless construction under the Tuolumne River and/or Dry Creek would not result in any noise or vibration impacts on fish. Vibration from the drilling machinery is minimal and because the tunneling operation occurs below the river, it would be attenuated to an imperceptible level before it reaches the river bottom. No

perceptible noise or vibration would translate into the water. Other non-open cut construction methods are also not anticipated to result in noise or vibration impacts on fish. There would be no impacts from noise or vibration from drilling machinery on special-status fishes.

Construction activities of Program components FTGRID-01 and FTGRID-04 could result in water quality impacts which could adversely affect special-status fish. For example, temporary increases in sediment discharges and increased turbidity, and in the event of an accidental spill, hazardous materials could adversely affect water quality. Such impacts would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements. Implementation of Mitigation Measure HYD/WQ-1 would further reduce soil erosion or loss of topsoil and reduce adverse effects on special-status fish. With implementation of Mitigation Measure HYD/WQ-1, impacts would be less than significant with mitigation.

Overall Conclusion. WMP components near the Tuolumne River, and Dry Creek, Stanislaus River, and the San Joaquin River have the potential to adversely affect special-status fish species due to construction-related effects on water quality (e.g., increased sedimentation, turbidity, and hazardous materials in the event of an accidental spill). Implementation of Mitigation Measure HYD/WQ-1 would minimize adverse effects on water quality and reduce adverse effects on special-status fish. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measure HYD/WQ-1, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels:

Mitigation Measure HYD/WQ-1: Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods. (only FTGRID-01 and FTGRID-04)

See the description under Impact HYD/WQ-1 below.

Impact BIO-5: Impacts on Western Pond Turtle

Finding:

Potentially suitable habitat for western pond turtle occurs in the Tuolumne River and Dry Creek. Irrigation ditches with emergent vegetation provide marginally suitable habitat because they generally lack basking sites, the banks are very steep, and they are not perennially inundated. Canals do not provide suitable habitat.

Impacts to western pond turtle would be minimized by using trenchless pipeline construction or other non-open cut pipeline construction where this species is most likely to occur, in the Tuolumne River and Dry Creek. The only Program components that would cross the Tuolumne River or Dry Creek are future grid improvement components FTGRID-01 and FTGRID-04. The majority of Program components

would occur in urban portions of Modesto or the outlying WMP service areas where habitat for western pond turtle is not present. Western pond turtle may also occur in upland areas. Construction activities that directly impact western pond turtle or their nests could result in significant impacts to this species.

Mitigation Measure BIO-8 would avoid impacts to suitable habitat for this species to the extent feasible. Where disturbance of suitable habitat is unavoidable, the mitigation measure would require that impacts be minimized through pre-construction surveys, establishment of buffers, and monitoring. With implementation of this mitigation measure, impacts would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measure, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-8: Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.

Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, ponds, and sloughs where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented.

- The City or its contractors will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating turtles.

- If a turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site.

- The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat.

- If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).

Impact BIO-6: Impacts on Burrowing Owl

Finding:

Burrowing owls could occur within grasslands, agricultural habitats and canal and railroad right of ways where burrows are present. Several buildout pipelines such as those in North Modesto near Cottonwood Drive or South Modesto near Ironside Drive, and a fire flow improvement pipeline in South Modesto near Crows Landing Road and El Paso Avenue occur in ruderal grasslands. Other Program components such as buildout pipelines in the northern portion of the contiguous study area, such as in the vicinity of the intersection of Oakdale Road and Mable Avenue and the vicinity of the intersection of Bangs Avenue and American Avenue, occur in agricultural habitats. Implementation of Mitigation Measure BIO-1 would identify burrowing owl habitat on a project-specific basis. If this species is present in the vicinity of proposed components, construction activities could disturb burrowing owls through noise, visual distraction, or direct impacts to occupied habitat. These impacts would be considered significant.

Implementation of Mitigation Measure BIO-9 would reduce impacts to this species. Where disturbance is unavoidable, impacts to burrowing owls would be minimized through establishing buffers around active burrows. If active burrows cannot be avoided, passive relocation techniques may be used. If relocation occurs, then compensation would be provided to offset impacts. With implementation of this mitigation measure, impacts would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measure, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels.

<u>Mitigation Measure BIO-9: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas If Necessary.</u>

Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented.

If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season. Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game [CDFG] 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW.

If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.

Impact BIO-8: Impacts on Raptors, Including Special-status Species

Finding:

Numerous raptors are known to nest and forage in habitats in the study area. Non-listed raptors commonly observed in the vicinity of the study area include red-tailed hawk, American kestrel, red-shouldered hawk, and merlin (*Falco columbarius*), among others. Special-status raptors (excluding burrowing owls, golden eagle, and bald eagle) known to occur in the vicinity of the study area include Swainson's hawk, white-tailed kite, and northern harrier. These species have been observed in the study area and are known to nest locally. Riparian trees along the Tuolumne River, Stanislaus River, and Dry Creek provide potential nesting habitat for Swainson's hawk and white-tailed kite; isolated mature trees in adjacent fields may also be used for nesting. These raptors commonly forage in agricultural fields. Northern harriers nest on the ground in open areas and may nest in agricultural fields. Program components near riparian habitat include future grid pipeline improvements FTGRID-01 and FTGRID-04, and existing grid improvement pipelines EXGRID-02, EXGRID-05, and EXGRID-06. Although the majority of Program pipelines are within existing roadways, many of these roadways are located adjacent to agricultural habitat.

Construction in the vicinity of raptor nest sites could disturb nesting raptors through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., tree removal or ground disturbance). Impacts to Swainson's hawk and white-tailed kite would be minimized by using trenchless construction techniques for future grid pipeline improvement FTGRID-01 and FTGRID-04 for crossing of the Tuolumne River and Dry Creek, where nesting is most likely to occur. However, special-status raptors could nest in relatively close proximity to trenchless construction operations, and in other portions of the study area. Thus, there would be the potential for disturbance of nesting raptors. Impacts that result in nest abandonment, nest failure, or reduced health or vigor of nestlings are considered significant.

Construction of Program components such as such as new tanks (e.g., North and South Modesto storage tanks) and wells in agricultural or grassland habitat could

result in the loss of suitable foraging habitat for Swainson's hawk. This impact would be considered significant.

Implementation of Mitigation Measure BIO-10, which would require preconstruction surveys for nesting raptors and establishment of no-disturbance buffers, and Mitigation Measure BIO-11, which would require mitigation for the loss of suitable foraging habitat, would reduce this impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-10: Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species.

The City shall implement the following measures.

- If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests.

- If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.

Mitigation Measure BIO-11: Compensate for Loss of Raptor Foraging Habitat.

The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's hawk foraging habitat mitigation bank that covers the study area, such as the Dutchman Creek Conservation Bank.

The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program-level components are assumed to be within 1 mile of an active Swainson's hawk nest tree. Mitigation

credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows:

- 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's hawk; or

- 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands.

The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.

Impact BIO-9: Impacts on Special-status Passerine Species and Birds Protected under the Migratory Bird Treaty Act (MBTA)

Finding:

Program Components (except Future Grid Improvements FTGRID-01 and FTGRID-04). Special-status passerines that may nest in the vicinity of Program components include tricolored blackbird, loggerhead shrike (*Lanius ludovicianus*), yellow-breasted chat (*Icteria virens*) and yellow warbler (*Dendroica petechia*). These special-status passerines nest in riparian habitat. Program components near riparian habitat include existing grid improvement pipelines EXGRID-02, EXGRID-05, and EXGRID-06. Various birds protected by the MBTA could also occur in the vicinity of any Program components. Construction could disturb nesting passerines through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Nest failure or removal of a nest are considered significant impacts.

Future Grid Pipelines FTGRID-01 and FTGRID-04. Portions of the future grid pipelines FTGRID-01 and FTGRID-04 cross sensitive habitat in the Tuolumne River and Dry Creek where nesting of special-status passerines are most likely to occur. Impacts would be minimized by using trenchless construction techniques for activities crossing these habitats. However, construction could still disturb nesting passerines through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Nest failure or removal of a nest are considered significant impacts.

Overall Conclusion. Construction activities that cross the Tuolumne River and Dry Creek could affect habitat where special-status passerines are likely to be present. Implementation of Mitigation Measure BIO-12 would minimize impacts to passerines by conducting pre-construction surveys during the nesting season and

establishing buffers around active nests. With implementation of this mitigation measure, impacts would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measure, identified in the Program EIR, will reduce these potentially significant effects to less-than-significant levels.

Mitigation Measure BIO-12: Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas if Necessary.

The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required.

If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.

Impact BIO-11: Impacts on Riparian Habitat and Other Sensitive Natural Communities

Finding:

Future grid pipelines FTGRID-01 and FTGRID-04 would traverse riparian habitat associated with Dry Creek and the Tuolumne River, respectively. Impacts to riparian habitat would be avoided by the use of trenchless construction techniques in riparian habitat. If a frac-out were to occur beneath riparian habitat, direct impacts on this habitat could occur.

Additionally, although the majority of Program components would take place in urban/developed habitats, vernal pool habitat may be present in areas where Program components would be constructed in grasslands and pastures. Vernal pool habitats would be identified on a project-specific basis. Construction-related impacts on vernal pool habitats could include sedimentation or alteration in drainage patterns. These impacts are considered significant.

Implementation of Mitigation Measure HYD/WQ-1, which would require preparation of a frac-out Contingency Plan; and Mitigation Measures BIO-3 and BIO-4, which would require avoidance and minimization of impacts on vernal pools, would reduce this impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measure HYD/WQ-1, described below and identified in the Program EIR, and Measures BIO-3, and BIO-4, described above and identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels.

Impact BIO-12: Impacts on Federally Protected Wetlands

Finding:

Program Components (except Future Grid Pipelines FTGRID-01 and FTGRID-04). The study area contains wetlands and waters that are likely to be regulated by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency under Section 404 the Clean Water Act (CWA). In the study area, the Tuolumne River is considered Traditional Navigable Waters of the U.S., as is the San Joaquin River adjacent to the Grayson outlying service area and the Stanislaus River adjacent to the Del Rio outlying service area. Other wetlands and waters with a "significant nexus" to the Tuolumne, San Joaquin, or Stanislaus rivers would also be considered jurisdictional waters of the U.S. Wetlands and waters would be preliminarily identified during implementation of Mitigation Measure BIO-1. Drainages excavated wholly in uplands and draining only uplands are not likely to be jurisdictional features. Program components located in or adjacent to wetlands and waters could cause impacts to wetlands or waters through temporary or permanent fill, and erosion or sedimentation.

Future Grid Pipelines FTGRID-01 and FTGRID-04. FTGRID-01 and FTGRID-04 would avoid impacts on wetlands and waters through the use of trenchless pipeline construction for crossings of Dry Creek and the Tuolumne River. If a frac-out were to occur beneath wetlands, direct impacts could occur. Implementation of Mitigation Measure HYD/WQ-1, which require preparation of a Frac-out Contingency Plan would reduce impacts to wetlands and waters. Other impacts to wetlands and waters could occur through temporary or permanent fill, and erosion or sedimentation.

Overall Conclusion. Construction of Program components could result in impacts to wetlands or waters. Implementation of Mitigation Measure HYD/WQ-1, which would reduce sedimentation; Mitigation Measure BIO-13, which would avoid and minimize impacts to wetlands to the maximum extent practicable; and Mitigation Measure BIO-14, which requires regulatory permits for work in wetlands and waters and compensatory mitigation for unavoidable impacts to wetlands and waters, would reduce this impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measures HYD/WQ-1 (described below) and the following measures, as identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-13: Avoid and Minimize Impacts on Federally Protected Wetlands.

The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands.

If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of Mitigation Measure BIO-14. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters. Mitigation Measure HYD/WQ-1 would also be implemented to minimize construction-related effects on wetlands and waters. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.

Mitigation Measure BIO-14: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.

The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. 19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.

Impact BIO-13: Impacts on Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites

Finding:

Program Components (Except Future Grid Pipelines FTGRID-01 and FTGRID-04). The majority of Program components (except FTGRID-01 and FTGRID-04, addressed below) would be constructed in previously developed areas or agricultural lands that do not function as a significant movement corridor for fish and wildlife. Some wildlife breeding does occur in agricultural lands and wetlands. Open-cut pipeline construction would create temporary barriers to wildlife

movement in agricultural lands and ruderal habitat. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season.

Future Grid Pipelines FTGRID-01 and FTGRID-04. Several fish and wildlife species utilize the Tuolumne River, and to a lesser degree Dry Creek, and adjacent riparian habitat as breeding sites and a migration corridor. Additionally, wildlife breeding does occur in agricultural lands and non-riparian wetlands. Impacts to wildlife migration and breeding in these riverine and riparian areas would be avoided by the use of trenchless construction methods. Open-cut pipeline construction would create temporary barriers to wildlife movement in agricultural lands and ruderal habitat. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season.

Overall Conclusion. Construction of most WMP components would occur in developed areas or agricultural lands that do not function as wildlife movement corridors for fish and wildlife, but open-cut pipeline construction could temporarily create barriers to wildlife movement. Implementation of Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, and BIO-12, described above, and Mitigation Measure BIO-15 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, and BIO 12 (described above) and the following mitigation measure, as identified in the Program EIR, will reduce these potentially significant effects to less-than significant levels.

Mitigation Measure BIO-15: Install Temporary Trench Plates over Open Trenches

The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.

Impact BIO-14: Conflict with Local Ordinances or Policies Protecting Biological Resources

Finding:

Implementation of Mitigation Measures BIO-1 through BIO-15 would ensure that the Proposed Program would be consistent with all local ordinances and policies protecting biological resources, reducing impacts to a level that is less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Implementation of the mitigation measures described above would reduce adverse effects related to compliance with local ordinances or policies protecting biological resources. The Proposed Program's overall impact would be less than significant with mitigation.

CULTURAL, PALEONTOLOGICAL, AND TRIBAL RESOURCES

Commented [CA1]: In the Summary Table, "Impact CR-4: Impacts on Paleontological Resources" is shown to have a LSM impact but the impact is LS (based on the content in the section). Please correct this error in Summary Table.

Commented [DL2R1]: Corrected in Chapter 3, Revisions to the DEIR.

Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources

Finding:

Projects proposing earthwork within archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k, which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Improvements proposing earthwork in the Planned Urbanizing Area must also adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c (also presented above), which require the applicant (City in this case) to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures.

All proposed components must adhere to City of Modesto Urban Area General Plan Section VII-F Policies 2-k, 2-l, 2-m, 2-n, 2-o, and 3-c, which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process.

Adherence to existing City policies regarding archaeological investigation, construction requirements, and proper mitigation for any resources discovered, as well as Mitigation Measure CR-1, would ensure that specific improvements would result in impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources that are less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

This potentially significant effect can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the Program EIR:

Mitigation Measure CR-1: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work

The City shall implement the following measures. Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to

receive information about the kinds of archaeological materials that could be present and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.

Impact CR-3: Disturb Any Human Remains, Including those Interred Outside of Dedicated Cemeteries

Finding:

Based on the Program information for the proposed infrastructure improvements, the Proposed Program does not appear to propose earthwork in proximity to any known cemeteries or Native American burial grounds. However, projects implemented as part of the Proposed Program have the potential to disturb previously undiscovered human remains. All of the City of Modesto Urban Area General Plan policies identified above for Impact CR-2 also pertain to the discovery of human remains. Specifically, Policy VII-F.2[k](2) (presented above) cites California Health and Safety Code 7050.5, which requires the cessation of further excavation and disturbance in the event of a human remains discovery, and coordination with the County coroner and (if applicable) the Native American Heritage Commission (NAHC) regarding further action.

Adherence to Policy VII-F.2[k] and other relevant general plan policies identified for Impact CR-2 and the California Health and Safety Code, as well as Mitigation Measure CR-1, would ensure that impacts on human remains as a result of constructing CIPs would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

This potentially significant effect can be reduced to a less-than-significant level by incorporating Mitigation Measure CR-1 (described above) identified in the Program EIR.

Impact CR-5: Potential for a Substantial Adverse Impact on Tribal Cultural Resources

Finding:

Tribal cultural resources (TCRs) have not been identified within the Program study area. None of the tribes contacted under Public Resources Code Section 21080.3.1 have responded with concerns about the potential impact of the Program on TCRs; thus, the City, as the lead CEQA agency, has determined that no known TCRs exist within the study area.

Project grading and earthmoving activities could disturb previously undiscovered archaeological deposits or buried historic resources. Proposed pipelines, lift stations, and other water infrastructure to be located within riverbeds and otherwise adjacent to natural channels are particularly susceptible to encountering Native American artifacts. The City has adopted guidelines to aid project compliance with requirements for archaeological resources analysis, and subsequent projects would be required to adhere to these guidelines.

Projects proposing earthwork within archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k, which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Projects proposing earthwork in the Planned Urbanizing Area must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c , which require the applicant to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures.

All subsequent projects must adhere to other City of Modesto Urban Area General Plan Section VII-F Policies listed above, including 2-l, 2-m, 2-n, and 2-o, which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process.

Adherence to existing City policies regarding archaeological investigations, construction requirements, and proper mitigation for any resources discovered on the site, as well as to Mitigation Measure CR-1, would ensure that specific projects implemented subsequent to the Proposed Program would result in less-than significant with mitigation impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

This potentially significant effect can be reduced to a less-than-significant level by incorporating Mitigation Measure CR-1 identified in the Program EIR.

GREENHOUSE GAS EMISSIONS AND ENERGY

Impact GHG-1: Generate a Substantial Amount of Greenhouse Gas (GHG) Emissions

Finding:

Construction Impacts. Construction of Program components including tanks, pump stations, wells, and pipelines would involve activities that would result in one-time emissions of GHGs. Changes in carbon sequestration due to land use change and tree planting would also result in one-time emissions of GHGs. GHG emissions

from construction equipment exhaust, including exhaust from haul or equipment trucks and worker commutes. Specific project-level data about the amount, use, and locations of these equipment are not available at this time, nor are specific project-level data about the construction periods for each individual CIP. In general, replacement and maintenance of existing facilities and strengthening and replacement of existing water lines would be categorically exempt from CEQA. New water mains or extension of water mains that have been identified in the WMP would therefore be considered to fall below the significance threshold. For other CIPs, in the absence of specific project-level information, it has been conservatively assumed that construction activities for each WMP component would generate GHG emissions that, in combination with the other Program components, could be substantial because they would exceed the significance threshold of 10,000 million tons of carbon dioxide equivalents per year (MT CO2e/year). This is considered a significant impact.

Operational Impacts. The Proposed Program would indirectly and directly generate GHG emissions through operation of booster pump stations, use of new or larger emergency electrical generators, and employee vehicle trips for operation and maintenance of future facilities. Employee trips would be similar to the City's existing maintenance and operation activities. Emissions for emergency electrical generators would be infrequent and would not be substantial. Operation of new or larger pumps at booster pump stations as well as the increased capacity and improved level of water distribution could generate GHG emissions that are substantial because they would increase GHG emissions over the applicable significance threshold of 10,000 MT CO2e/year of GHG emissions Therefore, this impact would be significant.

Overall Conclusion

Consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from construction of WMP components. However, it is still possible that these emissions would not be reduced below the applicable significance threshold of 10,000 MT CO2e/year of GHG emissions and therefore the Proposed Program would result in a significant and unavoidable impact.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

On the whole, since specific details regarding the program-level components are not yet available, construction and operation of these components have been conservatively determined to potentially generate GHG emissions that exceed the significance threshold. These emissions may not be able to be reduced below the applicable significance threshold, and no other feasible mitigation has been identified which can further reduce emissions. Therefore, the Proposed Program's impact related to increased GHG emissions would be significant and unavoidable.

Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs

Finding:

Consistency with strategies outlined in California Air Resources Board's (CARB's) Scoping Plan and future updates are used to ensure that the state goals of Assembly Bill (AB) 32, Senate Bill (SB 32), and Executive Order (EO) S-3-05 will be met. CARB's renewable portfolio standard (RPS) would reduce GHG emissions compared to the existing mix of energy sources and would likely result in the program-level components having more than a 29-percent reduction by at least 2030. This is consistent with the emissions reductions goal of AB 32 and SB 32, as well as the policies/actions described in CARB's 2017 Scoping Plan.

In addition, individual WMP components would comply with the Stanislaus Regional Sustainability Toolbox's regional climate action plan goals, strategies, and policies, as well as the County's general plan policies related to reduced energy use. Specifically, Proposed Program-level components would have an energy-efficient design, and utilize Modesto Irrigation District's, Turlock Irrigation District's, and Pacific Gas and Electric's increased renewable energy sources.

WMP components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. Therefore, these program-level components would generally comply with applicable plans, policies, and regulations, including AB 32 and SB 32, and as well as the policies/actions described in the CARB's Scoping Plan. However, at this time the state is still developing strategies that will be needed to fully reach the goals of SB 32 and EO S-3-05 and new strategies may be developed that are inconsistent with the project. In addition, as described in Impact GHG-1, the GHG emissions for the entire Program would be significant and, as such, may impede the state from reaching the goals of AB 32 and SB 32, and EO S-3-05, to reduce GHG emissions within California.

Consulting with and permitting through the SJVAPCD would reduce this impact, but not necessarily to less-than-significant levels and may not be consistent in the future with new strategies. Therefore, this impact would be significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

WMP components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. However, for the reasons described above, the Proposed Program may impede the state from reaching the goals of AB 32, SB 32, and EO S-3-05 to reduce GHG emissions within California. The City would consult with and conduct permitting through the SJVAPCD to help reduce this impact, but no other feasible mitigation has been identified that could further reduce this impact. Therefore, the Proposed Program's overall impact would be significant and unavoidable.

HYDROLOGY AND WATER QUALITY

Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality

Finding:

Construction of the proposed components could result in discharges of poor-quality water to nearby water bodies if adequate precautions are not taken. Trenching and other ground-disturbing activities could expose loose soils that could be eroded during precipitation events. Construction equipment also would use hazardous materials (e.g., fuel and diesel) that could spill during routine use, storage, transport, or disposal, and then seep into groundwater or be washed into nearby water bodies. Use of trenchless construction methods (e.g., horizontal directional drilling [HDD]) also could present hazards to water quality, such as from frac-out[2] accidents during boring activities below or near streams. Additionally, construction of Program components may require dewatering of excavations, particularly for those components adjacent to the Tuolumne River. Discharge of this water back to the river or other areas could result in adverse water quality effects if adequate precautions are not taken.

Testing, disinfection, and flushing of pipeline improvements prior to use also would require disposal of de-chlorinated flushing water to the storm drainage system or sanitary sewer system. One of the prescribed disinfection methods in the City's standard specifications, which comply with American Water Works Association (AWWA) standard methods, would be used to disinfect all new water mains and appurtenances. After completion of the disinfection process, the heavily chlorinated water would be de-chlorinated and flushed from the new pipelines/water system facilities until the residual chlorine concentration meets the City's established requirements, which are protective of water quality in receiving waters. Discharges of this water would not substantially affect receiving waters or result in a violation of water quality standards or waste discharge requirements.

Many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. Compliance with this permit would minimize any impacts of Proposed Program construction activities on water quality, but construction water quality impacts of individual program components could nevertheless be significant.

To ensure that the Proposed Program would not adversely impact water quality from trenchless pipeline installation methods beneath waterways, the City would

[2] "Frac-out" is the inadvertent return and release to the environment of drilling lubricant during HDD. This is a potential concern when HDD is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD procedure uses bentonite slurry, which is a fine clay material that is used as a drilling lubricant. Bentonite is non-toxic and is commonly used farming practices, but benthic invertebrates, aquatic plants, and fish and their eggs can be smothered by the fine particles if bentonite is discharged to waterways (California Public Utilities Commission [CPUC] 2003).

implement Mitigation Measure HYD/WQ-1. This measure would require the City's drilling contractor to prepare and implement a frac-out contingency plan for trenchless construction methods. The plan would be designed to minimize the potential for frac-out, provide for the timely detection of frac-outs, and ensure a timely and effective response in the event a frac-out occurs (CPUC 2003). Implementation of this mitigation measure would reduce adverse water quality impacts from frac-out associated with trenchless activities to a level that less than significant. Additionally, compliance with the General Construction Permit, the Central Valley Regional Water Quality Control Board's (RWQCB's) general permit for low threat discharges to surface water, the Central Valley RWQCB's Low Risk General Order, and/or the Low Risk Waiver for activities involving discharging dewatered groundwater to land would prevent substantial adverse impacts from dewatering activities during construction of Program components. Overall, this impact would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Construction of WMP components could result in water quality impacts due to trenching, pipeline installation and other ground-disturbing activities. Use of trenchless construction methods (e.g., jack and bore, HDD) also could present hazards to water quality, such as from frac-out accidents during boring activities below or near streams. Compliance with NPDES permit requirements and the City's Standard Specifications, and implementation of Mitigation Measure HYD/WQ-1 would minimize adverse effects on water quality. In conclusion, the Proposed Program's overall impact would be less than significant with mitigation.

<u>Mitigation Measure HYD/WQ-1: Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.</u>

The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling, microtunneling, pipe bursting) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include the following components/measures:

- Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions.

- Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route.

- Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below.

- Maintain necessary response equipment on-site or at a readily accessible location and in good working order.

- Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003):

  For a terrestrial frac-out:

  - Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud.

  - Based on consultation with CDFW (see below), either:

    - Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or

    - Leave the drilling mud in place to avoid potential damage from vehicles entering the area.

  - Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

  For an aquatic frac-out:

  - Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location).

  - Based on consultation with CDFW (see below), either:

    - If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column.

    - If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain).

    - If the fracture becomes excessively large, call in a spill response team to contain and clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site.

  - If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

- Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.

Impact HYD/WQ-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would Be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level

Finding:

The City of Modesto's Proposed Program includes new and replacement groundwater wells within the contiguous and outlying Modesto water service areas. Typically, the wells would have a pumping capacity between 750 and 2,000 gallons per minute (gpm). Although it cannot be determined how much groundwater pumping may increase under the Proposed Program, as it is not known how frequently and at what capacity the new wells would operate, it can be assumed that groundwater pumping would increase over time in accordance with the City's growth and development.

The Proposed Program was developed in consideration of the operating yield of the Modesto and Turlock groundwater sub-basins. This operating yield was calculated to better manage the groundwater basin in consideration of estimates of annual recharge and pumping activities, and to prevent lowering of the groundwater table. Therefore, by design, operation of existing and proposed wells in the study area should not substantially lower the overall basin-wide level of water or the capacity of the groundwater basins. Individual wells would also be designed and operated to avoid localized reductions in groundwater levels that could substantially affect nearby wells and groundwater beneficial uses.

The City is a participant in the Groundwater Sustainability Agencies (GSAs) that have been formed for the Modesto and Turlock subbasins. Both GSAs are currently developing Groundwater Sustainability Plans (GSPs) per the requirements of the Sustainable Groundwater Management Act (SGMA). The City, along with other agencies or private entities, will implement the recommendations of the GSP, when available, in accordance with SGMA.

That said, groundwater development in the Modesto, Turlock, and/or Delta-Mendota subbasins by other agencies or private entities could, in combination with the City's use of groundwater, result in overall groundwater pumping which exceeds the sustainable yield of the aquifer(s). Pumping by other entities is outside of the City's control. SGMA requires users of groundwater in a basin to develop a GSP which will define the sustainable yield of the aquifer and allocate pumping amounts to individual users (or identify other measures) which will ensure that overall pumping is sustainable. The City will be a participant in development of the GSPs. However, because the GSP has not been developed, and the measures or allocations it will contain are currently unknown and would not be entirely within the City's control, the GSP cannot be relied upon as the basis for concluding that the City's use of groundwater (in combination with other users) would not exceed the sustainable yield of the basin(s); this would be improperly deferred mitigation under CEQA.

As such, the City finds that no feasible changes or alterations have been identified which would lessen the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

While the City fully expects that the SGMA process and the planning surrounding the WMP will prevent overdraft, due to the stage of the SGMA planning process, the City has conservatively concluded that impacts are potentially significant. The City has not identified feasible mitigation beyond that which would be identified in the future pursuant to SGMA, and such measures would be outside of the City's control, to the extent they would need to be implemented by other entities (e.g., other users of groundwater in the basin(s). For these reasons, this impact is considered significant and unavoidable.

NOISE

Impact NOI-1: Expose Persons to Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or in the Applicable Standards of Other Agencies

Finding:

Construction activities would generally occur Monday through Friday between 7:00 a.m. and 5:00 p.m. excluding City-observed holidays. Nonetheless, since the construction timeframes and schedules for each individual CIP have not yet been determined, future construction activities have potential to expose people (particularly residential receptors) to noise levels exceeding the above-listed timeframe and other standards in the local general plan and noise ordinances. This impact is considered significant. Construction of all WMP components would be required to follow applicable local laws and the City's contractor(s) would be required to adjust the times of construction accordingly. Stanislaus County and the City of Modesto, City of Turlock, and City of Ceres municipal codes contain some exemptions for noise from construction and maintenance activities performed by, or for, public utilities and facilities (e.g., a special exemption permit allowed by Modesto Municipal Code Section 4-9.103[b][6]). With implementation of Mitigation Measure NOI-1 (Employ Noise-Reducing Construction Practices) and Mitigation Measure NOI-2 (Limit Nighttime Construction Noise), the City's contractor(s) would be required to ensure that construction activities occur in a manner consistent with local noise standards when operating during allowable daytime hours outlined above. Therefore, this impact would be less than significant with mitigation.

Once construction is complete, WMP components involving new, upgraded, or replacement pipelines would not generate excess noise levels. However, operation of proposed tanks, wells, water pump stations, and emergency generators would generate ongoing noise levels in areas that could expose people to noise levels in excess of established noise levels without mitigation. The Proposed Program includes wells, emergency generators, and booster pump station components in residential areas of Modesto and the outlying service areas, and the operation of these facilities would generate noise. Data indicate that the motor would produce a sound level of 56 A-weighted decibels (dBA) at 50 feet. To approximate the sound level produced under a load, 3 dB were added to the no-load condition for a

resulting source level of 59 dBA at 50 feet. The distance needed for a source of this level to attenuate to the lowest County noise-level standards is 250 feet for 45 dBA (nighttime standard). Noise at sensitive receptors located closer than 250 feet to proposed well locations or pumps could exceed the threshold of significance.

In the event that propane- or natural gas–powered engines are used at some of the proposed CIP locations, the sound level of a similarly-sized pump operated by a propane-fueled reciprocating engine was calculated using the equations for reciprocating engines from Noise Control for Buildings, Manufacturing Plants, Equipment and Products (Hoover and Keith 1996). Based on these calculations, a 100-horsepower, propane-fueled engine would produce a sound level of 75 dBA at 50 feet. This sound level would represent the highest potential noise level from well pumping activities, or the worst-case scenario at the proposed well locations. The distances needed for a source of this level to attenuate to the lowest County noise-level standards is 1,250 feet for 45 dBA (nighttime standard).

Currently, the level of design detail for all proposed CIPs is not sufficient to conduct a quantitative noise analysis; thus, operational noise impacts for these components are conservatively considered to be significant. The preliminary analysis indicates that there is the potential for noise from engines at proposed facilities with the maximum horsepower rating to exceed County nighttime noise standards at residences located within 250 feet of electric engines, or within 1,250 feet of a propane powered engine. For sensitive receptors within Modesto, the noise standard allows a higher exposure level, and the residences could be located closer than 250 feet. This impact is considered potentially significant. With implementation of Mitigation Measure NOI-3 (Employ Noise-Reducing Methods during Operations) this impact would be reduced to a less-than-significant level.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Considering the WMP components as a whole, while construction-related noise impacts would be reduced to a less-than-significant level with implementation of Mitigation Measures NOI-1 and NOI-2. Design details and specific locations for some components (e.g., wells, emergency generators, booster pump stations) have not yet been developed such that a quantitative operational noise analysis can be conducted at this time. Implementation of Mitigation Measure NOI-3 would ensure that noise-reducing design measures are incorporated into the design of these components. In conclusion, implementation of Mitigation Measures NOI-1, NOI-2, and NOI-3 would reduce noise levels associated with the Proposed Program's construction and operation, and noise levels would not be in excess of standards established in the relevant noise ordinances and policies. Therefore, this impact would be less than significant with mitigation.

<u>Mitigation Measure NOI-1: Employ Noise-Reducing Construction and Maintenance Practices</u>

The following measures will be implemented by the City or its contractor to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected:

- locating stationary equipment as far as practical from noise-sensitive land uses,
- using electrified or otherwise quieter equipment when practical,
- using sound-control devices on equipment that are more effective than devices originally provided on the equipment,
- using noise-reducing enclosures around noise-generating equipment, and
- installing temporary barriers between noise sources and noise sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission.

When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.

Mitigation Measure NOI-2: Limit Nighttime Construction Noise

When feasible, the City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays unless a special exemption permit allowed by Modesto Municipal Code Section 4-9.103(b)(6) is obtained.

Mitigation Measure NOI-3: Employ Noise-Reducing Methods During Operations

The City will implement noise-reducing methods so that noise from well operations and emergency generators does not exceed County noise-level standards at adjacent residences. Example measures may include but are not limited to:

- using sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available.
- locating stationary equipment as far as practical from noise-sensitive land uses,
- using electrified or otherwise quieter equipment when practical,
- using sound-control devices on equipment that are more effective than devices originally provided on the equipment,

- installing permanent barriers between noise sources and noise-sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission, and

- limiting operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas.

Impact NOI-2: Expose Persons to Excessive Groundborne Vibration or Groundborne Noise Levels

Finding:

Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receptor. Impact construction activity, including the use of compactors, jackhammers, and similar equipment, may be perceived hundreds of feet away and can cause damage to susceptible buildings located over 100 feet away. Loaded trucks, a substantial source of construction-related vibration, would likely be used during construction of Proposed Program-level components, which would involve travel along residential roads in Modesto and the outlying service areas. These trucks can generate vibration above the annoyance and human perception thresholds at distances up to 73 and 125 feet, respectively. As a result, vibration effects on sensitive receptors would be significant. Implementation of Mitigation Measure NOI-4 (Implement Vibration Reduction Measures) would reduce construction-related impacts from vibration to a less-than-significant level.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Given the temporary nature of vibration resulting from construction activities and the implementation of Mitigation Measure NOI-4, this impact would be less than significant with mitigation.

<u>Mitigation Measure NOI-4: Implement Vibration Reduction Measures.</u>

The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:

- Ensure proper tuning of vibration-causing equipment.

- Use vibration damping devices to the extent feasible.

- Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings.

- Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.

- Use electric stationary equipment (e.g., generators) where feasible.

- Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 p.m. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.

Impact NOI-3: Substantial Temporary, Periodic, or Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program

Finding:

Temporary and periodic increases in noise levels associated with the Proposed Program's construction activities, periodic maintenance activities, and associated periodic truck traffic, would increase ambient noise levels above the ambient noise levels existing without the Proposed Program. However, implementation of Mitigation Measure NOI-1, which includes several construction noise-reducing measures, would reduce short-term noise impacts to a less-than-significant level.

Operation of proposed tanks, wells, pipelines, water pump stations, and emergency generators would generate ongoing noise levels in areas that could expose people to substantial permanent increases in noise levels. The Proposed Program's components would be located near or in residential areas of Modesto, Ceres, Del Rio, and Turlock. As indicated in Impact NOI-1, implementation of Mitigation Measure NOI-3 would reduce potential operation-related noise levels such that the proposed components would not result in noise levels exceeding the relevant thresholds (Community Noise Equivalent Level [CNEL] exterior noise levels or 3-dB increase if existing levels are above the ambient noise level), and thereby ensure that operation of new and upgraded facilities would not result in substantial permanent increases in noise levels. In conclusion, the Proposed Program's effects on ambient noise levels would be less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Some program-level components involving construction activities, periodic maintenance activities, and associated periodic truck traffic would result in a temporary increase in ambient noise levels. Implementation of Mitigation Measure NOI-1 would ensure that short-term ambient noise levels would be reduced to a less-than-significant level.

Operation of proposed tanks, wells, pipelines, water pump stations, and emergency generators would generate ongoing noise levels in areas that could expose people to substantial permanent increases in noise levels. Implementation of Mitigation Measure NOI-3 would ensure that operation of new and upgraded facilities would not result in substantial permanent increases in ambient noise levels. In conclusion, the Proposed Program's effects on ambient noise levels would be less than significant with mitigation.

POPULATION AND HOUSING

Impact PH-3: Long-term Inducement of Unplanned Substantial Population Growth, Both Directly and Indirectly

Finding:

The Proposed Program includes upgrading the City's groundwater treatment, and water storage and distribution systems to provide improved water service to the City's contiguous and outlying service areas. The Program would not directly induce growth as it does not entail construction of new housing. However, by upgrading the treated water distribution system to deliver more water, it would remove an obstacle to planned development that would support population growth. Although this growth would be consistent with projected growth evaluated in adopted general plans, such growth could not occur without the proposed water system improvements addressed in the EIR.

New growth facilitated by the Proposed Program would result in associated physical environmental impacts; this could include aesthetic effects, conversion of farmland, air pollutant and greenhouse gas emissions, conversion of habitat, impacts on cultural or tribal cultural resources, increased point source or nonpoint source water pollution, use and possible releases of hazardous materials, noise, traffic, additional demands for public services and utilities such as police protection, fire protection, schools, parks, wastewater treatment, solid waste disposal, and energy.

Growth-inducing and secondary impacts are addressed by the policies of general plans and community plans of Stanislaus County, Modesto, Del Rio, Salida, Empire, Turlock and Ceres. These policies ensure that development within the planned growth areas occur as demand arises and services are available, and that utilities are sized appropriately to serve such development. The general and community plans mitigate for impacts through advanced planning and the implementation of growth management strategies, the provision of adequate public services and utilities such as treated water distribution, wastewater collection, and the protection of open space and habitat areas.

In conclusion, proposed improvements to the City's water distribution and storage system would remove an obstacle to urban development and population growth within the Program area. This development would occur in accordance with general plans and thus would not result in unplanned or disorderly growth. Nevertheless, the Program would remain growth-inducing and the impacts of growth inducement, and the secondary environmental effects of induced growth, are considered significant.

The policies contained in general and community plans, in particular Policy No. V.C.4[b], as well as the mitigation measures contained in the EIR, would reduce the secondary effects of growth to a level of insignificance. Individual development improvements would be required to comply with CEQA, which may result in additional mitigation for growth and its effects. For these reasons, this impact is considered less than significant with mitigation.

As such, the City finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The policies contained in general plans, as well as the mitigation measures described throughout the WMP EIR, would reduce the secondary effects of growth to a level of insignificance. Individual development improvements would also be required to comply with CEQA, which may result in additional mitigation for growth and its effects. For these reasons, this impact is considered less than significant with mitigation.

CUMULATIVE IMPACTS

Commented [CA3]: This section is missing the LSM findings for Impacts CUM 1, 4 and 5. Please add.

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Impact CUM-1: Cumulative Impacts on Aesthetics

Finding:

Several cumulative projects identified in the EIR involve new development throughout Modesto and the County. For example, in northeastern Modesto, the Marketplace Shopping Center Project is planned within one mile of a new storage tank to be constructed under the Proposed Program. Residences and recreationists located in close proximity to these facilities may have views of both the new water storage tank and shopping center. Additionally, the Proposed Program would support planned growth in the City's service area which would involve conversion of agricultural lands. Given the large scale of the new water storage tanks, the facilities in combination with cumulative projects and other planned growth would substantially alter the Program area's rural and open space landscape. Cumulative impacts on aesthetics and visual resources would be considered significant and the Program's contribution, if left unmitigated, may be considerable.

As such, the City finds that changes or alterations have been incorporated into the project which would reduce the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

Construction of Program components could adversely affect the visual quality and visual character of a particular site during construction, but **Mitigation Measure AES-1** would reduce this impact by requiring that construction staging areas be located away from public areas. Other projects in the Modesto area, particularly new development projects and future water infrastructure projects, could alter the visual landscape in the study area. However, with implementation of **Mitigation Measure AES-2** to incorporate aesthetic considerations into the design of these components, the Proposed Program would not make a considerable contribution to any significant cumulative impacts pertaining to aesthetics and visual resources. Therefore, the Program's contribution to this cumulative impact would be less than considerable.

Impact CUM-2: Cumulative Impacts on Agriculture

Finding:

Several cumulative projects identified in the EIR could result in conversion of agricultural land, including Important Farmland, to non-agricultural uses. Additionally, build out of the City of Modesto, Stanislaus County, City of Ceres, and City of Turlock General Plans would convert agricultural land to non-agricultural use. The Proposed Program would result in the conversion of Prime Farmland or Unique Farmland to non-agricultural use associated with development of four storage tanks and six groundwater wells in the Program area.

Given the importance of agriculture to Stanislaus County and that loss of Prime Farmland has been occurring in recent years and is an ongoing concern with increasing urban development in the region, the loss of Prime Farmland is a significant cumulative impact, and the Proposed Program's contribution would be considerable.

As such, the City finds that no feasible changes or alterations have been identified which would lessen the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

LAFCO's Agricultural Preservation Policy (2015) and Policy 2.15 in the *Stanislaus County General Plan*, which require that agricultural land converted to residential use be replaced at a 1:1 ratio, do not apply to the Proposed Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing conservation easements, that mitigation program is designed to address loss of Farmland resulting from residential development and not public infrastructure projects such as the Proposed Program. Furthermore, the City has determined that the cost of establishing a conservation easement would substantially increase the cost of the Proposed Program and burden on ratepayers which would not be acceptable and purchasing an agricultural easement over off-site agricultural land would not ultimately avoid or reduce the impact of converting Farmland. Additional mitigation (e.g., restoration of Farmland) is not considered feasible. Based on this, no feasible mitigation measures have been identified. This impact of the Proposed Program would be significant and unavoidable at the project level, and a considerable contribution to significant cumulative impacts related to

loss of Farmland. Therefore, the Program's contribution to this cumulative impact would be significant and unavoidable.

Impact CUM-3: Cumulative Impacts on Air Quality and GHG Emissions

Finding:

Cumulative impacts of air quality and GHG emissions are evaluated in Impact AQ-3 and Impacts GHG-1 and GHG-2, respectively.

No single CIP would be sufficient in size, by itself, to cause nonattainment of the regional air quality standards. With implementation of **Mitigation Measures AQ-1, AQ-2, and AQ-3**, none of the program-level components would result in mass emissions above the significance threshold. However, these measures would not completely avoid emissions; therefore, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain significant and unavoidable.

Consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from construction of WMP components. However, it is still possible that these emissions would not be reduced below the applicable significance threshold of 10,000 MT CO2e/year of GHG emissions and therefore the Proposed Program would result in a significant and unavoidable impact.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

Program-level components would be located in an area that is in non-attainment for federal and state ozone and PM2.5 standards and state standards for PM10. Thus, the combined emissions of past, present, and probable future projects would have a significant cumulative impact on air quality in the project area. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3 (described above for Impact AQ-2), none of the program-level components would result in mass emissions above the significance threshold. However, because these measures would not completely avoid emissions, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain significant and unavoidable.

On the whole, since specific details regarding the program-level components are not yet available, construction and operation of these components have been conservatively determined to potentially generate GHG emissions that exceed the significance threshold. These emissions may not be able to be reduced below the applicable significance threshold, and no other feasible mitigation has been identified which can further reduce emissions. Therefore, the Proposed Program's impact related to increased GHG emissions would be significant and unavoidable.

Impact CUM-4: Cumulative Impacts on Biological Resources

Finding:

Construction activities for cumulative projects in the Program area as well as elsewhere in Stanislaus County would have the potential to impact biological resources. Ground-disturbing construction activities could directly injure or kill wildlife, while development of new areas may result in permanent loss of habitat. Given that many of the special-status species known to occur in Stanislaus County are found in riparian areas, this may be particularly true for projects that are located along the Tuolumne River, Dry Creek, or the San Joaquin River. This is considered a cumulatively significant impact.

The Proposed Program would involve various construction activities that could impact wildlife, plants, and fish, which, if left unmitigated, would be considered a considerable contribution to this cumulative impact.

However, implementation of **Mitigation Measures BIO-1** through **BIO-15** would avoid and/or minimize impacts. In addition, compliance with the NPDES General Construction Permit, the City of Modesto's Standard Specifications related to erosion control, and implementing **Mitigation Measure HYD/WQ-1** regarding a frac-out contingency plan for trenchless pipeline installation methods would serve to avoid and minimize impacts on water quality that could affect fish and aquatic life.

As such, the City finds that changes or alterations have been incorporated into the project which would reduce the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

Considering that the Program would not convert large areas of sensitive habitat and would avoid or minimize temporary effects to the maximum extent practicable, with implementation of the above-mentioned mitigation measures, its contribution to cumulative impacts on biological resources would not be considerable. Therefore, this impact would be less than significant with mitigation.

Impact CUM-5: Cumulative Impacts on Cultural, Tribal, and Paleontological Resources

Finding:

While unlikely, it is possible that construction of WMP components in the Program study area could impact buried cultural or archaeological resources. Any project that would disturb the ground surface would have the potential to disturb buried cultural, archaeological, or paleontological resources. Therefore, many of the cumulative projects, as well as currently unknown projects that may be constructed in accordance with the City of Modesto, City of Ceres, City of Turlock, and Stanislaus County General Plans, could impact buried archaeological or paleontological resources. Such projects also could affect above-ground historical structures depending on the nature of the project and location. For these reasons, cumulative impacts on cultural and paleontological resources are considered significant.

If the Proposed Program were to impact resources or groups of resources, which are also being impacted by other projects, the Proposed Program's contribution to cumulative impacts, if left unmitigated, would be potentially considerable. However, along with implementing the City's standards and policies, the Proposed Program would implement **Mitigation Measure CR-1** to avoid and/or minimize impacts to cultural and tribal cultural resources. Therefore, this impact would be **less than significant with mitigation.**

As such, the City finds that changes or alterations have been incorporated into the project which would reduce the significant effect on the environment to a less-than-significant level.

Supporting Evidence:

Mitigation Measure CR-1 would include requirements to conduct cultural resources awareness training before beginning construction on CIP projects. With implementation of this measure, along with implementing the City's standards and policies, the Proposed Program would not substantially affect cultural, tribal cultural, and paleontological resources and would not contribute considerably to any cumulative impacts on such resources in the Program area or greater Stanislaus County.

Impact CUM-6: Cumulative Impacts on Hydrology and Water Quality

Finding:

Cumulative projects could adversely affect hydrology and water quality (e.g., via stormwater discharges from construction sites). In particular, projects located near the Tuolumne River, Dry Creek, or San Joaquin River would have potential to affect water quality in these water courses, which is already substantially compromised. The existing impairments to water quality in the region are considered to be a cumulatively significant impact. The Proposed Program, if left unmitigated, would result in discharges to impaired water bodies and therefore would make a considerable contribution to this impact.

Cumulative projects identified in the EIR, and those that may be constructed in the future in accordance with the City of Modesto, City of Ceres, City of Turlock, and Stanislaus County General Plans, could adversely affect hydrology and water quality (e.g., via stormwater discharges from construction sites). In particular, projects located near the Tuolumne River, Dry Creek, Stanislaus River, or San Joaquin River would have potential to affect water quality in these water courses, which is already substantially compromised. The existing impairments to water quality in the region are considered to be a cumulatively significant impact. The Proposed Program, if left unmitigated, would result in discharges to impaired water bodies and therefore would make a considerable contribution to this impact.

The Proposed Program's impacts on hydrology and water quality, apart from groundwater supply impacts, would be avoided and/or minimized through compliance with the NPDES General Construction Permit, the City's Standard Specifications related to erosion control, and implementation of **Mitigation Measure HYD/WQ-1**, which would require preparation and implementation of a frac-out contingency plan for trenchless pipeline installation methods.

While discharges of pollutants to the Tuolumne, Stanislaus, and San Joaquin Rivers may be considered a contribution to a significant cumulative impact given the existing contamination in these water bodies, the mitigation measures prescribed in the EIR would avoid or reduce any such discharges to minimal levels. Additionally, although not specifically identified, the sources of the existing contaminants in the Tuolumne, Stanislaus, and San Joaquin Rivers are more likely attributed to agricultural and urban runoff, rather than construction-related stormwater discharges, as many of the contaminants are pesticides.

Several of the CIP projects could add impervious surface area to the region or require additional use of groundwater supplies. The new impervious surface area, concentrated largely within or near urban areas, would not substantially affect groundwater recharge because the majority of groundwater recharge within the Modesto and Turlock Subbasins occurs via percolation of irrigation water in the vast agricultural lands in the area. However, any additional groundwater use by the cumulative projects and the Proposed Program's groundwater needs could contribute to declining groundwater levels and potential overdraft of the aquifer. As discussed in **Impact HYD/WQ-2**, although the SGMA process and the future development of a GSP would include measures or allocations to prevent groundwater overdraft, these GSP measures or allocations have not yet been developed and the aquifers' sustainable yields may be exceeded by the Proposed Program (in combination with other users) before these measures and allocations are in place. Thus, while it is the intent of the City to avoid use of groundwater in a manner which would contribute to overdraft, because overall use of groundwater in the relevant aquifers is partially outside of the City's control, and the GSP has not yet been developed to address this issue, the Proposed Program's groundwater use has been conservatively concluded to make a considerable contribution to the cumulative groundwater use and cumulatively exceedance of the local aquifers' sustainable yields. Therefore, following mitigation, the Proposed Program's contribution to cumulative impacts on hydrology and water quality could be considerable. This impact would be significant and unavoidable.

As such, the City finds that changes or alterations have been incorporated into the project which lessen the significant effect on the environment, but not to a less-than-significant level.

Supporting Evidence:

While it is the intent of the City to avoid use of groundwater in a manner which would contribute to overdraft, because overall use of groundwater in the relevant aquifers is partially outside of the City's control, and the GSP has not yet been developed to address this issue, the Proposed Program's groundwater use has been conservatively concluded to make a considerable contribution to the cumulative groundwater use and cumulatively exceedance of the local aquifers' sustainable yields. Therefore, following mitigation, the Proposed Program's contribution to cumulative impacts on hydrology and water quality could be considerable. This impact would be significant and unavoidable.

B. FINDINGS SUPPORTING REJECTION OF ALTERNATIVES

The final Program EIR discussed and evaluated a range of alternatives as required by CEQA Guidelines section 15126.6. In order to reject an alternative, the City must find:

> Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the [Program] EIR.

Following are the findings supporting rejection of each of the alternatives.

Alternative 1 – No Program Alternative

Under this alternative, no new water supply infrastructure would be constructed or upgraded. Operation of the City's water treatment, pumping, storage, and conveyance infrastructure would continue similar to existing conditions. The existing storage tanks and booster pump stations, groundwater wells, and transmission/distribution pipeline network would continue to operate. Facilities that are currently operating in the contiguous service area and the outlying service areas would continue functioning, but capacity issues would not be addressed and would likely increase over time as the population of the contiguous service areas is projected to increase by approximately 52 percent (from 255,906 to 388,579) by 2050. The Del Rio and Grayson areas would experience some growth until buildout. The City's outlying water service area in Turlock is already at buildout.

Finding for Rejection:

> Specific legal and social considerations make infeasible the alternative identified in the Program EIR. This alternative would result in increased impacts related to land use and planning as growth planned by the City would not be able to proceed because necessary infrastructure to support development would not be constructed. This alternative also would not meet any of the City's objectives to plan for and provide water infrastructure in a timely and cost-effective manner to serve new and existing development; repair and replace aging water infrastructure; ensure adequate water infrastructure and services are available to serve new growth within the General Plan and City's sphere of influence (SOI); or provide adequate storage capacity to meet operational, fire flow and emergency storage needs.

Supporting Evidence:

> Under this alternative, it is assumed that the City would not approve development which would result in demand for water supply that cannot be met under the No Program Alternative. As such, this alternative would impede attainment of the City's land use plans and policies which rely upon the water supply that would be made available by the Proposed Program. The potential exists for fire risk to increase as a result of the City's failure to address shortfalls or needed expansion of water supply to meet fire flow requirements. More wells could go out of production due to water quality concerns, without the installation of new wells or wellhead treatment to address the issue. Therefore, this could adversely affect the City's water supply as groundwater resources may be less available. The potential exists for increased impacts related to the need for new or expanded water supply or entitlements as a result of the No Program Alternative, if growth in population and housing proceeds in the absence of additional water supply infrastructure and/or if the existing infrastructure becomes deteriorated or otherwise incapable due to pressure or

groundwater quality issues of providing adequate water supplies to the City's water service area.

This alternative would also not meet any of the City's objectives related to providing sewer infrastructure for new and existing development, replacing aging water infrastructure, ensuring adequate water infrastructure and services are available to serve new growth within the General Plan and City's SOI, or provide adequate storage capacity to meet operational, fire flow and emergency storage needs. While this alternative would reduce or avoid most of the significant impacts of the Proposed Program, for the reasons described above, this alternative is considered to be infeasible.

Alternative 2 – Deferred Implementation Alternative

Under the Deferred Implementation Alternative, the schedule for construction of some program-level WMP components would be deferred by 5 years, compared to the schedule for implementation of the Proposed Program. New water supply infrastructure would be constructed or upgraded as indicated for the Proposed Program, but at a later date. Similarly, operation of the City's water treatment, pumping, storage, and conveyance infrastructure would be improved and expanded, but at a slower pace. Maintenance and addition of storage tanks and booster pump stations, groundwater wells, and the transmission/distribution pipeline network would continue, but some shortfalls in capacity or pressure flows may result from the delay in implementation of identified CIPs. Facilities in the contiguous service area and the outlying service areas would continue to operate, but capacity and pressure issues may not be addressed in a timely manner. Development in the City's water service area may be delayed to the extent that construction of necessary infrastructure to support such development would be delayed under this alternative.

Finding for rejection:

Specific legal and social considerations make infeasible the alternative identified in the Program EIR. This alternative would delay the City's ability to meet Program objectives and thus would not fully meet objectives aimed to provide water infrastructure in a timely and cost-effective manner to serve new and existing development and provide adequate water infrastructures and services to serve new growth within the General Plan and City's SOI.

Supporting Evidence:

By delaying construction of facilities, this alternative may not fully meet the City's land use plans, which could result in greater impacts than under the Proposed Program. Impacts of long-term inducement of substantial population growth, and related secondary impacts, would remain, but would be delayed as growth would be impeded by the lack of adequate water supply infrastructure. The potential exists for fire risk to increase if the extended timeline results in delays in addressing shortfalls or needed expansion of water supply to meet fire flow requirements.

This alternative would also fail to meet most of the City's objectives related to providing water infrastructure for new and existing development, replacing aging water infrastructure in a timely and cost-effective manner, ensuring adequate water infrastructure and services are available to serve new growth within the General Plan and City's SOI, or providing adequate storage capacity to meet operational, fire flow and emergency storage needs. As such, the Deferred Implementation

Alternative would not as effectively meet program objectives, as necessary infrastructure to address system deficiencies and support planned development would be delayed. For the reasons described above, this alternative is considered to be infeasible.

Alternative 3: Alternative Sources of Water Supply

Under this alternative, alternative sources of water supply would be used to address existing system deficiencies and meet increases in demand. This would alter the mosaic of capital improvements needed to deliver water to City customers. This alternative would not ultimately alter the amount of water to be used; however, it would rely on a greater range of sources for that water, aside from groundwater and surface water. Different capital facilities would be required to utilize this water throughout the City's service area compared to those proposed under the Program. The actual facilities would depend upon the sources selected and their relative contributions to the overall supply. The additional sources identified for this alternative are assumed to be in addition to alternative water supply sources already being developed by the City, such as water conservation through the City's water shortage contingency plan, in-lieu groundwater recharge, and Aquifer Storage and Recovery (ASR). Alternative sources of water supply under this alternative could include the following:

- **Additional Sources of Potable Water:** A MRWTP Phase Three Expansion project may be possible if there is a sizable future conversion of agricultural land to urban uses that would allow for a corresponding redistribution of Modesto Irrigation District's (MID's) existing surface water rights.

- **Development of Recycled Water Options:** Recycled water could be used in future Comprehensive Planning Districts. This additional supply, however, may affect potable water supply needs by supporting additional and future irrigation of golf courses and parks with non-potable water supply sources. The existing non-potable water supply sources, however, may be subject to cut-backs during dry years; the City would need to use groundwater to make up the difference. Recycled water supplies are not subject to cut-backs and, therefore, could reduce groundwater extractions during dry years.

This alternative would not ultimately alter the amount of water to be used; however, it would rely on a greater range of sources for that water, aside from groundwater and surface water. Project objectives related to repair and replacement of water infrastructure and serving new growth within the General Plan area and the City's SOI would not be met by this alternative.

Finding for rejection:

Specific legal and social considerations make infeasible the alternative identified in the Program EIR. While it would reduce some impacts through use of alternative water supplies, it would be anticipated to have impacts that are, on the whole, similar to those of the Proposed Program. This alternative would meet some, but not all, of the project objectives.

Supporting Evidence:

Many categories of impact for this alternative could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities. one of the potential sources of water supply under this alternative would be water

previously used for agriculture; as such, it would be dependent upon the conversion of agricultural lands to non-agricultural uses. By using alternative means of addressing system deficiencies and meeting future water demand, this alternative would reduce the need for the sources of potable water identified for the Proposed Program (i.e., groundwater and surface water supplies from MID). As such, the impacts related to use of those water sources would be avoided. However, these new sources of water could have their own set of environmental impacts. While the water supply options evaluated under this alternative are very general in nature, examples of impacts include: reductions or changes of instream flows and related effects on water quality and/or instream habitat, injury to other legal holders of water rights, and third-party effects, such as changes in land uses associated with changed water usage patterns. Appropriate mitigation would need to be developed to address any such impacts. No water supplies would be tapped without a prior agreement with their water rights holders. For these reasons, this alternative is considered to be infeasible.

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EXHIBIT "B"

STATEMENT OF OVERRIDING CONSIDERATIONS

STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to Public Resources Code Section 21081 and Section 15093 of the State CEQA Guidelines (14 California Code of Regulations 15000 et seq.), the City of Modesto cannot approve a project for which an Environmental Impact Report (EIR) has been certified which identifies significant effects on the environment unless it adopts a statement of overriding considerations that finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh its significant effects on the environment.

A. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following significant impacts have been identified for which no mitigation is available that would reduce the impact to a less-than-significant level:

- Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use
- Impact AG-3: Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use
- Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan
- Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-attainment Under an Applicable Federal or State Ambient Air Quality Standard
- Impact GHG-1: Generate a Substantial Amount of GHG Emissions
- Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs
- Impact HYD/WQ-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would Be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level
- Impact CUM-2: Cumulative Impacts on Agriculture
- Impact CUM-3: Cumulative Impacts on Air Quality and GHG Emissions
- Impact CUM-6: Cumulative Impacts on Hydrology and Water Quality

B. STATEMENT OF OVERRIDING CONSIDERATIONS

The City Council has determined that the Water Master Plan Program EIR should be approved and that any remaining unmitigated environmental impacts attributable to the Proposed Program are outweighed by the following specific benefits. The Proposed Program will:

i. Meet existing and future water treatment demands for the City and its customers in unincorporated areas of Stanislaus County through 2035;

ii. Implement the City's economic goals and Urban Area General Plan policies, including Policies VI.A.3, VI.B.2, VI.B.3, and VI.B.5 in Chapter VI, Community Services and Facilities, by planning for, and providing, water infrastructure in a timely and cost-effective manner to serve new and existing development;

iii. Repair and replace aging water infrastructure;

iv. Ensure adequate water infrastructure and services are available to serve new growth within the General Plan and City's Sphere of Influence, and planned water demands; and

v. Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

Commented [CA1]: Add specific reference to relevant General Plan goals or policies.

Commented [DL2R1]: Added.

City of Modesto

Water Master Plan

Final Environmental Impact Report

Prepared for:

City of Modesto
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353

Prepared by:

Horizon Water and Environment, LLC
266 Grand Avenue, Suite 210
Oakland, California 94610

March 2020

For accessibility assistance with this document, please contact the City of Modesto at 209-577-5402 or through the California Relay Service by dialing 711.

City of Modesto

Water Master Plan

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Acronyms and Abbreviations

A	
ASR	aquifer storage and recovery
C	
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Modesto
D	
DEIR	draft environmental impact report
DTSC	California Department of Toxic Substances Control
E	
EIR	environmental impact report
F	
FEIR	Final Environmental Impact Report
G	
GSP	groundwater sustainability plan
L	
LAFCO	Stanislaus Local Agency Formation Commission
LHMP	Local Hazard Mitigation Plan
M	
MID	Modesto Irrigation District
MRFA	Modesto Regional Fire Authority
MSR	Municipal Service Review
N	
NOA	Notice of Availability
NOD	Notice of Determination
NOP	notice of preparation
O	
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Act
P	
Proposed Program	2016 Water Master Plan
R	
RWQCB	Regional Water Quality Control Board
S	
SCADA	supervisory control and data acquisition
SFPD	Salida Fire Protection District
SGMA	Sustainable Groundwater Management Act
W	
WMP	2016 Water Master Plan

Chapter 1
INTRODUCTION

The City of Modesto (City) as the lead agency has prepared this Final Environmental Impact Report (FEIR) to provide other responsible agencies and the public with information about the potential environmental effects of the proposed Water Master Plan (WMP or Proposed Program). The document has been prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). Together with the Draft Environmental Impact Report (DEIR), this document constitutes the FEIR for the Proposed Program.

1.1 FEIR Context

The Proposed Project would involve implementation of a WMP prepared by the City of Modesto. The City developed the WMP to define the City's long-term water supply and infrastructure needs and guide management of its water service system, which includes the City of Modesto and communities in its sphere of influence (Salida, Del Rio, Ceres [Walnut Manor], Empire), and the cities of Grayson and Turlock. The WMP identifies recommended and prioritized capital improvement projects (CIPs) for system-wide implementation needed to deliver safe and reliable water and meet water demand requirements for existing and future City customers through buildout of the City's adopted General Plan. The CIPs proposed in the WMP include new water storage tanks, improvements to existing tanks, new and replacement groundwater wells, groundwater monitoring wells, pump stations, transmission mains, distribution pipelines, supervisory control and data acquisition (SCADA) system upgrade, water quality related studies, wellhead treatment, emergency generators, water system security enhancements, groundwater management, water master plan updates, maintaining and calibrating a hydraulic model of the water system, evaluations of the water system, and water meters for the contiguous water service area and/or outlying water service areas. The Proposed Program was evaluated in a DEIR in accordance with CEQA and the State CEQA Guidelines and was circulated for a 45-day public review period.

CEQA requires the lead agency to prepare an FEIR, addressing all substantive comments received on the DEIR, before approving a project. The FEIR must include a list of all individuals, organizations, and agencies that provided comments on the DEIR, and must contain copies of all comments received during the public review period along with the lead agency's responses.

1.2 Summary of Public Participation

1.2.1 Notice of Preparation and Public Scoping

Scoping refers to the public outreach process used under CEQA to determine the coverage and content of an environmental impact report (EIR). The scoping comment period offers an

important early opportunity for public review and comment on the focus of the CEQA analysis. The scoping process for an EIR is initiated by publication of the Notice of Preparation (NOP), as required by CEQA, which provides formal notice to the public and to interested agencies and organizations that a DEIR is in preparation. Additionally, the NOP informs responsible agencies and the public whether the proposed project could have significant effects on the environment and to solicit their comments so that any concerns raised could be considered during the preparation of the DEIR. During the scoping period, agencies and the public are invited to comment on the project, the approach to environmental analysis, and any issues of concern to be discussed in the DEIR. Scoping also can assist the lead agency with identification of project alternatives and mitigation measures. CEQA does not require public meetings during the scoping phase.

In accordance with State CEQA Guidelines Sections 15082(a), 15103, and 15375, the City circulated an NOP for the Proposed Program beginning on August 26, 2016, and ending on September 26, 2016. The NOP was circulated to the public; local, state, and federal agencies; and other interested parties. A copy of the NOP was included in Appendix A, *Scoping Summary,* of the DEIR. Comment letters received in response to the NOP were also compiled in the scoping summary and were considered during preparation of the DEIR. In addition, the City held a public scoping meeting on September 6, 2016 to receive agency and public comments on the scope of the EIR for the Proposed Program. No comments were provided at the meeting.

1.2.2 Notice of Availability of the DEIR and Public Review

Upon completion of the DEIR, the City issued a Notice of Availability (NOA), providing agencies and the public with formal notification that the document was available for review. The notice was sent to the Governor's Office of Planning and Research (OPR) State Clearinghouse, responsible and trustee agencies, persons and organizations that requested a copy, and the Stanislaus County Clerk's office for posting. A notice was also published in the *Modesto Bee*.

These actions triggered a 45-day public review period, which began on October 15, 2019, and concluded on December 2, 2019. A notice advertising the availability of the DEIR and the location and time of the DEIR public meeting was published in the *Modesto Bee* on October 15, 2019.

During the review period for the DEIR, all documents related to the Proposed Program were available for review on City business days, between the hours of 8 a.m. and 5 p.m., at the following location:

City of Modesto Utilities Department
1010 10th Street, Suite 4600
Modesto, CA 95353

In addition, an electronic copy of the DEIR was available for review and download from the City's website (www.modestogov.com/847/Water-Plans-Reports), and CD copies of the DEIR were also available by contacting Jim Alves, Associate Civil Engineer at City of Modesto. Copies were also available for review at the Stanislaus County Library.

1.2.3 Comments on the DEIR

Written comments or questions concerning the DEIR were accepted during the public review period at the following address:

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353
Email: jalves@modestogov.com

A total of 5 comment letters were received during the public review period. Chapter 2 provides additional information about comments received on the DEIR.

1.3 FEIR Review and Certification

The FEIR will be distributed to public agencies that provided comments at least 10 days prior to certifying the FEIR. At the close of the 10-day public agency review period, City staff will recommend to the City Council whether or not to certify the FEIR. This governing body then will review the FEIR, consider staff recommendations and public testimony, and decide whether to certify the FEIR.

For significant impacts identified in the EIR that cannot be mitigated, a statement of overriding considerations must be included in the administrative record of the Proposed Program and, if the City chooses to certify the EIR and approve the Proposed Program, mentioned in the Notice of Determination (NOD) to be filed with OPR and at the office of the County Clerk (14 CCR Section 15093[c]).

1.4 Organization and Content of the FEIR

This FEIR contains the following chapters:

- **Chapter 1, *Introduction*.** This chapter describes the context of the FEIR; summarizes the public participation process to date, including the NOP and public scoping, the DEIR and public review, and comments on the DEIR; explains the FEIR review and certification process; and describes the organization of the document.
- **Chapter 2, *Comments on the DEIR and Responses*.** This chapter contains the substantive comments received on the DEIR and provides City's responses to those comments.
- **Chapter 3, *Revisions to the DEIR*.** This chapter presents revisions to the text of the DEIR made in response to comments received during the public review period or initiated by the City.
- **Chapter 4, *Report Preparation*.** This chapter lists the firms and individuals who assisted in the preparation of this FEIR.
- **Chapter 5, *References*.** This chapter provides a list of sources that are cited to support responses to comments on the DEIR.

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Chapter 2
COMMENTS ON THE DEIR AND RESPONSES

2.1 Introduction

CEQA requires the lead agency to prepare an FEIR, addressing all substantive comments received on the DEIR. The FEIR must include a list of all individuals, organizations, and agencies that provided comments on the DEIR, and must contain copies of all comments received during the public review period, along with the lead agency's responses.

This chapter provides a list of comments received, copies of the comments, and responses to those comments that address environmental issues.

Individual comments within each submittal are marked and numbered in the margin of the comment letter. The marked individual comments correspond to the responses to those comments (e.g., Comment A-1 from Letter A corresponds to the response to Comment A-1).

2.2 List of Comments Received

The City received five comment submittals, including letters and emails, during or immediately following the public review period. **Table 2-1** lists the identifier for each submittal; the name and affiliation of the individual who submitted each comment; and the date the comment was sent.

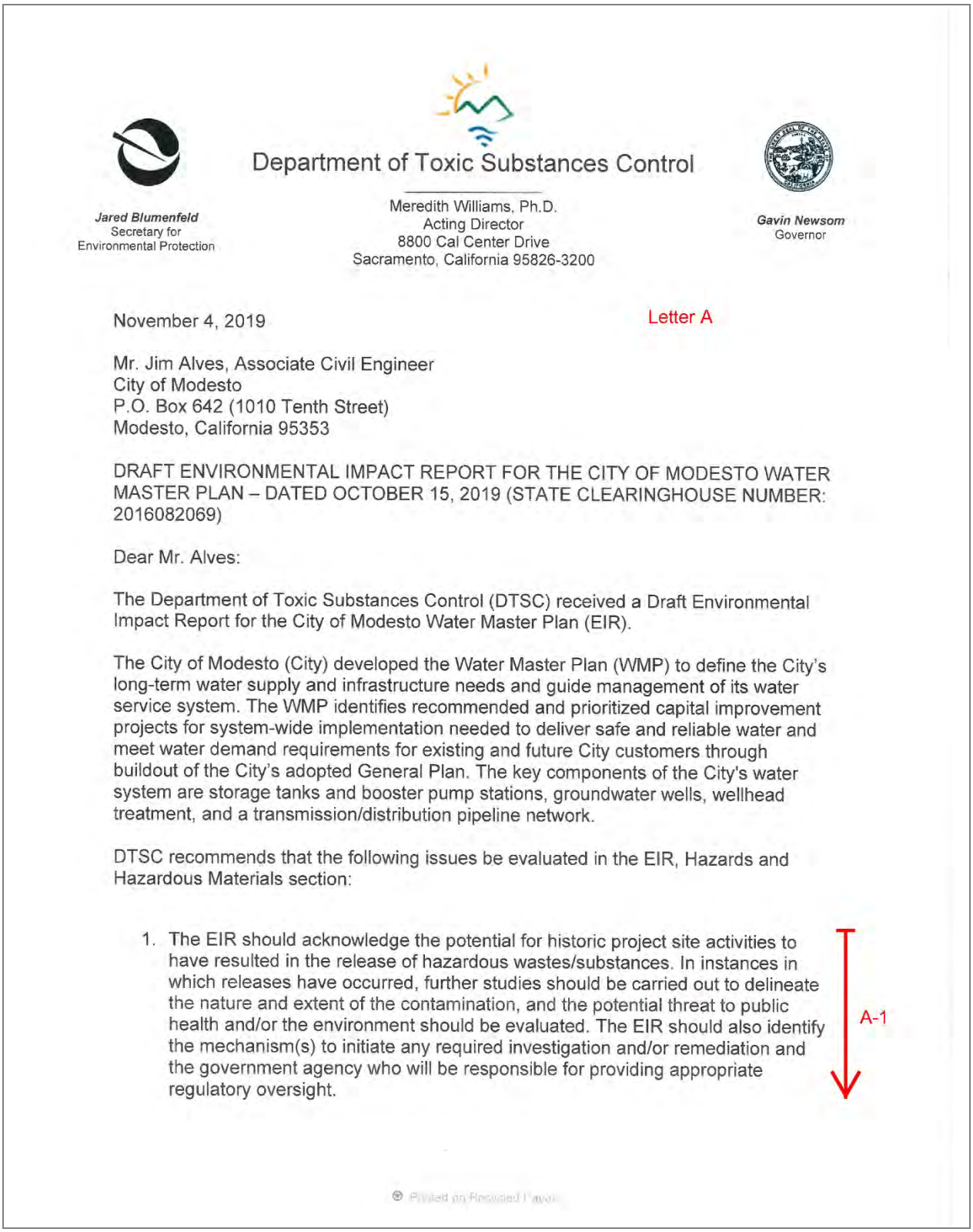
Table 2-1. List of DEIR Comment Submittals Received During the Public Review Period

Comment Letter	Commenter Name and Affiliation	Date Sent
A	Gavin McCreary, Site Mitigation and Restoration Program, Department of Toxic Substances Control	November 4, 2019
B	Jordan Hensley, Environmental Scientist, Central Valley Regional Water Quality Control Board	December 2, 2019
C	William D. Ross, on behalf of Salida Fire Protection District	December 2, 2019
D	John Davids, Modesto Irrigation District	December 12, 2019
E	Scott Morgan, Director, State Clearinghouse	December 3, 2019

2.3 Comments and Responses

This section contains a copy of each comment letter received during the DEIR review period. Following each submittal are the City's responses to each comment that addresses an environmental issue. Revisions to the DEIR that are indicated in these responses are provided in Chapter 3 of this FEIR.

Letter A – Gavin McCreary, Department of Toxic Substances Control



Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

November 4, 2019

Letter A

Mr. Jim Alves, Associate Civil Engineer
City of Modesto
P.O. Box 642 (1010 Tenth Street)
Modesto, California 95353

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF MODESTO WATER MASTER PLAN – DATED OCTOBER 15, 2019 (STATE CLEARINGHOUSE NUMBER: 2016082069)

Dear Mr. Alves:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report for the City of Modesto Water Master Plan (EIR).

The City of Modesto (City) developed the Water Master Plan (WMP) to define the City's long-term water supply and infrastructure needs and guide management of its water service system. The WMP identifies recommended and prioritized capital improvement projects for system-wide implementation needed to deliver safe and reliable water and meet water demand requirements for existing and future City customers through buildout of the City's adopted General Plan. The key components of the City's water system are storage tanks and booster pump stations, groundwater wells, wellhead treatment, and a transmission/distribution pipeline network.

DTSC recommends that the following issues be evaluated in the EIR, Hazards and Hazardous Materials section:

1. The EIR should acknowledge the potential for historic project site activities to have resulted in the release of hazardous wastes/substances. In instances in which releases have occurred, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

A-1

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In addition to anticipating contaminants discovered while performing work for system infrastructure at specific sites, the City should have plans in place for any incidental hazardous wastes/substances encountered while installing piping for water distribution systems. The Health and Safety Plan developed for site workers should include protocol for cases in which suspected contamination is encountered. Additionally, a Soil Management Plan should be in place to ensure proper disposal for any contaminated soil.

A-1, cont'd

2. If buildings or other structures are to be demolished on any project sites included in the WMP, surveys should be conducted to investigate for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf).

A-2

3. If any projects initiated as part of the WMP require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to *DTSC's 2001 Information Advisory Clean Imported Fill Material* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf).

A-3

4. If any sites included as part of the WMP have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf). In addition, sampling should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead_Contamination_050118.pdf).

A-4

DTSC appreciates the opportunity to review the Draft EIR. Should you need any assistance with an environmental investigation, please submit a request for Lead Agency Oversight Application, which can be found at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc. Additional information regarding voluntary agreements with DTSC can be found at: https://dtsc.ca.gov/brownfields/.

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If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.clearinghouse@opr.ca.gov

Ms. Lora Jameson, Chief
Site Evaluation and Remediation Unit
Department of Toxic Substances Control
Lora.Jameson@dtsc.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereasis@dtsc.ca.gov

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Response to Comment A-1

The commenter from the California Department of Toxic Substances Control (DTSC) indicates that the EIR should acknowledge the potential for past activities that may have resulted in the release of hazardous wastes/substances, and requests that the EIR describe the process for conducting further studies, investigations, and remediation that may be necessary.

The regulatory setting portion of EIR Chapter 11, *Hazards and Hazardous Materials*, describes Stanislaus County Safety Element Goal 2, Policy Thirteen: "The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required." This portion of Chapter 11 also describes City of Modesto Urban Area General Plan Policy VII-J[a]: "Support the Local Hazard Mitigation Plan (LHMP) and ensure the LHMP will be monitored, evaluated, and updated every three years or more frequently as the need arises." Also, there is an extensive state and local regulatory framework that includes requirements for addressing hazardous waste/substances.

Section 11.3.2, "Existing Hazards and Hazardous Materials," states: "In general, hazardous materials contamination is most often connected with past land uses such as gas stations, industrial facilities with underground storage tanks, military bases, and other sites that commonly use or store hazardous materials." Figure 11-4 depicts existing hazardous materials sites within the Proposed Program vicinity. Table 11-1 identifies existing hazardous material sites within 0.25 mile of Proposed Program components. This information provides adequate discussion regarding the potential for historic releases of hazardous wastes and substances.

Impact HAZ-6 (page 11-25) describes the process adopted with Modesto City Council Resolution 2003-66, which would require that any property acquisition by the City must be preceded by appropriate soil investigation and testing. This impact discussion also discloses that "Proposed pipeline improvements would generally be located within the public right-of-way and not within documented clean-up sites." The discussion provides the requested information; no additional response is necessary.

Response to Comment A-2

The comment indicates procedures to be followed prior to demolition of structures that may involve the presence of lead-based paints, mercury, asbestos-containing materials, and polychlorinated biphenyl caulk.

Chapter 11, "Hazards and Hazardous Materials," provides information in several places about federal and state requirements for demolition and construction activities that involve hazardous materials. The discussion primarily focuses on removal of asbestos-containing materials, however. In response to this comment, the discussion under "Occupational Safety and Health Act" (page 11-3) is hereby revised as follows to include information about other hazardous materials.

Occupational Safety and Health Act

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances, as well as other workplace hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. 29 CFR Chapter XVII, Subpart Z, Section 1926.1101 includes regulations to prevent worker exposure to unsafe levels of asbestos during construction and demolition activities. These regulations require contractors to set up regulated areas in dealing with asbestos materials and ensure that persons entering these areas are wearing respirators. Similarly, OSHA regulations establish general safety requirements for demolition involving hazardous materials (29 CFR Chapter XVII, Subpart Z, Section 1926 Subpart T) and requirements for construction and demolition activities involving lead (29 CFR Chapter XVII, Subpart Z, Section 1926.62).

In addition, Impact HAZ-1 (page 11-23) is hereby revised as follows to clarify inclusion of OSHA and DTSC regulations and requirements.

Impact HAZ-1: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Construction (*Less than Significant*)

Construction of the Proposed Program improvements would involve use of heavy construction equipment, which would use hazardous materials in their operation. These materials would include fuel, grease, oil, and other materials that may be contained within the equipment and/or stored on-site by the construction contractor. Contractors may routinely transport these materials to and from the site, and dispose of the materials once they have been used. In addition, the disinfection and flushing of newly constructed pipelines would require the use of hazardous materials (i.e., chlorination or de-chlorination chemicals). Potential demolition of structures could expose construction workers to hazardous materials such as asbestos-containing materials or lead-based paint.

Transport, use, and disposal of hazardous materials during construction could expose workers, the public, or the environment to hazards if adequate precautions are not taken. Construction workers could inhale toxic vapors or make bodily contact with materials, which could subject them to harm. The public or the environment could be exposed to toxic substances if materials were not stored, transported, or disposed of properly. The potential for harm may depend on the site-specific characteristics at any given Program improvement site, as well as proximity to sensitive receptors or environmental resources.

In accordance with applicable regulations, the City of Modesto and its contractors would be required to identify and track hazardous waste from “cradle to grave” (see RCRA under Section 11.2.1) and provide training and personal protective equipment to workers, if necessary, to prevent exposure to hazardous substances in excess of exposure limits (see “OSHA” under Section 11.2.1). Additionally, the City and/or its contractors would be required to follow protocols established under the NESHAP regulations (described in the

regulatory setting above and in Chapter 6, *Air Quality*), which are designed to limit health impacts associated with hazardous substances.

Compliance with these laws and regulations described in the regulatory setting would prevent significant impacts from occurring during construction activities, and the WMP does not create unique hazards from use, storage, transport, and disposal of materials. Therefore, this impact would be **less than significant.**

The commenter also provides a web link to DTSC's guidance for evaluating school sites with potential contamination. The Proposed Program does not involve the siting or construction of any schools, nor would it involve any activities that would result in the relocation of existing schools. Thus, although there are schools located in the Proposed Program's vicinity (Figure 11-3), the Proposed Program's pipelines would be located outside of these areas and instead within City or County right-of-way boundaries, City utility easements, and/or construction easements (Page 2-39). Because the Proposed Program does not involve school sites, no change to the EIR is necessary.

Response to Comment A-3

The commenter provides a web link to DTSC's guidance regarding imported fill material. The discussion of DTSC's responsibilities (page 11-3 in Chapter 11, *Hazards and Hazardous* Materials) is hereby revised to incorporate the recommended information, as follows:

The Unified Program

The Unified Program (20 Health and Safety Code [HSC] Sections 25404-25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, including the following:

- removal, demolition, and disposal of demolished structures that contain lead-based paint, mercury, and asbestos (DTSC 2006);
- importation of fill material (DTSC 2001); and
- presence of organochlorinated pesticides (DTSC 2008).

~~and it~~ DTSC works with other state agencies and delegates its authority to local jurisdictions that enter into agreements with the state. [[*no further revisions*]]

(Note that the links provided in the comment letter have been superseded by more current information due to reorganization of the DTSC website.)

Response to Comment A-4

The commenter provides a web link to DTSC's guidance for evaluating potential contamination of agricultural soils and for evaluating school sites for potential contamination. As described in the Response to Comment A-1, Modesto City Council Resolution 2003-66 requires that any property acquisition by the City must be preceded by appropriate soil investigation and testing. In addition,

as described in Response to Comment A-2, the Proposed Program would not affect existing school sites or require the relocation of schools. The comment is noted.

Letter B – Jordan Hensley, Central Valley Regional Water Quality Control Board

California Water Boards

Gavin Newsom, Governor
Jared Blumenfeld, Secretary for Environmental Protection

Central Valley Regional Water Quality Control Board

2 December 2019

Letter B

Jim Alves
City of Modesto
P.O. Box 642
Modesto, CA 95353

CERTIFIED MAIL
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COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF MODESTO WATER MASTER PLAN PROJECT, SCH#2016082069, STANISLAUS COUNTY

Pursuant to the State Clearinghouse's 15 October 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report (DEIR)* for the City of Modesto Water Master Plan Project, located in Stanislaus County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Recycled water use can help to reduce local water scarcity. It is not the only option for bringing supply and demand into a better balance, but it is a viable cost-effective solution that is appropriate in many cases. The feasibility of recycled water use depends on local circumstances which affect the balance of costs and benefits. In drought conditions, recycled water can be particularly valuable, given the scarcity of alternative supplies. In normal precipitation years recycled water use may reduce groundwater extraction. The proposed Water Mater Plan Project's goal is to deliver safe and reliable water and meet the demands of existing and future City of Modesto water customers. However, the DEIR has identified a substantial adverse effect on groundwater through depletion of groundwater supply and potential interference with groundwater recharge. This is presented as an unavoidable impact with no feasible mitigation. We recommend the consideration of recycled water use wherever possible within the Project's area as a means to help minimize the groundwater depletion. Information on permitting for recycled water is in the section "Waste Discharge Requirements – Discharges to Land", below. B-1

I. Regulatory Setting

Basin Plan B-2

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-

Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

B-2, cont'd

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

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II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

B-2, cont'd

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

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0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

B-2, cont'd

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more

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information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Waste Discharge Requirements – Discharges to Land

Before beginning discharge of any wastewater to land, the property owner and operator (together) are required to have WDRs or other documents from the Regional Water Quality Control Board allowing discharge to land.

The use of recycled water for non-potable uses, e.g. landscape irrigation, crop irrigation, dust control, industrial/commercial cooling, decorative fountains, can help to reduce local water scarcity and minimize groundwater withdrawals. The State Water Resources Control Board's Water Quality Order 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycled Water General Order), regulates discharges of recycled or reclaimed water to land. The Recycled Water General Order establishes standard conditions for recycled water use and conditionally delegates authority to an Administrator to manage a Water Recycling Program and issue Water Recycling Permits to recycled water users. Under this order only treated municipal wastewater for non-potable uses can be permitted.

In accordance with California Water Code Section 13260, the project proponent is required to submit a Report of Waste Discharge (RWD) to apply for enrollment under the general order. We recommend that the RWD be submitted 6 to 12 months before the expected startup date.

Pursuant to the State Board's Onsite Wastewater Treatment Systems Policy, the regulation of the septic system may be regulated under the local agency's management program. Please note that only domestic wastewater coming from bathrooms and kitchens should be discharged to septic systems, to avoid negative impacts to groundwater.

For more information on waste discharges to land, visit the Central Valley Water Board Waste Discharges to Land website at https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_land/.

Dewatering and Well-Development Discharge to Land

If the proposed project includes construction dewatering to be discharged to land, the proponent may apply for coverage under Water Quality Order 2003-0003-DWQ, *General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality* (Low Threat General Order). Small temporary construction dewatering projects are projects that discharge groundwater to land from, for example, excavation activities, water or monitoring well development and test pumping/purging, or non-contact cooling water. For certain other discharges which represent the absolute lowest threat to water quality, the Central Valley Water Board has adopted Resolution R5-2018-0085, *Waiver of Reports of Waste Discharge and WDRs for Specific Types of Discharge Within the Central Valley Region* (Specific Low-Threat Waiver). Dischargers seeking coverage under the

B-2, cont'd

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Low Threat General Order or the Specific Low-Threat Waiver must file at minimum a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order, visit the Central Valley Water Board Adopted Orders website, WQO 2003-0003 at https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf.

For more information regarding the Specific Low-Threat Waiver, visit the Central Valley Water Board website, R5-2018-0085 at https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf.

Limited Threat NPDES Permit - Discharge to Surface Waters
If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit
If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

B-2, cont'd

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Original Signed By

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento (via email)

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Response to Comment B-1

The City acknowledges and appreciates the Central Valley Regional Water Quality Control Board's (RWQCB's) review and comments on the DEIR, and its input regarding recycled water use as a means of minimizing groundwater depletion. The permitting requirements stated in the Central Valley RWQCB's letter regarding recycled water use are described in Section 12.2.2 of Chapter 12, *Hydrology and Water Quality,* on page 12-4. The use of recycled water for agricultural purposes is described by the City in its Wastewater Master Plan (2017); however, the City's *Urban Water Management Plan* (City of Modesto 2016) states that the City does not use recycled water to offset potable water use, nor does it anticipate doing so in the future.

Response to Comment B-2

The City acknowledges and appreciates the Central Valley RWQCB's review and comments on the DEIR, and its input regarding the various regulatory permitting requirements which may apply to the Proposed Program. The permitting requirements stated in the Central Valley RWQCB's letter are described in Section 12.2.2 of Chapter 12, *Hydrology and Water Quality,* of the DEIR. Additions to the setting section of Chapter 12 and Impact HYD/WQ-1 have been provided to further clarify the City's compliance with the potentially applicable NPDES permitting requirements. These clarifying edits do not alter the conclusions of the impact's significance or require any new or additional mitigation measures. Therefore, no additional response is necessary.

Letter C – William D. Ross, on behalf of Salida Fire Protection District

William D. Ross
David Schwarz
Kypros G. Hostetter

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Facsimile: (650) 843-8093

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#25532
Los Angeles, CA 90025

File No: 178/5.3.1

December 2, 2019

Letter C

VIA ELECTRONIC TRANSMISSION
jalves@modestogov.com

Jim Alves, Associate Civil Engineer[1]
City of Modesto Utilities Department
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353

Re: Comments of Salida Fire Protection District on City of Modesto Water Master Plan Draft Environmental Impact Report

Dear Mr. Alves:

This communication comments initially on behalf of the Salida Fire Protection District ("District") on the City of Modesto ("City") Draft Environmental Impact Report ("DEIR") for the City Water Master Plan (the "Project"). The comments focus on the substantive and procedural compliance of the Project DEIR with the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 *et. seq.*, "CEQA"), its Guidelines (Title 14, California Code of Regulations, Section 15000 *et. seq.*, "CEQA Guidelines") and applicable case law interpreting CEQA and the CEQA Guidelines as they relate to the District.

The methodology used in analyzing the DEIR is to: (1) examine the requirements for the contents of an environmental impact report ("EIR") as contained in CEQA, the CEQA Guidelines and applicable case law; and, (2) apply those standards to the DEIR to determine whether compliance is present with respect to the specific concerns of the District focused on adequacy of assessment of the Project impact on fire services.

I. FACTUAL BACKGROUND

A. Documents Reviewed.

The following documents have been reviewed in conjunction with the analysis of the DEIR in this communication:

1. Mr. Alves' job title is also listed as "Acting Senior Civil Engineer," *see*, DEIR, Executive Summary, p. ES-8.

1. Notice of Preparation ("NOP") of Draft Environmental Impact Report for the City of Modesto Water Master Plan, dated August 26, 2016;[2]

2. Notice of Availability of Draft Environmental Impact Report for City of Modesto Water Master Plan, dated October 15, 2019;

3. The City of Modesto 2019 Urban Area General Plan; and,

4. The City of Modesto 2019 Urban Area General Plan, Master Final Environmental Impact Report.

B. The Organization of The Project DEIR.

The DEIR is organized as follows:

An Executive Summary ("ES") (pp. ES-1 – ES-11);

Chapter 1 Introduction (pp. 1-1 – 1-23);

Chapter 2 Program Description (pp. 2-1 – 2-41);

Chapter 3 Introduction to the Environmental Analysis (pp. 3-1 - 3-5);

Chapter 4 Aesthetics and Visual Resources (pp. 4-1 – 4-7);

Chapter 5 Agricultural Resources (pp. 5-1 – 5-9);

Chapter 6 Air Quality (pp. 6-1 – 6-18);

Chapter 7 Biological Resources (pp. 7-1 – 7-34);

Chapter 8 Cultural, Tribal, and Paleontological Resources (pp. 8-1 – 8-18);

Chapter 9 Geology, Soils, and Seismicity (pp. 9-1 - 9-13);

Chapter 10 Greenhouse Gas Emissions and Energy Resources (pp. 10-1 - 10-11);

Chapter 11 Hazards and Hazardous Materials (pp. 11-1 – 11-23);

Chapter 12 Hydrology and Water Quality (pp. 12-1 – 12-25);

2. The District has reviewed its records, e-mails and written correspondence before and after August 26, 2016 and has determined that it did *not* receive the NOP. A summary review of this DEIR does not reveal a record of furnishing the NOP. *See*, CEQA Guideline Section 15082(a)(3).

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Chapter 13 Land Use and Planning (pp. 13-1 – 13-14);

Chapter 14 Noise and Vibration (pp. 14-1 – 14-19);

Chapter 15 Population and Housing (pp. 15-1 – 15-11);

Chapter 16 Transportation (pp. 16-1 – 16-11);

Chapter 17 Utilities and Service Systems (pp. 17-1 – 17-15);

Chapter 18 Other Statutory Considerations (pp. 18-1 – 18-23);

Chapter 19 Alternatives (pp. 19-1 – 19-14);

Chapter 20 Report Preparation (pp. 20-1); and,

Chapter 21 References (pp. 21-1).

C. Organization of the 2019 City Master FEIR For the Urban Area General Plan.

The City of Modesto 2019 Master Final Environmental Impact Report for the Urban Area General Plan consists of the following Chapters:

(1) Executive Summary (pp. I-1 – I-14);

(2) Implementation and Use of the Master Environmental Impact Report (pp. II-1 – II-9);

(3) Project Description (pp. III-1 – III-5);

(4) Environmental Setting (pp. IV-1 – IV-4);

(5) Environmental Analyses (pp. V-1-1 – V-1-46);

(6) Air Quality and Greenhouse Gas Emissions (pp. V-2-1 – V-2-43);

(7) Generation of Noise (pp. V-3-1 – V-3-46);

(8) Effects on Agricultural Lands (pp. V-4-1 – V-4-12);

(9) Increased Demand for Long-Term Water Supplies (pp. V-5-1 – V-5-23);

(10) Increased Demand for Sanitary Sewer Services (pp. V-6-1 – V-6-13);

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(11) Loss of Sensitive Wildlife and Plant Habitat (pp. V-7-1 – V-7-31);

(12) Disturbance of Archaeological / Historical Sites (pp. V-8-1 – V-8-29);

(13) Increased Demand for Storm Drainage (pp. V-9-1 – V-9-13);

(14) Flooding and Water Quality (pp. V-10-1 – V-9-13);

(15) Increased Demand for Parks and Open Space (pp. V-11-1 – V-11-10);

(16) Increased Demand for Schools (pp. V-12-1 – V-12-8);

(17) Increased Demand for Police Services (V-13-1 – V-13-8);

(18) Increased Demand for Fire Services (V-14-1 – V-14-8);

(19) Generation of Solid Waste (pp. V-15-1 – V-15-8);

(20) Generation of Hazardous Materials (pp. V-16-1 – V-16-15);

(21) Geology, Soils, and Minerals Resources (pp. V-17-1 – V-17-14);

(22) Energy (pp. V-18-1 – V-18-9);

(23) Effects on Visual Resources (pp. V-19-1 – V-19-7);

(24) Land Use and Planning (V-20-1 – V-20-14);

(25) Growth-Inducing Impacts (pp. VI-1 – VI-3);

(26) Irreversible Impacts (pp. VII-1 – VII-1);

(27) Alternatives Analysis (pp. VIII-1 – VIII-14); and,

(28) Draft Master EIR Comments and Responses (pp. IX-1).

II. ANALYSIS

A. Standard of Review for Sufficiency of Environmental Analysis of the DEIR.

1. CEQA Procedure.

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To achieve the objective of protecting the environment, the Legislative enacted CEQA and authorized the Office of Planning and Research within the Governor's Office to formulate the CEQA Guidelines. CEQA requires a public agency to consider the environmental impact of an activity or project before approving it. Public Resources Code Sections 21063, 21100. *Meridian Oceansystems, Inc. v. State Lands Com.*, 222 Cal. App. 3d 153, 159 (1990).[3] A project is defined as "the whole of an action, which has potential for resulting in a physical change in the environment." CEQA Guidelines Section 15378.

CEQA sets forth three levels of environmental review. First, if a project falls within a category exempted by administrative regulation, or it can be seen with certainty that there is no activity in question that may have a significant effect on the environment, no public evaluation is required. CEQA Guidelines Section 15060. An exemption is formalized by the adoption of a categorical exemption. The significance of a categorical exemption is that no further environmental review is required prior to project approval. However, if a project is one which may have a significant effect on the environment, an EIR is required. Public Resources Code Sections 21100, 21150; CEQA Guidelines Section 15062; *Perley v. Board of Supervisors,* 137 Cal. App. 3d 424, 430 (1982).

Here, the lead agency, the City, determined in the NOP that a DEIR would be prepared.

2. Standard of Review of Project DEIR.

The Project DEIR to be adequate must be "prepared with sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences." CEQA Guidelines Section 15151. The DEIR must include sufficient detail so that those who did not participate in the preparation of the DEIR can understand and consider meaningfully the issues raised by the proposed Project. *Kings County Farm Bureau v. City of Hanford,* 221 Cal. App. 3d 692, 712 (1990) *("Kings County").* In reviewing whether agency procedures comply with CEQA, the test to be applied is "whether and objective, good faith effort to so comply is demonstrated." *Mt. Sutro Defense Com. v. Regents of the University of California,* 77 Cal. App. 3d 20, 37 (1978); *Kings County, supra.,* 221 Cal. App. 3d at 712.

In summary, the DEIR must present a meaningful, accurate analysis of the significant environmental effects of the Project in order to comply with the law.[4]

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3. It has been continuously emphasized by the Courts that the Legislative intended CEQA to be interpreted in such a manner so as to afford the fullest possible protection to the environment. *Napa Valley Wine Train, Inc. v. Public Utilities Com., 50* Cal.3d 370, 376 (1990), which can only be achieved if CEQA is compiled with by presenting a *complete and accurate portrayal of the environmental effects of a project.*

4. In commenting upon the DEIR, we are cognizant of the definition of the terms "environment" and "significant effect on the environment."

CEQA Guidelines Section 15360 provides:
15360. "Environment" means the physical condition which exists within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or

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B. The DEIR Analysis of Project Impact with Respect to Fire Services Is Inaccurate and Incomplete.

The impact of the project on public services, including fire, is set forth is DEIR Section 3.6.3 (p. 3-4) and providing:

> Public services include police, fire, schools, and parks serving the study area and outline areas outside the city limits in Stanislaus County. The Proposed Program involves upgrades to the City's water distribution system and supply system that would accommodate growth projected within the City's water service areas and under the respective General Plans of Modesto, Ceres, Turlock and Stanislaus County (City of Modesto 2019a) … This growth would not result in any significant affects on …. fire services beyond those evaluated in the *Master Environmental Impact Report for the Urban Area General Plan* (City of Modesto 2019)…

References for this section of the DEIR indicate that the Urban Area Plan FEIR is available at: www.modestogov.com/2243/Documents-Resources. However, when that link is accessed, it is indicated on the City of Modesto website that "We're Sorry, there is Not a Webpage Matching Your Entry" (*see*, Exhibit "A").[5] C-1

When the Master Plan FEIR for the Urban Area General Plan (Section 14) is independently accessed for the DEIR reference above, the following is provided with respect to fire services in the unincorporated area subject to the Area Plan with the caveat without further elaboration that it is for areas that are only *partially* within the City's Sphere of Influence (p.V-14-2). C-2

Critical portions of this analysis provide as follows: C-3

> These Fire Districts (including Salida) their current staffing, and general type of service are listed in Table V-14-1. Because most of these districts are partially within the City's Sphere of Influence, these staffing levels do not correspond to the number of firefighters serving the sphere areas.

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aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions.

CEQA Guidelines Section 15382 provides:
15382. "Significant Effect on the Environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area effected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
5. This failed link means that the referenced information is *not* in the DEIR. Because it is not in the DEIR in writing it frustrates a fundamental principle of CEQA – to achieve meaningful public review. *See*, *Santiago County Water District v. County of Orange, 118 Cal.App.3d 818, 831 (1981).*

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> The rural level of service standard is characterized as a fire company equipped to handle basic structural fires and related emergencies that will arrive within 15 minutes of travel time, accompanied by other vehicles and capable of sustaining a five hundred-gallon-per minute fire flow for one hour. The suburban level of service is characterized as a fire company equipped to handle "all risk emergencies" that will arrive within 5-6 minutes of travel time and capable of sustaining a flow for a two thousand square foot occupancy for one hour. An urban level of service is characterized as a fire company equipped to handle all risk emergencies that will arrive within 5 minutes of travel time ninety percent of the time capable of sustaining adequate fire flow for the designated risk level in the area. These are broad characterizations of levels of service and *do not* necessarily reflect the District's effectiveness or efficiency in dealing with a given emergency. (Stanislaus Local Agency Formation Commission Countywide Fire Services Municipal Service Review 2007).

C-3, cont'd

In other words, the incorporated (linked) terms of the City Urban Area General Plan *do not analyze* the impact of the Project Program on the increased density of development contemplated in the District area. There is no analysis or conclusion of the Project with respect to fire services.

Moreover, the Master Plan FEIR, keeping in mind *it was prepared and filed in January 2019*, relies on a Municipal Service Review for analyzing Fire Protection Districts that *is out of date – April 25, 2007*. This incorporated analysis is insufficient as it should have analyzed the capability of fire services on the basis of the Municipal Service Review and Sphere of Influence Update for the Fire Protection Districts in Stanislaus County *adopted* by the Stanislaus Local Agency Formation Commission *on July 27, 2016. See*, http://www.modestogov.com/2243/Documents-Resources.

C-4

Stated plainly, the document relied on for the so-called DEIR "baseline analysis" relies on a study that is twelve years old and has been superseded by more recent information in the 2016 County LAFCO MSR for Fire Protection Districts.

The 2016 MSR, in assessing the effectiveness of fire services in the Salida Fire Protection District notes the following under the heading of "Growth and Population Projection for the Affected Area":

> Portions of the District south of Kiernan have a new, including the north county corridor are within the City of Modesto's sphere of influence. The rest of the District, including the urban area of Salida and Del Rio are not (though the urban area is defined in the City's General Plan). Annexations and land detachment by the City of Modesto possess a threat to the continued financial health of the District. Salida Fire has stated it is taking an active role in trying to protect its interest, and is interested in examining alternatives that protect both the City and the District. These efforts will require the active support of the County and LAFCO. *To date, the City of Modesto and Salida Fire have in place a*

C-5

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revenue-sharing agreement, which supports annexation without detachment. The last sentence of this "of this portion of the 2016 MSR is critical."

In the most recent example of an annexation by the City- the Wells Avenue Annexation- which supposedly will implement the goals and policies of not only the Urban Area General Plan but also this Project for the extension and improvement of water service departed from the "annexation without detachment process" whereby *all revenues* are reserved for fire services. No explanation was given from the City from this departure.

Indeed, the City assumes the lead agency role for CEQA compliance on the Wells Avenue Reorganization and prepared an initial study and adopted a finding of conformance with the Modesto Urban Area General Plan Master Environmental Impact Report – the same environmental impact report that inaccurately assesses Fire Services. *See*, Exhibit "B" attached.

Correspondingly, this DEIR *does not* indicate there would be a specific amount of revenue always set aside for fire protection in the affected area for the City of Modesto Fire Department to accomplish fire and lifesaving services (http://www.stanislauslafco.org/info/Agenda_PDFs/19/10232019a.pdf).

C-5, cont'd

Stated differently, the City Fire Department must compete for funds with other City Departments such as Parks and Recreation whereas the District is a single service district and its sole sources of revenue shares of the property tax and assessments which must be expended for fire and lifesaving services. This *was* the practice as noted previously.

C-6

Accordingly, this portion of the DEIR is insufficient because it references inaccurate information, relies on old information (the 2007 LAFCO MSR for Fire Protection Services) rather than current information and comes to no conclusion as to how this lack of analysis of fire services would be associated with the projected growth for the affected area- all areas examined by this DEIR. The method of accurate and current analysis required is extensive and *cannot* be accomplished by an addendum (*see*, CEQA Guidelines Section 15164) as it is not a "minor or technical" in nature.

C-7

C. The Environmental Setting Description of The Project Is Incomplete.

Because of the inaccurate and incomplete information with respect to fire services, the "environmental setting" portion of the DEIR is incomplete and inadequate.

CEQA Guidelines Section 15125 requires the Project EIR contain the following with respect to environmental setting:

An EIR must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and regional perspective. The description shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives.

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(a) Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project.

(b) The EIR shall discuss any inconsistencies between the proposed project and the applicable general plans and regional plans. Such regional plans include, but are not limited to, the applicable Air Quality Management Plan (or State Implementation Plan once adopted), area-wide waste treatment and water quality control plans, regional transportation plans…

(c) Where a proposed project is compared with an adopted plan, *the analysis shall examine the existing physical conditions as well as the potential future conditions discussed in the plan.* (Emphasis added).

C-8

Again, the required accurate analysis is not present.

D. Because the DEIR Is Incomplete and Does Not Contain Accurate and Current Information, It Should Be Supplemented and Recirculated.

Because the DEIR lacks critical information with respect to the Project environmental setting description and analysis of significant impacts on the environment, mitigation measures, Project alternatives and cumulative impacts, the DEIR must be revised according to the comments above and *recirculated* as a revised draft EIR for proper public comment.

In *Sutter Sensible Planning, Inc. v. Board of Supervisors,* 122 Cal. App. 3d 813, 822-823 (1981), a similar issue was analyzed with the court noting, among other things:

> *"The failure to include [the information] in the draft impact statement denied the District the 'opportunity to test, assess and evaluate the data* and make an informed judgement as to the validity of the conclusions to be drawn therefrom."

C-9

The Project DEIR suffers from the same deficiencies. Until the incomplete and inaccurate information commented upon above is obtained, and timely comment from other governmental agencies is included, there is a fundamental omission of adequate information in the DEIR to allow decisionmakers and the public to properly assess the Project.

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III. CONCLUSION

Since the DEIR lacks the necessary current, accurate information to render a complete analysis as presented in these comments, it is recommended that the City, *as lead agency,* require a further supplemental draft EIR to be prepared in light of the foregoing comments and that the supplemental EIR then be recirculated to the public to allow for further comment and review. C-10

Very truly yours,

William D. Ross

cc: Richard Weigele, District Chief
Salida Fire Protection District

Exhibit "A": City of Modesto Website, "We're Sorry, there is Not a Webpage Matching Your Entry."
Exhibit "B": Stanislaus LAFCO Minutes September 25, 2019 – LAFCO Application No. 2019-08 – Wells Avenue Reorganization to the City of Modesto.

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EXHIBIT A

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We're sorry, but there is not a web page matching your entry.
You entered: http://www.modestogov.com/2243/Documents-Resources
Click here to go to the home page
C-11

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EXHIBIT B

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DRAFT

Stanislaus LAFCO

STANISLAUS LOCAL AGENCY FORMATION COMMISSION

MINUTES

September 25, 2019

1. CALL TO ORDER

Chair Van Winkle called the meeting to order at 6:00 p.m.

A. Pledge of Allegiance to Flag. Chair Van Winkle led in the pledge of allegiance to the flag.

B. Introduction of Commissioners and Staff. Chair Van Winkle led in the introduction of the Commissioners and Staff.

Commissioners Present:	Michael Van Winkle, Chair, City Member Jim DeMartini, Vice Chair County Member Terry Withrow, County Member Bill Berryhill, Public Member Amy Bublak, City Member Richard O'Brien, Alternate City Member
Staff Present:	Sara Lytle-Pinhey, Executive Officer Javier Camarena, Assistant Executive Officer Jennifer Vieira, Commission Clerk Alice Mimms, LAFCO Counsel
Commissioners Absent:	Brad Hawn, Alternate Public Member Vito Chiesa, Alternate County Member

2. PUBLIC COMMENT

None.

3. APPROVAL OF MINUTES

A. Minutes of the August 28, 2019 Meeting.

Motion by Commissioner DeMartini, seconded by Commissioner Withrow and carried with a 5-0 vote to approve the Minutes of the August 28, 2019 meeting by the following vote:

Ayes:	Commissioners: Berryhill, Bublak, DeMartini, Van Winkle and Withrow
Noes:	Commissioners: None
Ineligible:	Commissioners: O'Brien
Absent:	Commissioners: Chiesa and Hawn
Abstention:	Commissioners: None

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Stanislaus
LAFCO

STANISLAUS LAFCO
LOCAL AGENCY FORMATION COMMISSION

Sara Lytle-Pinhey, Executive Officer
1010 10th Street, Third Floor
Modesto, California 95354
Phone: 209-525-7660
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www.stanislauslafco.org

Chair Michael Van Winkle, City Member
Vice Chair, Jim DeMartini, County Member
Terry Withrow, County Member
Bill Berryhill, Public Member
Amy Bublak, City Member
Richard O'Brien, Alternate City Member
Brad Hawn, Alternate Public Member
Vito Chiesa, Alternate County Member

AGENDA
Wednesday, October 23, 2019
6:00 P.M.
Joint Chambers—Basement Level
1010 10th Street, Modesto, California 95354

The Stanislaus Local Agency Formation Commission welcomes you to its meetings. As a courtesy, please silence your cell phones during the meeting. If you want to submit documents at this meeting, please bring 15 copies for distribution. Agendas and staff reports are available on our website at least 72 hours before each meeting. Materials related to an item on this Agenda, submitted to the Commission or prepared after distribution of the agenda packet, will be available for public inspection in the LAFCO Office at 1010 10th Street, 3rd Floor, Modesto, during normal business hours.

1. CALL TO ORDER

A. Pledge of Allegiance to the Flag.

B. Introduction of Commissioners and Staff.

2. PUBLIC COMMENT PERIOD

This is the period in which persons may speak on items that are not listed on the regular agenda. All persons wishing to speak during this public comment portion of the meeting are asked to fill out a "Speaker's Card" and provide it to the Commission Clerk. Each speaker will be limited to a three-minute presentation. No action will be taken by the Commission as a result of any item presented during the public comment period.

3. APPROVAL OF MINUTES

A. Minutes of the September 25, 2019 Meeting.

4. CORRESPONDENCE

No correspondence addressed to the Commission, individual Commissioners or staff will be accepted and/or considered unless it has been signed by the author, or sufficiently identifies the person or persons responsible for its creation and submittal.

A. Specific Correspondence.

B. Informational Correspondence.

1. 2019 Legislative Update.

C. "In the News."

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5. DECLARATION OF CONFLICTS AND DISQUALIFICATIONS

6. CONSENT ITEM

The following consent items are expected to be routine and non-controversial and will be acted upon by the Commission at one time without discussion, unless a request has been received prior to the discussion of the matter.

A. **YEAR-END FINANCIAL REPORT FOR FISCAL YEAR 2018-2019** (Staff Recommendation: Accept and file the report.)

7. PUBLIC HEARINGS

Any member of the public may address the Commission with respect to a scheduled public hearing item. Comments should be limited to no more than three (3) minutes, unless additional time is permitted by the Chair. All persons wishing to speak during this public hearing portion of the meeting are asked to fill out a "Speaker's Card" and provide it to the Commission Clerk prior to speaking.

A. **LAFCO APPLICATION NO. 2018-02 – NORTHWEST NEWMAN PHASE I REORGANIZATION TO THE CITY OF NEWMAN.** Request to annex approximately 121.31 acres to the City of Newman and simultaneously detach the area from the West Stanislaus Fire Protection District and Central California Irrigation District. The project area is located northwest of the Newman City Limits, west of Highway 33 and south of Stuhr Road. The City, through its planning process, assumed the role of Lead Agency, pursuant to the California Environmental Quality Act (CEQA), for the project and prepared an Environmental Impact Report for the Northwest Newman Master Plan. LAFCO, as a Responsible Agency, will consider this environmental documentation and adoption of the same findings. (Staff Recommendation: Adopt Resolution No. 2019-19 approving the proposal.)

8. OTHER BUSINESS

9. COMMISSIONER COMMENTS

Commission Members may provide comments regarding LAFCO matters.

10. ADDITIONAL MATTERS AT THE DISCRETION OF THE CHAIRPERSON

The Commission Chair may announce additional matters regarding LAFCO matters.

11. EXECUTIVE OFFICER'S REPORT

The Commission will receive a verbal report from the Executive Officer regarding current staff activities.

A. On the Horizon.

12. ADJOURNMENT

A. Set the next meeting date of the Commission for December 4, 2019.

B. Adjournment.

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4. CORRESPONDENCE

A. Specific Correspondence.

None.

B. Informational Correspondence.

1. CALAFCO Proposed dues structure for 2020.

C. "In the News"

5. DECLARATION OF CONFLICTS AND DISQUALIFICATIONS

None.

6. CONSENT ITEM

A. **PROPOSED LAFCO MEETING CALENDAR FOR 2020.**
(Staff Recommendation: Accept the 2020 Meeting Calendar.)

Motion by Commissioner Bublak, seconded by Commissioner Berryhill and carried with a 5-0 vote to accept the 2020 meeting calendar, by the following vote:

Ayes:	Commissioners: Berryhill, Bublak, DeMartini, Van Winkle and Withrow
Noes:	Commissioners: None
Ineligible:	Commissioners: O'Brien
Absent:	Commissioners: Chiesa and Hawn
Abstention:	Commissioners: None

7. PUBLIC HEARING

A. **LAFCO APPLICATION NO. 2019-08 – WELLS AVENUE REORGANIZATION TO THE CITY OF MODESTO.** Request to annex approximately 35 acres located south of Pelandale Avenue and west of McHenry Avenue to the City of Modesto and simultaneously detach the area from the Salida Fire Protection District. The annexation is within the City's Sphere of Influence and is meant to accommodate new residential development. The City of Modesto assumed the role of Lead Agency, pursuant to the California Environmental Quality Act (CEQA), for the project. The City prepared an initial study and adopted a finding of conformance with its Modesto Urban General Plan Master Environmental Impact Report (SCH No. 2014042081), pursuant to Section 21157.1 of the CEQA Guidelines. LAFCO, as a Responsible Agency, will consider the environmental documentation prepared by the City as part of its action. (Staff Recommendation: Adopt Resolution No. 2019-18 Option 2, denying the proposal without prejudice.)

C-12

Javier Camarena, Assistant Executive Officer, presented the item with a recommendation of denial without prejudice.

Chair Van Winkle opened the Public Hearing at 6:19 p.m.

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Pat Burns of Salida Fire Protection District spoke in regards to an agreement between the City and Salida Fire Protection District; George Petrulakis, a landowner representative, gave a short presentation and was available to answer questions of the Commission.

Chair Van Winkle closed the Public Hearing at 6:38 p.m.

Motion by Commissioner Bublak, seconded by Commissioner Berryhill, and carried with a 5-0 vote to adopt Resolution No. 2019-18 approving the proposal with the added condition, by the following vote:

Ayes:	Commissioners: Berryhill, Bublak, DeMartini, Van Winkle and Withrow
Noes:	Commissioners: None
Ineligible:	Commissioners: O'Brien
Absent:	Commissioners: Chiesa and Hawn
Abstention:	Commissioners: None

8. OTHER BUSINESS

None.

9. COMMISSIONER COMMENTS

None.

10. ADDITIONAL MATTERS AT THE DISCRETION OF THE CHAIRPERSON

None.

11. EXECUTIVE OFFICER'S REPORT

A. On the Horizon. The Executive Officer informed the Commission of the following:

- Upcoming items for October will include the Northwest Newman Master Plan Annexation.
- Upcoming for the December meeting: Staff is working on the Eastside Water District Annexation and anticipates a Fire Contract application from the City of Modesto.

12. ADJOURNMENT

A. Chair Van Winkle adjourned the meeting at 6:42 p.m.

NOT YET APPROVED

_____
Sara Lytle-Pinhey, Executive Officer

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Response to Comment C-1

The commenter, representing the Salida Fire Protection District (SFPD), indicates that the web link provided in the Draft EIR to the Master EIR for the City's Urban Area General Plan (City of Modesto 2019) was out of date. From time to time, agencies revise or update their websites for a variety of reasons; for instance, the web link provided by the commenter no longer provides access to the Master EIR. That document is currently available online at www.modestogov.com/2070/Master-Environmental-Impact-Report-EIR. Nevertheless, the Master EIR remained available online (although online access to references is not required under CEQA). In addition, the information in the letter that precedes Comment C-1 is background factual information or statements of law, and no response to these statements is necessary under CEQA.

Response to Comment C-2

The commenter misquotes the text, which states: "Each of these districts is at least partially within the City's Sphere of Influence." This comment pertains to the Master EIR for the Urban Area General Plan, not the WMP DEIR. No response is required.

Response to Comment C-3

The meaning of the phrase "the incorporated (linked) terms" is unclear. However, this comment pertains to the Master EIR for the Urban Area General Plan, not the WMP DEIR. No response is required.

Response to Comment C-4

This statement by the commenter addresses background information to the Master EIR for the Urban Area General Plan. The Master EIR contains a thorough analysis of the environmental impacts of Urban Area General Plan policies, including those related to fire services. Because this comment pertains to the Master EIR for the Urban Area General Plan, not the WMP DEIR, no response is required.

Response to Comment C-5

The commenter cites information from the 2016 Stanislaus Local Agency Formation Commission (LAFCO) Municipal Service Review (MSR), which describes a revenue sharing agreement that was in place at one time but is no longer in effect. The commenter also addresses the Wells Avenue Annexation as a departure from the "annexation without detachment process" and provides the October 23, 2019 Stanislaus LAFCO agenda for that project as Exhibit B.

To provide context: The Modesto Regional Fire Authority (MRFA) was established in 2011 as a joint powers authority between the City of Modesto and the Salida Fire Protection District. During the period when the MRFA was active, the Stanislaus LAFCO approved several development projects with a condition of "annexation without detachment," meaning that the area was annexed into the city's sphere of influence but continued to be served by the SFPD for fire protection service. Although the commenter implies that this was a longstanding relationship, the JPA was terminated in June 2014.

Thus, the commenter is raising issues regarding the Stanislaus LAFCO 2016 MSR, the Wells Avenue Annexation approval by the Stanislaus LAFCO, and the Master EIR for the Urban Area General

Plan. The WMP DEIR relies on, and references (on page 3-4), the previously certified Master EIR for the adopted Urban Area General Plan with regard to impacts associated with projected growth within the City's SOI, and the DEIR is consistent with the analysis of growth-related impacts provided in the Master EIR. None of these comments, however, address environmental impacts of the City of Modesto Water Master Plan as evaluated in the DEIR.

Response to Comment C-6

The comment addresses funding sources for the City Fire Department and SFPD, which is an economic issue and therefore not a resource topic subject to environmental review under CEQA. No comment related to the environmental impacts of the WMP analyzed in the DEIR is provided; therefore, no response is necessary.

Response to Comment C-7

The commenter states that the fire services analysis in the DEIR is inadequate as a result of the items identified in Comments C-1 through C-6. As noted in the Responses to Comments C-1 through C-6 above, the commenter's concerns are not relevant to the DEIR analysis of environmental impacts of the WMP. Although financial issues and funding are important considerations related to implementation of any project, they are not environmental issues under CEQA. Furthermore, the commenter's concerns about projected growth for the affected area are misdirected. The City's potential adoption of the WMP does not, by itself, result in increased growth or redirect growth from one area to another. Any growth that might result following adoption of the WMP is consistent with the adopted Urban Area General Plan, the environmental impacts of which were evaluated in the Master EIR for the Urban Area General Plan. These comments are more appropriately directed to the City Council with regard to the Urban Area Master Plan, which was adopted in January 2019; the comment period for approval of that project ended in February 2019. No comments were received from SFPD regarding the sufficiency of the Master EIR for the Urban Area General Plan.

Response to Comment C-8

The commenter cites CEQA Guidelines Section 15125(c) with regard to the adequacy of an EIR's environmental setting discussion. As noted in the quotation, "existing physical conditions" must be described. Although not stated in the comment, the commenter is presumably implying that a discussion of funding sources for fire protection service is required as part of the environmental setting. CEQA Guidelines Section 15064(d) states, in part:

> In evaluating the significance of the environmental effect of a project, the Lead Agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project.
>
> (1) A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project. …
>
> (2) An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. …

The presence or absence of funding availability over the course of a master plan does not meet the definition of a physical change in the environment. The "required analysis" requested by the commenter is neither required nor appropriate in an environmental review document under CEQA.

Response to Comment C-9

The commenter states that, because the requested information has not been provided, the DEIR is deficient. As described in the Responses to Comments C-1 through C-8, the requested information is not, in fact, required or appropriate. The DEIR is adequate as written; no additional response is necessary.

Response to Comment C-10

See the Response to Comment C-9. The DEIR contains sufficient information about the WMP's physical effects on the environment to allow the City to make an informed decision about the Proposed Program. No supplemental EIR or recirculation is necessary.

Response to Comment C-11

In Exhibit A, the commenter provides a printout of the web page indicating that the City's website has been reorganized and the Urban Area Master Plan is no longer at the link provided in the references section of the DEIR. The comment is noted; see the Response to Comment C-1.

Response to Comment C-12

In Exhibit B, the commenter provides the October 23, 2019 agenda for the Stanislaus LAFCO, which includes LAFCO Application No. 2019-08 – Wells Avenue Reorganization to the City of Modesto. No indication is provided by the commenter about the relevance of this information to the analysis of environmental impacts in the DEIR for the WMP. No response is possible.

Letter D – John Davids, Modesto Irrigation District

Subject: FW: City of Modesto Water Master Plan Draft EIR

Letter D

From: John Davids [mailto:John.Davids@mid.org]
Sent: Thursday, December 12, 2019 1:18 PM
To: William Wong
Cc: Gordon Enas
Subject: City of Modesto Water Master Plan Draft EIR

Hi Will –

I know we missed the formal comment deadline on your Water Master Plan, but I would prefer to work any issues out at a staff level anyway. Consistent with that approach, below are a few comments that we had following our review:

1. Section 2.6 Proposed Aquifer Storage and Recovery Program: The first sentence reads, "The proposed ASR program would identify areas within the Modesto Groundwater Subbasin where groundwater augmentation may occur both to aid in maintaining basin groundwater levels and to provide storage of seasonally-available surplus treated water (obtained via existing infrastructure from the MRWTP as supplied under agreements with MID) in the subsurface for future use."

   MID Comment: There doesn't appear to be an explicit provision for providing "seasonally-available surplus treated water" and storing as groundwater in the ARTDA. Further, we believe that the EIR should address how the ASR program will be integrated with the upcoming Groundwater Sustainability Plan for the Modesto Subbasin. ("Seasonally-available" is defined as water available in winter and spring months, in normal and wet years.) D-1

2. Section 10.3.1 Energy Resources and Consumption: The first sentence of the 2nd paragraph should be changed to read, "The TID in conjunction with MID owns and operates the ~~San~~ Don Pedro Dam…" D-2

3. Table 17-1 Projected Water Supplies:

Table 17-1. Projected Water Supplies **Source**	**Projected Water Supply (af/yr)**				
2020	**2025**	**2030**	**2035**	**2040**	
Surface water (from MID)	44,800	48,533	52,267	56,000	59,733
Groundwater	24,664	26,369	28,073	29,778	31,483
Total	**69,464**	**74,902**	**80,340**	**85,778**	**91,216**

MID Comment: As we discussed this week, we need to circle back to available water supplies now that Phase II is complete. If we could add a general statement along the lines of "future water supply from MID will be supplied in accordance with the ARTDA and the associated environmental documentation" I think that would preserve both parties position, meet your needs from a planning perspective and allow us the space for continued discussions. D-3

Appreciate your cooperation on this as I think many of the same approaches could be used in the 2020 Urban Water Management Plan update. Please let me know if you have any questions or concerns.

Regards,
John

1

Response to Comment D-1

The commenter with Modesto Irrigation District (MID) notes that some requested types of specific information are not provided about operation of the aquifer supply and recovery (ASR) program, including how seasonally available surplus treated water would be set aside. The commenter requests that the EIR describe how the ASR program would be integrated into the Groundwater Sustainability Plan (GSP) for the Modesto Sub-basin.

Section 2.6, "Proposed Aquifer Storage and Recovery Program," of the WMP DEIR describes the ASR program at a conceptual level. The Water Master Plan (WMP) conducted a reconnaissance-level feasibility evaluation (Appendix I) of ASR only as it pertains to certain existing City wells. These existing wells were evaluated as candidates for injection of surface water based on physical criteria in regard to capacity and soil strata of the wells. The WMP did not discuss other aspects that would be involved with a project-level analysis (e.g., water quality issues, conveyance of water to the well site, actual availability of surface water), nor did it discuss aspects regarding the Amended and Restated Treatment and Delivery (ARTDA) language or lack thereof. The statement regarding "seasonally available" surface water is referenced as conceptual in context. The conclusions of the WMP evaluation also recommended that, under a future focused evaluation, the City would address source water availability, water quality, and regulatory and other issues associated with an ASR program. This statement clearly implies working with MID, the source water provider, on such an effort. The WMP did not present ASR as an actual project, nor did the WMP account for ASR as a form of quantified groundwater supply to meet future demands that then could be evaluated under this CEQA process.

In the context of the Sustainable Groundwater Management Act, the WMP DEIR describes the City's participation in the Modesto and Turlock Sub-basins (page 2-31 under "Category 14 of WSER: Groundwater Management"). ASR is a well-known form of managed aquifer recharge that could be one of several tools available to address and/or manage groundwater sustainability goals. The conclusions of the GSP have not been formulated yet as to the sustainability of the sub-basin and, as such, GSP language regarding solutions or mitigation to achieve sustainability have not been developed. The GSP was initiated after the WMP effort; thus, the WMP could not consider the integration aspect. The WMP merely suggests that ASR could be a viable management tool for future consideration and that certain City wells may be good candidates.

Response to Comment D-2

The first paragraph on page 10-10, in Section 10.3.1, "Energy Resources and Consumption," is hereby revised as follows:

> The TID in conjunction with MID owns and operates the ~~San~~ Don Pedro Dam, providing up to 203 megawatts of hydroelectric power to customers throughout the City of Modesto.

Response to Comment D-3

The commenter indicates that, notwithstanding the projected water supply data provided in Table 17-1 (which originated in Table 6-20 of the City's 2015 Urban Water Management Plan), MID and the City have discussed the need for follow-up discussions on future water supply. The requested language is hereby added following Table 17-1 on page 17-9, before the subheading "Sources of Surface Water," as follows:

With completion of Phase II of MID's Modesto Regional Water Treatment Plant (MRWTP) in 2016, future water supply from MID will be supplied in accordance with the ARTDA and the associated environmental documentation.

1 # Letter E – Scott Morgan, State Clearinghouse

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

December 3, 2019

Letter E

Jim Alves
Modesto, City of
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353

Subject: Water Master Plan
SCH#: 2016082069

Dear Jim Alves:

The State Clearinghouse submitted the above named EIR to selected state agencies for review. The review period closed on 12/2/2019, and the comments from the responding agency (ies) is (are) available on the CEQA database for your retrieval and use. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

Check the CEQA database for submitted comments for use in preparing your final environmental document: https://ceqanet.opr.ca.gov/2016082069/2 . Should you need more information or clarification of the comments, **we recommend that you contact the commenting agency directly**.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

E-1

Sincerely,

Scott Morgan
Director, State Clearinghouse

cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL 1-916-445-0613 state.clearinghouse@opr.ca.gov www.opr.ca.gov

2

Response to Comment E-1

The comment states that the State Clearinghouse submitted the WMP EIR to selected state agencies for review and indicates that the CEQA database holds submitted comments. The comment also acknowledges that the City has complied with State Clearinghouse review requirements for draft environmental documents pursuant to CEQA.

The City checked the CEQA database, and all substantive comments submitted have been addressed in this Chapter 2.0, *Comments on the DEIR and Responses*.

Chapter 3
REVISIONS TO THE DEIR

This chapter presents revisions to the DEIR in response to the public review and comment process. This chapter also corrects minor errors from the DEIR that are corrected herein. Changes made in response to comments are discussed in FEIR Chapter 2 and indicated below. Text added to the DEIR is underlined, and deleted text is shown in ~~strikeout~~. DEIR text changes are presented in the order they would appear in the DEIR; page numbers from the DEIR are provided to assist in identifying the location of the revisions.

Executive Summary

In Table ES-2, "Summary of Potential Impacts and Mitigation Measures," the section summarizing impacts and mitigation for cultural, tribal, and paleontological resources (page ES-17) incorrectly indicated that Impact CR-4 requires implementation of Mitigation Measure CR-1. This portion of Table ES-2 is hereby revised as follows to correct that error:

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Cultural, Tribal, and Paleontological Resources			
Impact CR-1: Impacts on Known Historic, Archaeological or Tribal Resources	LS	LS	None required
Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources	S	LSM	**Mitigation Measure CR-1:** Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work
Impact CR-3: Disturb Any Human Remains, Including Those Interred Outside of Dedicated Cemeteries	S	LSM	Mitigation Measure CR-1
Impact CR-4: Impacts on Paleontological Resources	S	LS~~M~~	~~Mitigation Measure CR-1~~ None required
Impact CR-5: Potential for a Substantial Adverse Impact on Tribal Cultural Resources	S	LSM	Mitigation Measure CR-1

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Chapter 10, Greenhouse Gas Emissions and Energy Resources

The first paragraph on page 10-10, in Section 10.3.1, "Energy Resources and Consumption," is hereby revised as follows:

> The TID in conjunction with MID owns and operates the ~~San~~ Don Pedro Dam, providing up to 203 megawatts of hydroelectric power to customers throughout the City of Modesto.

Chapter 11, Hazards and Hazardous Materials

The discussion under "Occupational Safety and Health Act" (page 11-3) is hereby revised as follows:

> ***Occupational Safety and Health Act***
>
> OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances, as well as other workplace hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. 29 CFR Chapter XVII, Subpart Z, Section 1926.1101 includes regulations to prevent worker exposure to unsafe levels of asbestos during construction and demolition activities. These regulations require contractors to set up regulated areas in dealing with asbestos materials and ensure that persons entering these areas are wearing respirators. Similarly, OSHA regulations establish general safety requirements for demolition involving hazardous materials (29 CFR Chapter XVII, Subpart Z, Section 1926 Subpart T) and requirements for construction and demolition activities involving lead (29 CFR Chapter XVII, Subpart Z, Section 1926.62).

The discussion of DTSC's responsibilities (page 11-3) is revised as follows:

> ***The Unified Program***
>
> The Unified Program (20 Health and Safety Code [HSC] Sections 25404-25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, including the following:
>
> - removal, demolition, and disposal of demolished structures that contain lead-based paint, mercury, and asbestos (DTSC 2006);
> - importation of fill material (DTSC 2001); and
> - presence of organochlorinated pesticides (DTSC 2008).
>
> ~~and it~~ DTSC works with other state agencies and delegates its authority to local jurisdictions that enter into agreements with the state. [[*no further revisions*]]

Impact HAZ-1 (page 11-23) is hereby revised as follows to clarify inclusion of OSHA and DTSC regulations and requirements.

Impact HAZ-1: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Construction (*Less than Significant*)

Construction of the Proposed Program improvements would involve use of heavy construction equipment, which would use hazardous materials in their operation. These materials would include fuel, grease, oil, and other materials that may be contained within the equipment and/or stored on-site by the construction contractor. Contractors may routinely transport these materials to and from the site, and dispose of the materials once they have been used. In addition, the disinfection and flushing of newly constructed pipelines would require the use of hazardous materials (i.e., chlorination or de-chlorination chemicals). Potential demolition of structures could expose construction workers to hazardous materials such as asbestos-containing materials or lead-based paint.

Transport, use, and disposal of hazardous materials during construction could expose workers, the public, or the environment to hazards if adequate precautions are not taken. Construction workers could inhale toxic vapors or make bodily contact with materials, which could subject them to harm. The public or the environment could be exposed to toxic substances if materials were not stored, transported, or disposed of properly. The potential for harm may depend on the site-specific characteristics at any given Program improvement site, as well as proximity to sensitive receptors or environmental resources.

In accordance with applicable regulations, the City of Modesto and its contractors would be required to identify and track hazardous waste from "cradle to grave" (see RCRA under Section 11.2.1) and provide training and personal protective equipment to workers, if necessary, to prevent exposure to hazardous substances in excess of exposure limits (see "OSHA" under Section 11.2.1). Additionally, the City and/or its contractors would be required to follow protocols established under the NESHAP regulations (described in the regulatory setting above and in Chapter 6, *Air Quality*), which are designed to limit health impacts associated with hazardous substances.

Compliance with these laws and regulations described in the regulatory setting would prevent significant impacts from occurring during construction activities, and the WMP does not create unique hazards from use, storage, transport, and disposal of materials. Therefore, this impact would be **less than significant.**

Chapter 12, Hydrology and Water Quality

The discussion under Section 12.2.2, "State Laws, Regulations, and Policies" (page 12-2), is hereby revised as follows to include this additional information:

Antidegradation Policy. The State Water Board adopted California's antidegradation policy by Resolution 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," in 1968. The Antidegradation Policy seeks to protect

high-quality surface water and groundwater from the disposal of waste and subsequent resulting decrease in water quality. This policy requires that the "quality of existing high-quality water be maintained unless the State finds that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in policies as of the date on which such policies became effective" (State Water Resources Control Board [SWRCB] 2020). In addition, the Antidegradation Policy requires best practicable treatment or control (BPTC) of discharges to high-quality waters to assure that pollution or nuisance will not occur, and that the highest water quality consistent with maximum benefit to the people of the state will be maintained (SWRCB 2020).

The discussion under "National Pollutant Discharge Elimination System Permits" (page 12-3) is hereby revised as follows to include this additional information:

Dewatering Activities

Although some construction-related dewatering is covered under the General Construction Permit, the Central Valley RWQCB has also adopted a general permit for limited threat discharges to surface water, including construction dewatering discharges (Order No. R5-2016-0076 [NDPES No. CAG995002]) (Central Valley RWQCB 2016). This permit (Limited Threat General Order) would most likely apply to the Proposed Program if construction would require dewatering in greater quantities than allowed by the General Construction Permit and would discharge the effluent to surface waters. The general permit for limited threat discharges to surface water contains waste discharge limitations and prohibitions similar to those in the General Construction Permit. To obtain coverage, the applicant must submit a Notice of Intent and a pollution prevention and monitoring program.

Similarly, if construction-related dewatering requires discharge to land and exceeds the amount permissible under the General Construction Permit, the applicant may seek coverage under *Water Quality Order 2003-0003-DWQ, General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality (Low Threat General Order*), or under the Central Valley RWQCB's Resolution R5-2018-0085, *Waiver of Reports of Waste Discharge and WDRs for Specific Types of Discharge within the Central Valley Region (Specific Low-Threat Waiver*). The Low Threat General Order may be applicable for temporary, small construction dewatering projects that discharge groundwater to land from excavation activities, water or monitoring well development, and test pumping/purging. Other discharges that represent the absolute lowest threat to water quality may be covered under the Specific Low-Threat Waiver. To obtain coverage under the Low Threat General Order or the Specific Low-Threat Waiver, the applicant must submit a Notice of Intent at a minimum with the Central Valley RWQCB.

Impact HYD/WQ-1 (page 12-25) is hereby revised as follows to clarify inclusion of the SWRCB's Anti-Degradation Policy, the Low Threat General Order, and the Specific Low-Threat Waiver regulations and requirements. These clarifying edits do not alter the conclusions of the impact's significance or require any new or additional mitigation measures.

Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality (*Less than Significant with Mitigation*)

Construction of the proposed components could result in discharges of poor-quality water to nearby water bodies, if adequate precautions are not taken. Trenching and other ground-disturbing activities could expose loose soils that could be eroded during precipitation events. Construction equipment also would use hazardous materials (e.g., fuel and diesel) that could spill during routine use, storage, transport, or disposal, and then potentially seep into groundwater or be washed into nearby water bodies. Use of trenchless construction methods (e.g., jack and bore, horizontal directional drilling [HDD] also could present hazards to water quality, such as from frac-out accidents during boring activities below or near streams. Additionally, construction of Program components may require dewatering of excavations, particularly for those components adjacent to the Tuolumne River. Discharge of this water back to the river or other areas could result in adverse water quality effects if adequate precautions are not taken.

Testing, disinfection, and flushing of pipeline improvements prior to use also would require disposal of de-chlorinated flushing water to the storm drainage system or sanitary sewer system. As described in Chapter 2, Program Description, one of the prescribed disinfection methods in the City's standard specifications, which comply with American Water Works Association (AWWA) standard methods, would be used to disinfect all new water mains and appurtenances. After completion of the disinfection process, the heavily chlorinated water would be de-chlorinated and flushed from the new pipelines/water system facilities until the residual chlorine concentration meets the City's established requirements, which are protective of water quality in receiving waters. Discharges of this water would not substantially affect receiving waters or result in a violation of water quality standards or waste discharge requirements; refer to Chapter 17, Utilities and Service Systems for additional discussion of impacts on the stormwater and sewer system from discharge of testing, disinfection and flushing water.

As described in Chapter 11, Hazards and Hazardous Materials, many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. As described in Section 12.2, the SWPPP must, among other things, present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. The SWPPP also would include spill prevention and response procedures for any hazardous materials used during construction. Compliance with this permit would minimize any impacts of Proposed Program construction activities on water quality, but construction water quality impacts of individual program components could nevertheless be significant.

For Program components whose construction would disturb less than one acre, the City of Modesto's Standard Specifications require that all projects less than one acre develop a Local SWPPP or Erosion Control Plan and implement stormwater BMPs during construction. The Local SWPPP must be submitted to the City of Modesto Land

Development Engineering Division for review prior to obtaining a Grading or Encroachment Permit for the project. Erosion control BMPs are described in Chapter 15 of the Standard Specifications. Implementation of these requirements included in the City's Standard Specifications would ensure that impacts on water quality related to erosion for Program components that disturb less than one acre would be less than significant.

In addition, for Program components that require construction-related dewatering of excavated areas, particularly areas near the Tuolumne River, any discharges of dewatered water to surface waters or land would be required to meet all applicable NPDES permitting requirements and corresponding water quality protections. Depending on if the dewatered groundwater is discharged to land or surface waters, the following NPDES permits would be potentially applicable: the Low Threat General Order, the Specific Low-Threat Waiver, and the Limited Threat General Order. Compliance with the pollution prevention and water quality protection measures included in these permits would minimize the potential for any impacts on the quality of surface waters or groundwater from discharge of dewatered groundwater during construction activities. Furthermore, all Program components requiring these activities and coverage under the NPDES permits, would be required to comply with the State's Antidegradation Policy. Thus, through the regulatory and permitting compliance processes associated with the NPDES program, any dewatering activities for the Proposed Program would not result in substantial groundwater or surface water quality impacts.

As described in Chapter 11, *Hazards and Hazardous Materials*, the City would maintain compliance with all local, state, and federal regulations concerning hazardous materials which would prevent substantial water quality impacts (e.g., due to accidental spills of hazardous materials) during construction activities and ensure water quality impacts would be less than significant.

To ensure that the Proposed Program would not adversely impact water quality from proposed trenchless pipeline installation methods (e.g., new water distribution pipelines underneath the Tuolumne River or Dry Creek), the City would implement Mitigation Measure HYD/WQ-1 (Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods). This measure would require the City's drilling contractor to prepare and implement a frac-out contingency plan for trenchless construction methods. The plan would be designed to minimize the potential for frac-out, provide for the timely detection of frac-outs, and ensure a timely and effective response in the event a frac-out occurs (CPUC 2003). Implementation of this mitigation measure would reduce adverse water quality impacts from frac-out associated with trenchless activities to a level that is less than significant.

Overall, compliance with NPDES permit requirements and the City's Standard Specifications, and implementation of Mitigation Measure HYD/WQ-1 would minimize adverse effects on water quality. In conclusion, the Proposed Program's overall impact would be less than significant with mitigation.

Chapter 17, Utilities

The following text is hereby added on page 17-9, following Table 17-1 and before the subheading "Sources of Surface Water":

> With completion of Phase II of MID's Modesto Regional Water Treatment Plant (MRWTP) in 2016, future water supply from MID will be supplied in accordance with the ARTDA and the associated environmental documentation.

Chapter 4
REPORT PREPARATION

City of Modesto

City of Modesto Utilities Department
PO Box 642 (1010 10th Street)
Modesto, CA 95353

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Chapter 5
REFERENCES

Chapter 1, Introduction

None cited.

Chapter 2, Comments on the DEIR and Responses

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City of Modesto

Water Master Plan

Draft Environmental Impact Report

Prepared for:

City of Modesto
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353

Prepared by:

Horizon Water and Environment, LLC
266 Grand Avenue, Suite 210
Oakland, California 94610

October 2019

For accessibility assistance with this document, please contact the City of Modesto at 209-577-5402 or through the California Relay Service by dialing 711.

This document includes complex figures that may be difficult to interpret for readers with some disabilities. For ADA assistance interpreting any figures, please contact the City of Modesto.

City of Modesto

Water Master Plan

Draft Environmental Impact Report

Prepared for:

City of Modesto
PO Box 642
Modesto, CA 95353

Prepared by:

Horizon Water and Environment, LLC
266 Grand Avenue, Suite 210
Oakland, California 94610

October 2019

Horizon Water and Environment. 2019. City of Modesto, Water Master Plan, Draft Environmental Impact Report. October. (HWE 15.042) Oakland, CA.

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ACRONYMS AND ABBREVIATIONS

Abbreviation	*Full Term*
°F	degrees Fahrenheit
A	
A	attainment
AB	Assembly Bill
ACE	Altamont Commuter Express
AF	acre-foot
af/yr	acre-feet per year
ALUCP	Airport Land Use Compatibility Plan
APCD	air pollution control district
ASR	aquifer storage and recovery
ATCM	airborne toxic control measure
AWWA	American Water Works Association
B	
Basin Plan	Water Quality Control Plan
BAU	business as usual
bgs	below ground surface
BMP	best management practice
BMO	best management objective
BP	Business Park
BPS	Best Performance Standards
C	
C	Commercial
CAAQS	California Ambient Air Quality Standards
Cal. Code Regs.	California Code of Regulations
Cal EMA	California Emergency Management Agency
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	climate action plan
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CBC	California Building Standards Code
CCR	California Code of Regulations

Abbreviation	*Full Term*
CCTS	Central California Taxonomic System
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CIP	capital improvement project
City	City of Modesto
CMP	Congestion Management Process for the Stanislaus County Region
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
Court	U.S. Supreme Court
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
D	
dB	decibel
dBA	A-weighted decibel
DBCP	dibromochloropropane
DEIR	draft program environmental impact report
DOF	California Department of Finance
DPM	diesel particulate matter
DPWD	Del Puerto Water District
DRCP	Del Rio Community Plan
DTSC	California Department of Toxic Substances Control

Abbreviation	*Full Term*
DWR	California Department of Water Resources
E	
EIR	environmental impact report
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
F	
FD	federally delisted
FE	federally endangered
FEMA	Federal Emergency Management Agency
F&G Code	California Fish and Game Code
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FR	Federal Register
FT	federally threatened
FTA	Federal Transit Administration
G	
g	unit of measure for ground shaking, expressing the acceleration of movement relative to the acceleration of gravity
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
General Order	Water Reclamation Requirements for Recycled Water Use
General Permit	General Permit for Storm Water Discharges Associated with Construction Activity
General Plan	Proposed (or Alternative) Urban Area General Plan
GHG	greenhouse gas
GIS	geographic information systems
gpm	gallons per minute
GSA	groundwater sustainability agency
GPS	groundwater sustainability plan
Guidance	Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA
GWMP	groundwater management plan
GWP	global warming potential
H	
H_2O	atmospheric water
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HAZCOM	Hazardous Materials Communication

Abbreviation	*Full Term*
HCM	Highway Capacity Manual
HCP	habitat conservation plan
HDD	horizontal directional drilling
HFC	hydrofluorocarbon
HMBP	Hazardous Materials Business Plan
hp	horsepower
HSC	Health and Safety Code
Hz	Hertz
I	
I	Industrial
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IRGMP	integrated regional groundwater management
K	
km	kilometer
L	
LAFCO	Local Agency Formation Commission
lf	linear feet
L_{dn}	day-night sound level
L_{eq}	equivalent steady-state sound level
L_{max}	maximum sound level
L_{min}	minimum sound level
LOS	level of service
LS	less than significant
LSM	less than significant with mitigation
LUST	leaking underground storage tank
M	
M	magnitude
MAP	Model Accreditation Plan
MAX	Modesto Area Express
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MEI	Maximally Exposed Individual
MG	million gallons
mgd	million gallons per day
MID	Modesto Irrigation District
MLD	Most Likely Descendent
MMI	Modified Mercalli Intensity Scale

Abbreviation	*Full Term*
MMT CO_2e	million tons of carbon dioxide equivalents
mph	miles per hour
MRWTP	Modesto Regional Water Treatment Plant
MS4	municipal separate storm sewer system
msl	mean sea level
MT	million tons
MT CO_2e	million tons of carbon dioxide equivalents
MU	Mixed Use
N	
NOA	Notice of Availability
N	nonattainment
N	nitrogen
N_2O	nitrous oxide
NA	not available
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NI	no impact
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSF	National Science Foundation
NSPS	Standards of Performance for New Stationary Sources
O	
O&M	operations and maintenance
O_2	oxygen
O_3	ozone

Abbreviation	*Full Term*
OBD	on-board diagnostic
OEHHA	California Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OS	Open Space
OSHA	U.S. Department of Labor, Occupational Safety and Health Administration
P	
Pb	lead
PCE	perchloroethylene
PEIR	program environmental impact report
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less
ppm	parts per million
PPV	peak particle velocity
Proposed Program	proposed 2017 Water Master Plan
PST	Pacific Standard Time
PUA	Planned Urbanizing Area
Pub. Res. Code	Public Resources Code
PVC	polyvinyl chloride
PWWF	peak wet weather flow
R	
R	Residential
R-1	low-density residential
RC	Regional Commercial
RCRA	Resource Conservation and Recovery Act of 1976
RMP	risk management plan
ROG	reactive organic gases
RPD	Redevelopment Planning District
RPS	Renewable Portfolio Standard
R&R	rehabilitation and replacement
RST	Stanislaus Regional Sustainability Toolbox
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board

Abbreviation	*Full Term*
S	
SAR	Second Assessment Report
SB	Senate Bill
SC (Endangered)	state candidate for listing as endangered
SCADA	supervisory control and data acquisition
SCS	Sustainable Communities Strategy
SCP	Salida Community Plan
SE	state endangered
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act of 1990
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-Lived Climate Pollutant
SMBRP	Site Mitigation and Brownfields Reuse Program
SO_2	sulfur dioxide
SOI	Sphere of Influence
S-P	Specific Plan
SPFC	State Plan of Flood Control
SR	State Route
SRWA	Stanislaus Regional Water Authority
SSC	state species of special concern
SSO	sanitary sewer overflow
StanCOG	Stanislaus Council of Governments
ST	state threatened
StaRT	Stanislaus Regional Transit
STRGBA	Stanislaus and Tuolumne Rivers Groundwater Basin Association
SU	significant and unavoidable
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWSP	Surface Water Supply Project
T	
TAC	toxic air contaminant
TCE	trichloroethyylene
TCP	traditional cultural property
TCR	tribal cultural resource
TDS	total dissolved solids
TGBA	Turlock Groundwater Basin Association

Abbreviation	*Full Term*
TID	Turlock Irrigation District
TMDL	total maximum daily load
TMP	traffic management plan
TRRP	Tuolumne River Regional Park
U	
U	unclassified
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
UWMP	urban water management plan
V	
VdB	vibration velocity in decibels
VELB	valley elderberry longhorn beetle
VOC	volatile organic compound
VR	Village Residential
W	
WAS	waste activated sludge
WMP	2017 Water Master Plan
WSER	Water System Engineer's Report
WSA	water sales agreement

EXECUTIVE SUMMARY

ES.1 Introduction

The City of Modesto (City) has prepared this Draft Program Environmental Impact Report (DEIR) as lead agency to provide the public, responsible agencies, and trustee agencies with information about the environmental effects of implementation of the proposed 2017 Water Master Plan (WMP or Proposed Program). This DEIR was prepared in compliance with the California Environmental Quality Act of 1970 (CEQA), as amended, and the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.).

ES.2 Background and Overview

The WMP is intended to accommodate the existing and future water supply needs through 2050 of the population and land uses of the City, along with the City's other water customers in the outlying service areas of Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock. The City developed the WMP to define the City's long-term water supply and infrastructure needs and guide management of its water service system. The WMP identifies recommended and prioritized capital improvement projects (CIPs) for system-wide implementation needed to deliver safe and reliable water and meet water demand requirements for existing and future City customers through buildout of the City's adopted General Plan. The WMP is described in the *City of Modesto Water Master Plan*, prepared by West Yost Associates (Final Draft September 2017).

ES.2.1 Program Location

The Proposed Program is location in the city of Modesto and other communities in Stanislaus County, California, in the central San Joaquin Valley. Modesto is centrally located within California, approximately 70 miles southeast of Sacramento, 85 miles east of San Francisco, 90 miles northwest of Fresno, and 35 miles west of the foothills of the Sierra Nevada range. The City's contiguous service area is limited to the current sphere of influence (SOI), Salida, North Ceres, and some unincorporated areas within and adjacent to the SOI including Empire. The outlying service areas include Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock. Collectively, the contiguous service area and outlying service areas constitute the Proposed Program's study area. These areas are shown in **Figure ES-1**.

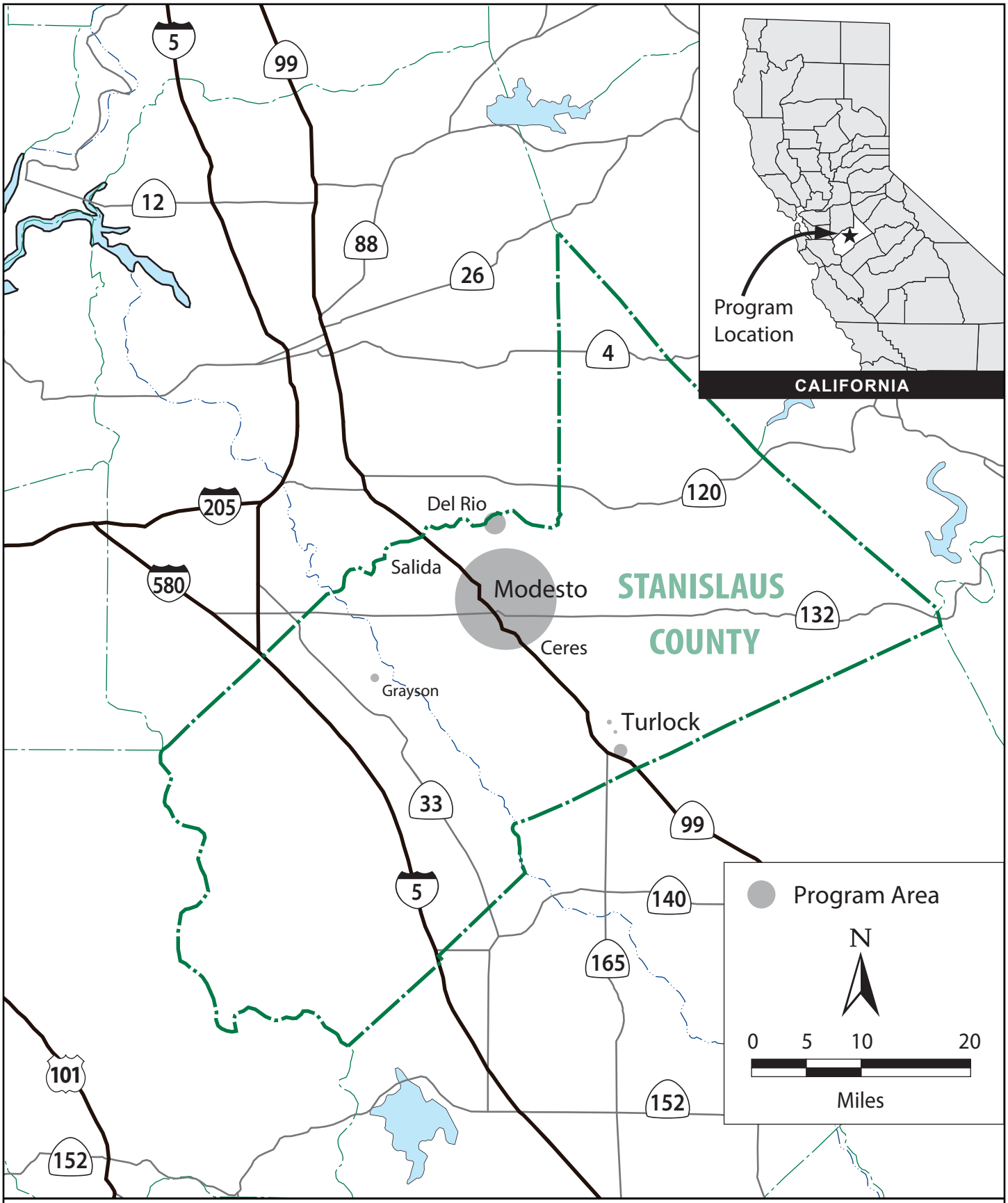

Figure ES-1. Project Location

Prepared by:
Horizon
WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

ES.2.2 Program Background

The City has been providing potable water service to its urban area since 1895 through the purchase and acquisition of several private water companies, serving not only the City of Modesto, but also Salida, Ceres (Walnut Manor), Grayson, Del Rio (Hillcrest), and North, South, and Central Turlock. The City of Modesto's water system currently serves a population of approximately 260,000 people in California's Central Valley. The City is currently the largest retail water supplier in Stanislaus County.

In general, water distribution in the City's service area is divided by the Tuolumne River. The area north of the Tuolumne River is referred to as North Modesto, and is within the service area of Modesto Irrigation District (MID). The area south of the Tuolumne River is referred to as South Modesto, and is within the Turlock Irrigation District (TID) service area.

Potable water resources delivered by the City's system to customers originate from two sources: treated surface water purchased from the MID, and groundwater pumped from the many wells located throughout the contiguous service area and the outlying service areas. Water treatment, pumping, storage, and conveyance infrastructure is operated and maintained by the City's Utilities Department, Water Operations Division.

The key components of the City's water system are storage tanks and booster pump stations, groundwater wells, and a transmission/distribution pipeline network. Information about components of the City's existing water supply, storage, and distribution system is provided in Chapter 1, Introduction, of this DEIR.

ES.3 Program Objectives

The objectives of the Proposed Program are as follows:

- To implement and support the City's economic goals and General Plan by planning for and providing water infrastructure in a timely and cost-effective manner to serve new and existing development.
- To clearly define the City's long-term water supply needs (from both groundwater and the Modesto Irrigation District's [MID's] surface water supplies) and identify the associated infrastructure required to deliver these supplies to existing and future customers.
- To provide the flexibility, system redundancy, and reliability at a reasonable cost to accommodate possible changing future conditions (regulatory, climate, additional conservation, etc.).
- To repair and replace aging water infrastructure.
- To ensure adequate water infrastructure and services are available to serve new growth within the General Plan area, the City's sphere of influence (SOI), and the outlying service areas.

- To plan for state-of-the-art facilities that reliably and economically meet changing regulatory requirements.
- To provide safe and reliable water supply by planning for and constructing appropriately sized storage facilities, redundancies, and alternate (back up) power supplies for key facilities.
- To provide adequate storage capacity to meet operational, fire flow, and emergency storage needs.
- To maintain system pressures that meet regulatory requirements and peak demand conditions.
- To provide transmission and distribution pipelines to safely and reliably convey water throughout the water system.
- To provide safe and reliable water that meets regulatory water quality requirements.
- To evaluate a groundwater aquifer storage and recovery program.
- To sustainably utilize and protect groundwater resources.

ES.4 Program Description

The Proposed Program, as analyzed in this EIR, is the collection of CIPs proposed in the *City of Modesto Water Master Plan* (WMP) and the *City of Modesto Water System Engineer's Report* (2016 WSER) (West Yost Associates 2017 and 2016, respectively). Proposed CIPs were determined by evaluating the City's ability to serve current, future, and buildout[1] demands for its contiguous and outlying service areas, and assessing the following system components: groundwater pumping capacity; storage capacity; demands (peak and fire flows), and distribution system needs. In addition, water supply requirements under existing and buildout situations were evaluated.

The City's water system CIPs are divided into 22 categories, which are described in detail in the 2016 WSER (West Yost 2016). These categories are used to group and develop budgets for each of these water system improvements/programs, based on the type of improvement, and to allocate costs between existing and future customers. **Table ES-1** lists the City's water system CIP categories.

[1] **Future** improvements are water facilities that are *required* to be installed by the City (e.g. wells, pumps, replacing deficient water mains). **Buildout** components are facilities to be paid for and constructed by developers for specific development projects (such as extension pipelines) guided by the Land Use Plan (City of Modesto 2019).

Table ES-1. Summary of City of Modesto Water System Capital Improvement Program Categories

Category No.	Project Category	Updated as Part of Water Master Plan or Engineer's Report	Description
1	Modesto Regional Water Treatment Plant Phase II Expansion	Project Complete	This project is complete and provided funding to expand Modesto Irrigation District's capacity from 30 million gallons per day (mgd) to 60 mgd.
2	City-Side Downstream Improvements	Engineer's Report	This project is near completion and provides funding for the Industrial Tank and Booster Pump Station, Codoni Transmission Mains, and the Yosemite Transmission Mains.
3	Improvements for South Modesto	Water Master Plan	Provides funding to increase the delivery reliability to customers in South Modesto, by providing additional transmission mains, distribution mains, tanks, and booster pumping capacity.
4	Water Quality Related Studies	Engineer's Report	Provides funding for system-wide water quality related studies to manage the City's groundwater/ surface water resources.
5	SCADA System Upgrades	Engineer's Report	Provides funding for SCADA system upgrades to improve the City's operation and management of the water system.
6	New Corporation Yard	Engineer's Report	Provides funding for a new Water Division Corporation Yard.
7	Existing Tank Improvements	Engineer's Report	Provides funding for interior and exterior enhancements to water storage tanks to improve efficiency and prolong their useful life.
8	Extend Water Mains	Engineer's Report	Provides funding to extend water mains into developing areas and to complete distribution pipeline "looping".
9	Strengthen and Replace Water System	Water Master Plan	Provides funding to replace and upgrade deficient water mains, which may also include "looping" improvements
10	Install New Wells	Water Master Plan	Provides funding to replace older wells (taken out of service for water quality or production capacity) or construct new wells.

Category No.	Project Category	Updated as Part of Water Master Plan or Engineer's Report	Description
11	Wellhead Treatment	Water Master Plan	Provides funding for wellhead treatment or blending facilities for wells that are offline due to water quality.
12	Purchase & Install New Generators	Water Master Plan	Provides funding to purchase and install new generators to ensure reliable water service throughout the water system.
13	Water System Security Enhancements	Engineer's Report	Provides funding to make security enhancements (e.g. fencing. signage) to facilities identified in the 2003 Water System Vulnerability Assessment.
14	Groundwater Management Program	Engineer's Report	Provides funding to support projects and studies related to managing groundwater resources.
15	Urban Water Management Plan	Engineer's Report	Provides funding to support completion of an Urban Water Management Plan every 5 years to help ensure reliability of water supply.
16	Water Master Plan	Engineer's Report	Provides funding to support completion of future Water Management Plans to evaluate the adequacy of water system to serve existing and future customers.
17	Water System Evaluation	Engineer's Report	Provides funding to support as-needed engineering studies and water system evaluations.
18	New Water Tanks	Water Master Plan	Provides funding to construct new tanks and booster pumping stations and other associated facilities.
19	Water Meters	Engineer's Report	Provides funding to purchase and install new automated meter readers throughout the service area.
21	New or Replacement Pumps	Engineer's Report	Provides funding to replace deficient water pumps at wells and booster pump station that are too costly to repair.
22	Utility Cuts	Engineer's Report	Provides funding to cover costs associated with utility construction (e.g., paving, valve replacement, leak repairs).

Notes:

mgd = million gallons per day; MRWTP = Modesto Regional Water Treatment Plant; SCADA = supervisory control and data acquisition; UWMP = urban water management plan; WMP = water master plan

Categories 1 and 20 are not used for the purposes of this analysis. The WSER category numbers have remained unchanged to be consistent with past WSERs.

Category 1, the Modesto Regional Water Treatment Plant Phase II Expansion, a portion of Category 2, City-side Downstream Improvements Related to MRWTP Expansion, and Category 6, the New Corporation Yard, are not included in the Proposed Program, as these projects are completed or are currently under construction. The Proposed Program encompasses the category components (storage tanks and booster pump stations, groundwater wells, etc.) proposed to be installed or upgraded to alleviate existing deficiencies and accommodate water service demands associated with future development within the contiguous and outlying service areas. The locations of existing facilities needing improvements are known. The exact locations of some new facilities have yet to be finalized; however, in some cases tentative sites have been identified.

Individual facilities/improvements would be designed and constructed on an as-needed basis and as funding becomes available. As final design and locations of Proposed Program components are identified, project-level CEQA review would be completed. All CIPs are evaluated at a program level of detail in this DEIR, since they are improvements that the City would likely construct in the future, but designs of these improvements have not been advanced to a level at which detailed evaluations can be completed. As such, a more general, programmatic analysis of these improvements is included in this DEIR.

ES.5 Public Involvement Process

ES.5.1 Scoping Comment Period

A Notice of Preparation (NOP) for the DEIR was prepared pursuant to the State CEQA Guidelines (Section 15082) and circulated to the Office of Planning and Research's State CEQA Clearinghouse on August 26, 2016. The scoping period continued for 30 days and concluded on September 26, 2016.

The NOP presented general background information on the Proposed Program, the scoping process, and the environmental issues to be addressed in the EIR. Approximately 38 copies of the NOP were mailed to a broad range of stakeholders, including state, federal, and local regulatory agencies and jurisdictions and nonprofit organizations.

The City accepted written comments during the 30-day scoping period, August 26 to September 26, 2016. A scoping meeting was held on September 6, 2016, which one person attended. During the scoping period, one comment letter was received. This comment was considered in the environmental impact evaluation.

ES.5.2 Draft EIR Public Comment Period

The City has prepared this DEIR, as informed by public and agency input received during the scoping period, to disclose significant environmental impacts associated with the Proposed Program. Where any such impacts are significant, feasible mitigation measures and potentially feasible alternatives that substantially lessen or avoid such effects are identified and discussed.

A public review period provides the public an opportunity to provide input to the lead agency on the DEIR. The DEIR will undergo public review for the period specified in the Notice of Availability (NOA). During this period, the City will hold a public meeting. The date, time, and exact location of the public meeting is included in the NOA of this DEIR.

ES.5.3 Submittal of Written Comments

The City is circulating this DEIR for public review and comment for the period specified in the NOA. The City will host a public meeting during this period. The purpose of public circulation is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of this DEIR. Specific dates, times and locations for the meeting will be provided in the NOA, which will be posted on the City's website (www.modestogov.com), and in a newspaper notice.

Written comments concerning this DEIR can be submitted at the public meeting described above or at any time during the DEIR public review period. All comments must be received by 5:00 p.m. on the final date of public review as identified in the NOA, and directed to the name and address listed below:

Jim Alves, Acting Senior Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 Tenth Street)
Modesto, CA 95353
jalves@modestogov.com

Submittal of written comments via e-mail (Microsoft Word or Adobe PDF format) is preferred. Written comments received in response to this DEIR during the public review period will be addressed in a Response to Comments section of the Final EIR.

ES.6 Areas of Known Controversy and Issues to Be Resolved

State CEQA Guidelines Section 15123(b) requires that an executive summary identify "areas of controversy known to a lead agency including issues raised by agencies and the public." To date, while not considered controversial, the following concerns regarding the Proposed Program have been raised during the scoping period:

- SOI boundary. Concerns regarding inclusion of certain areas in the Program's SOI that differ from the City's adopted SOI.
- Study area boundary. Concerns regarding the Beckwith Triangle, Wood Colony, and entire Salida community.

ES.7 Significant Impacts

Significant impacts identified in the DEIR are summarized in **Table ES-2**, Summary of Impacts and Mitigation Measures, at the end of this chapter. Environmental resource topics with the potential for significant environmental impacts and evaluated in detail in this DEIR are as follows:

- Aesthetics and Visual Resources
- Agricultural Resources

- Air Quality
- Biological Resources
- Cultural, Tribal, and Paleontological Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions and Energy Use
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Transportation
- Utilities and Service Systems
- Cumulative Impacts

Chapters 4 through 18 of this DEIR address each of these environmental resource topics and the impacts of the Proposed Program in more detail.

ES.8 Alternatives Considered

The purpose of the alternatives analysis in an Environmental Impact Report (EIR) is to describe a range of reasonable alternatives to the Proposed Program that could feasibly attain most of the objectives of the Proposed Program while reducing or eliminating one or more of the Proposed Program's significant effects. The range of alternatives considered must include those that offer substantial environmental advantages over the Proposed Program and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors.

The following alternatives have been evaluated for their potential feasibility and their ability to achieve most of the Proposed Program objectives while avoiding, reducing, or minimizing significant impacts identified for the proposed Program:

- No Program Alternative
- Deferred Implementation Alternative
- Alternative Sources of Water Supply

In addition, a number of alternatives were considered, but ultimately dismissed from further analysis for one or more of the following reasons: (1) they would not sufficiently meet the Proposed Program objectives; (2) they were determined to be infeasible; or (3) they would not avoid or substantially reduce one or more significant impacts of the Proposed Program. Refer to Section 19.4, "Alternatives Considered and Eliminated," in Chapter 19, *Alternatives,* for a description of these alternatives.

ES.8.1 No Program Alternative

Under this alternative, no new water supply infrastructure would be constructed or upgraded. Operation of the City's water treatment, pumping, storage, and conveyance infrastructure would continue similar to existing conditions. The existing storage tanks and booster pump stations,

groundwater wells, and transmission/distribution pipeline network would continue to operate. Facilities that are currently operating in the contiguous service area and the outlying service areas would continue functioning, but capacity issues would not be addressed and would likely increase over time.

While this alternative would not meet any of the Program objectives, it would avoid all of the impacts associated with construction and operation of the Proposed Program. No new facility construction or ground-disturbing activities would occur. Essentially, all categories of impacts are anticipated to be reduced with this alternative aside from land use and planning, which would be greater because the failure to provide adequate infrastructure for approved development would result in potential to conflict with land use plans, policies, and regulations.

ES.8.2 Deferred Implementation Alternative

Under the Deferred Implementation Alternative, the schedule for construction of all Program-level WMP components would be delayed by 5 years compared to the schedule for implementation of the Proposed Program.

Under this alternative, new water supply infrastructure would be constructed or upgraded as indicated for the Proposed Program, but at a later date. Similarly, operation of the City's water treatment, pumping, storage, and conveyance infrastructure would be improved and expanded, but at a slower pace. Facilities in the contiguous service area and the outlying service areas would continue to operate, but capacity and pressure issues may not be addressed in a timely manner.

Development in the City's water service area may be delayed to the extent that construction of necessary infrastructure to support such development would be delayed under this alternative. This could also hinder population growth. While this alternative would not necessarily avoid significant impacts of the Proposed Program, extending the overall schedule would reduce the severity of construction impacts for the 5-year period. Construction-related impacts such as traffic congestion and delays, air pollutant emissions, and noise and vibration would be reduced during this period compared to the Proposed Program. Extending the timeframe for implementation of CIPs could allow additional flexibility in timing for site-specific improvements that would allow avoidance of special-status species. However, the potential exists for fire risk to increase if the extended timeline results in delays in addressing shortfalls or needed expansion of water supply to meet fire flow requirements.

ES.8.3 Alternative Sources of Water Supply

Under this alternative, alternative sources of water supply would be used to address existing system deficiencies and meet increases in demand. This would alter the mosaic of capital improvements needed to deliver water to City customers. This alternative would not ultimately alter the amount of water to be used; however, it would rely on a greater range of sources for that water. It would require different capital facilities to utilize this water throughout the City's service area than those proposed under the program. The actual facilities would depend upon the sources selected, and their relative contributions to the overall supply. Alternative sources of water supply under this alternative could include additional water conservation and revised water shortage contingency plan; additional sources of potable water; development of recycled water options; and additional in-lieu groundwater recharge and aquifer storage and recovery. While this

alternative would accomplish the goals of the project, it would be anticipated to have impacts that are, on the whole, similar to those of the proposed program.

ES.8.4 Environmentally Superior Alternative

The No Program Alternative is considered environmentally superior as, with one exception, it would reduce or avoid the impacts of the Proposed Program. This alternative, however, would result in increased impacts related to land use and planning as growth planned by the City would not be able to proceed because necessary infrastructure to support development would not be constructed.

Under CEQA, if the "no project" alternative is identified as environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives. Therefore, the Deferred Implementation Alternative, has been selected as environmentally superior; this alternative would avoid impacts during the interim period during which the program would be delayed (although the impacts would eventually occur). The Deferred Implementation Alternative would result in increased impacts related to land use and planning as growth planned by the City would not be able to proceed in the interim period while necessary infrastructure to support development is not completed. As such, the Deferred Implementation Alternative would not as effectively meet program objectives, as necessary infrastructure to address system deficiencies and support planned development would be delayed.

The Alternative Sources of Water Supply Alternative is not considered to be environmentally superior because, while it would reduce some impacts through use of alternative water supplies, it would be anticipated to have impacts that are, on the whole, similar to those of the Proposed Program.

For this reason, the Proposed Program has been selected for implementation, as it would have the same impacts over the long term and would more fully meet Program objectives.

ES.9 Summary of Impacts and Levels of Significance

The impacts of the Proposed Program, proposed mitigation, and significance conclusions before and after mitigation are discussed in detail in Chapters 4 through 18 of this DEIR. Table ES-2 summarizes the impacts, mitigation measures, and levels of significance identified in this document.

Table ES-2. Summary of Potential Impacts and Mitigation Measures

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Aesthetics and Visual Resources			
Impact AES-1: Adverse Effects on Scenic Vistas	NI	NI	None required
Impact AES-2: Damage to Scenic Resources	LS	LS	None required
Impact AES-3: Degradation of Visual Character or Quality of Site and Surroundings During Construction	S	LSM	**Mitigation Measure AES-1:** Locate Staging Areas Away from Public Areas and Install Screening
Impact AES-4: Degradation of Visual Character of Quality of Site and Surroundings During Program Operations	S	LSM	**Mitigation Measure AES-2:** Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Setting
Impact AES-5: Permanent Source of Substantial Light or Glare	S	LSM	Mitigation Measure AES-2
Agricultural Resources			
Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use	S	SU	No feasible mitigation is available
Impact AG-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact AG-3: Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use	S	SU	No feasible mitigation is available
Air Quality			
Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan	S	SU	No feasible mitigation is available
Impact AQ-2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation	S	LSM	**Mitigation Measure AQ-1.** Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM10 **Mitigation Measure AQ-2.** Implement Enhanced Control Measures for Construction Emissions of PM10 **Mitigation Measure AQ-3**. Implement Control Measures for Operational Emissions of PM10 and for Ozone Precursors (ROG and NOx)
Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard	S	SU	Mitigation Measures AQ-1, AQ-2, and AQ-3
Impact AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations	S	LSM	Mitigation Measures AQ-1, AQ-2, and AQ-3

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact AQ-5: Create Objectionable Odors Affecting a Substantial Number of People	LS	LS	None required
Biological Resources			
Specific biological resources-related impacts and applicable mitigation measures of the Proposed Program may differ by CIPs, specifically for future grid pipelines (FTGRID-01 and FTGRID-04) that cross water bodies. Where measures are applicable for these future grid CIPs and not for other Program components, these distinctions have been indicated. Regardless of these limited mitigation measure differences, the impact significance conclusions prior to and after mitigation measure implementation were identical for the Proposed Program overall, future grid pipelines (FTGRID-01 and FTGRID-04), and other Proposed Program components.			
Impact BIO-1: Impacts on Special-status Plants	S	LSM	**Mitigation Measure BIO-1:** Perform Focused Surveys for Special-status Plant Species **Mitigation Measure BIO-2:** Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species
Impact BIO-2: Impacts on Vernal Pool Branchiopods and Western Spadefoot	S	LSM	**Mitigation Measure BIO-3:** Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat **Mitigation Measure BIO-4:** Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact BIO-3: Impacts on Valley Elderberry Longhorn Beetle	S	LSM	**Mitigation Measure BIO-5:** Avoid Impacts on VELB Habitat **Mitigation Measure BIO-6:** Implement VELB Compensatory Mitigation, if Necessary **Mitigation Measure BIO-7:** Transplant Elderberry Shrubs if Avoidance Is Not Feasible
Impact BIO-4: Impacts on Special-status Fishes	S	LSM	**Mitigation Measure HYD/WQ-1:** Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods (only FTGRID-01 and FTGRID-04)
Impact BIO-5: Impacts on Western Pond Turtle	S	LSM	**Mitigation Measure BIO-8:** Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle
Impact BIO-6: Impacts on Burrowing Owl	S	LSM	**Mitigation Measure BIO-9:** Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas if Necessary
Impact BIO-7: Impacts on Golden Eagle and Bald Eagle	LS	LS	None required
Impact BIO-8: Impacts on Raptors, Including Special-status Species	S	LSM	**Mitigation Measure BIO-10:** Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species **Mitigation Measure BIO-11:** Compensate for Loss of Raptor Foraging Habitat

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Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact BIO-9: Impacts on Special-status Passerine Species and Birds Protected under the MBTA	S	LSM	**Mitigation Measure BIO-12:** Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas if Necessary
Impact BIO-10: Impacts on Special-status Mammals	LS	LS	None required
Impact BIO-11: Impacts on Riparian Habitat and Other Sensitive Natural Communities.	S	LSM	Mitigation Measures HYD/WQ-1, BIO-3, and BIO-4
Impact BIO-12: Impacts on Federally Protected Wetlands	S	LSM	**Mitigation Measure BIO-13:** Avoid and Minimize Impacts on Federally Protected Wetlands **Mitigation Measure BIO-14:** Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State Mitigation Measure HYD/WQ-1
Impact BIO-13: Impacts on Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites	S	LSM	Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, and BIO-12 **Mitigation Measure BIO-15:** Install Temporary Trench Plates over Open Trenches
Impact BIO-14: Conflict with Local Ordinances or Policies Protecting Biological Resources	S	LSM	Mitigation Measures BIO-1 through BIO-15

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Cultural, Tribal, and Paleontological Resources			
Impact CR-1: Impacts on Known Historic, Archaeological or Tribal Resources	LS	LS	None required
Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources	S	LSM	**Mitigation Measure CR-1:** Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work
Impact CR-3: Disturb Any Human Remains, Including Those Interred Outside of Dedicated Cemeteries	S	LSM	Mitigation Measure CR-1
Impact CR-4: Impacts on Paleontological Resources	S	LSM	Mitigation Measure CR-1
Impact CR-5: Potential for a Substantial Adverse Impact on Tribal Cultural Resources	S	LSM	Mitigation Measure CR-1
Geology, Soils, and Seismicity			
Impact GEO-1: Cause Damage to Facilities and Exposure of People to Hazards from Strong Seismic Events, Including Ground Shaking or Landslides	LS	LS	None required
Impact GEO-2: Result in Risk to Property and Life from Expansive Soils	LS	LS	None required
Impact GEO-3: Result in Substantial Soil Erosion or Loss of Topsoil	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact GEO-4: Result in Subsidence, Liquefaction, or Collapse Due to Seismic Activity or an Unstable Geologic Unit or Soil	LS	LS	None required
Greenhouse Gas Emissions and Energy Resources			
Impact GHG-1: Generate a Substantial Amount of GHG Emissions	S	SU	No feasible mitigation is available
Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs	S	SU	No feasible mitigation is available
Impact GHG-3: Cause Wasteful, Inefficient, and Unnecessary Consumption of Energy During Construction, Operation, and/or Maintenance	LS	LS	None required
Impact GHG-4: Cause a Substantial Increase in Energy Demand and the Need for Additional Energy Resources	LS	LS	None required
Hazards and Hazardous Materials			
Impact HAZ-1: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Construction	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact HAZ-2: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Operation	LS	LS	None required
Impact HAZ-3: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Construction	LS	LS	None
Impact HAZ-4: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Operation	LS	LS	None required
Impact HAZ-5: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School	LS	LS	None required
Impact HAZ-6: Location on a Site Which Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact HAZ-7: Location in an Airport Land Use Plan or within 2 miles of a Public Airport, Resulting in a Safety Hazard for People Residing or Working in the Program Area	LS	LS	None required
Impact HAZ-8: Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan	LS	LS	None required
Impact HAZ-9: Expose People or Structures, Either Directly or Indirectly, to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires	NI	NI	None required
Hydrology and Water Quality			
Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality	S	LSM	**Mitigation Measure HYD/WQ-1:** Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods
Impact HYD/WQ-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would Be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level	S	SU	No feasible mitigation is available
Impact HYD/WQ-3: Substantially Alter the Existing Drainage Pattern of the Site or Area Such as to Result in Substantial Erosion, Siltation, or Flooding On- or Off-Site	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact HYD/WQ-4: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff	LS	LS	None required
Impact HYD/WQ-5: Place Within a 100-year Flood Hazard Area Structures Which Would Impede or Redirect Flood Flows	LS	LS	None required
Impact HYD/WQ-6: Expose People or Structures to a Significant Risk of Loss, Injury or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam	LS	LS	None required
Land Use and Planning			
Impact LU-1: Divide an Established Community	LS	LS	None required
Impact LU-2: Conflict with Land Use Plans, Policies, or Regulations Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Noise and Vibration			
Impact NOI-1: Expose Persons to Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or in the Applicable Standards of Other Agencies	S	LSM	**Mitigation Measure NOI-1:** Employ Noise-Reducing Construction and Maintenance Practices **Mitigation Measure NOI-2:** Limit Nighttime Construction Noise **Mitigation Measure NOI-3:** Employ Noise-Reducing Methods During Operations
Impact NOI-2: Expose Persons to Excessive Groundborne Vibration or Groundborne Noise Levels	S	LSM	**Mitigation Measure NOI-4:** Implement Vibration Reduction Measures
Impact NOI-3: Substantial Temporary, Periodic, or Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program	S	LSM	Mitigation Measures NOI-1 and NOI-3
Impact NOI-4: Expose People Residing or Working in the Study Area to Excessive Noise Levels Associated with a Public Airport	LS	LS	None required
Population and Housing			
Impact PH-1: Induce Substantial Population Growth, Both Directly and Indirectly, During Construction	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact PH-2: Displace Substantial Numbers of People or Existing Housing, Necessitating the Construction of Replacement Housing Elsewhere	LS	LS	None required
Impact PH-3: Long-term Inducement of Substantial Population Growth, Both Directly and Indirectly	S	LSM	The policies contained in general and community plans, in particular Policy No. V.C.4[b], as well as the mitigation measures contained in this DEIR, would reduce the secondary effects of growth to a level of insignificance.
Transportation			
Impact TR-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System	LS	LS	None required
Impact TR-2: Conflict with an Applicable Congestion Management Program	LS	LS	None required
Impact TR-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses	LS	LS	None required
Impact TR-4: Result in Inadequate Emergency Access	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Impact	Level of Significance of Impact		Mitigation Measure
	Before Mitigation	After Mitigation	
Impact TR-5: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Features	LS	LS	None required
Utilities and Service Systems			
Impact UTL-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board	LS	LS	None required
Impact UTL-2: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects	LS	LS	None required
Impact UTL-3: Require New or Expanded Water Supply or Entitlements	NI	NI	None required
Impact UTL-4: Require Additional Permitted Landfill Capacity to Accommodate the Project's Solid Waste Disposal Needs	LS	LS	None required
Impact UTL-5: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste	LS	LS	None required

Key to Significance Levels: LS = less than significant, LSM = less than significant with mitigation, NI= no impact; S = significant, SU = significant and unavoidable

Chapter 1
Introduction

The City of Modesto (City) has prepared this Draft Program Environmental Impact Report (DEIR) as lead agency to provide the public, responsible agencies, and trustee agencies with information about the environmental effects of implementation of the proposed 2017 Water Master Plan (Proposed Program). The Water Master Plan is intended to accommodate the existing and future water supply needs through 2050 of the population and land uses of the City, along with the City's other water customers in the outlying service areas of Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock.

The following sections provide an overview of the California Environmental Quality Act (CEQA) requirements, organization of the DEIR, impact terminology used, and process in which comments may be submitted on this DEIR. The last section describes the City's existing water system.

1.1 Overview of CEQA Requirements

The basic purposes of CEQA (State CEQA Guidelines Section 15002[a]) are to:

1. Inform governmental decision-makers and the public about the potential, significant environmental effects of the Program's proposed activities.
2. Identify the ways that environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring implementation of feasible mitigation measures or Program/project alternatives that would substantially lessen any significant effects that the Program (or a particular project) would have on the environment.
4. Disclose to the public the reasons why a governmental agency approved the Program in the manner the agency chose if significant environmental effects are involved.

With certain strictly limited exceptions, CEQA requires all state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority before approving or carrying out projects. CEQA establishes both procedural and substantive requirements that agencies must satisfy to meet CEQA's objectives. For example, the agency with principal responsibility for approving or carrying out a project (the lead agency) must first assess whether a proposed project would result in significant environmental impacts. If there is substantial evidence that the project would result in significant environmental impacts, CEQA requires that the agency prepare an Environmental Impact Report (EIR), analyzing both the proposed project and a reasonable range of potentially feasible alternatives.

As described in the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15121[a]), an EIR is an informational document that assesses potential environmental effects of a proposed project, and identifies mitigation measures and alternatives to the project that could reduce or avoid significant environmental impacts. Other key CEQA requirements include

developing a plan for monitoring the implementation of identified mitigation measures and carrying out specific public notice and distribution steps to facilitate public involvement in the environmental review process. As an informational document used in the planning and decision-making process, an EIR's purpose is not to recommend either approval or denial of a project. Note that an EIR does not expand or otherwise provide independent authority of the lead agency to impose mitigation measures or avoid project-related significant environmental impacts beyond the authority already within the lead agency's jurisdiction.

1.1.1 Intent and Scope of this Document

In proposing to conduct the various activities identified in Chapter 2 of this DEIR, the City is proposing to carry out and approve a discretionary project subject to CEQA (State CEQA Guidelines, Section 15378). This DEIR was prepared to disclose further details and of the Proposed Program, as well as the significant effects of the Proposed Program's capital improvement projects (CIPs) on the environment. The City will use the analyses presented in this DEIR, the public response to the DEIR, and the whole of the administrative record, to evaluate the Proposed Program's environmental impacts and to further modify, approve, or deny approval of the Proposed Program.

This DEIR evaluates the environmental impacts of the Proposed Program at a programmatic level of detail, as defined in State CEQA Guidelines Section 15168(a):

> A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
>
> (1) Geographically,
>
> (2) As logical parts in the chain of contemplated actions,
>
> (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
>
> (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

As described in State CEQA Guidelines Section 15168(c), subsequent activities implemented under the Proposed Program may require additional environmental review if those activities would have effects that were not examined in this program EIR.

1.2 CEQA Process

1.2.1 Notice of Preparation

A Notice of Preparation (NOP) for the Proposed Program was prepared pursuant to the State CEQA Guidelines (Section 15082) and circulated to the Office of Planning and Research's State CEQA Clearinghouse on August 26, 2016. The scoping period continued for 30 days and concluded on September 26, 2016. The NOP presented general background information on the Proposed Program, the scoping process, and the environmental issues to be addressed in the EIR.

Approximately 38 copies of the NOP were mailed to a range of stakeholders including state, federal, and local regulatory agencies and jurisdictions, non-profit organizations. A notice was placed in the local newspaper on August 26, 2016. The NOP is included in this DEIR in Appendix A, *Scoping Materials*.

1.2.2 Scoping Comments and Meetings

The City accepted written comments during the 30-day scoping period, August 26 to September 26, 2016. A scoping meeting was held on September 6, 2016 at which one person attended the meeting. During the scoping period, one comment letter was received. This comment was considered in the environmental impact evaluation.

1.2.3 Draft Program EIR

The City has prepared this DEIR, as informed by public and agency input received during the scoping period, to disclose significant environmental impacts associated with the Proposed Program. Where any such impacts are significant, feasible mitigation measures and potentially feasible alternatives that substantially lessen or avoid such effects are identified and discussed. The public review period provides the public an opportunity to provide input to the lead agency on the DEIR.

1.2.4 Public Review and Meetings

The DEIR will undergo public review for the period specified in the Notice of Availability of the DEIR. During this period, the City will hold a public meeting. The date, time, and exact location of the public meeting is included in the Notice of Availability (NOA) of this DEIR.

1.2.5 Final EIR

Written comments received in response to the DEIR will be addressed in a Response to Comments document which, together with the DEIR and any related changes to the substantive discussion in the DEIR, will constitute the Final EIR. The Final EIR, in turn, will inform the City's exercise of its discretion as a lead agency under CEQA in deciding whether or how to approve the Proposed Program.

1.3 Organization of this DEIR

This DEIR contains the following components:

Executive Summary. A summary of the Proposed Program, a description of the issues of concern, Program alternatives, and a summary of environmental impacts and mitigation measures are provided in this chapter.

Chapter 1, *Introduction*. This chapter describes the purpose and organization of the DEIR and its preparation, review, and certification process. This chapter also provides some background on the Proposed Program and describes the City's existing water supply system.

Chapter 2, *Program Description*. This chapter summarizes the Proposed Program of CIPs, including a description of the Program purpose and objectives, a brief description of the study area, and proposed actions that would be taken under the Program.

Chapter 3, *Introduction to the Environmental Analysis*. This chapter is an introduction to the impact analysis conducted in this DEIR. This chapter also identifies resource topic areas determined not to be affected by the Program, and therefore have been dismissed from further analysis in this DEIR.

Chapters 4–17 describe the environmental resources and environmental impacts of the Proposed Program. Each of these chapters describes the existing local and regional setting and background information for the resource topic area under consideration to aid the reader in understanding the conditions that could be affected by the Proposed Program. In addition, each of these chapters includes a discussion of the criteria used in determining the significance levels of the Proposed Program's environmental impacts. Each of these chapters also provides mitigation measures to reduce, where feasible, the adverse effects of significant impacts.

Chapter 18, *Other Statutory Considerations*, addresses the Proposed Program's contribution to cumulative impacts, outlines the Proposed Program's growth-inducing impacts, and identifies significant and irreversible environmental changes resulting from the Proposed Program.

Chapter 19, *Alternatives Analysis*. This chapter describes the process by which alternatives to the Proposed Program were developed and screened, evaluates their likely environmental impacts, and identifies the environmentally superior alternative.

Chapter 20, *Report Preparation*, lists the individuals involved in preparing this DEIR.

Chapter 21, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this DEIR.

Appendix A, *Scoping Materials*. This appendix contains the NOP issued by the City, materials from the scoping process, and copies of all comments submitted.

Appendix B contains the supporting documentation for the biological resource impacts evaluation.

Appendix C contains the supporting documentation for the evaluation of cultural resources.

Appendix D contains the draft Mitigation Monitoring and Reporting Program.

1.4 Submittal of Comments

The City is circulating this DEIR for public review and comment for the period specified in the NOA. As discussed above, the City will host a public meeting during this period. The purpose of public circulation is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of this DEIR. Specific dates, times, and locations for these

meetings will be provided in the NOA, which will be posted on the City's website (www.modestogov.com), and in a newspaper notice.

This CEQA document is available for review at the City's website: www.modestogov.com. In addition, hard copies can be reviewed at the City's Utilities Department offices in Modesto, California. To arrange to view documents during regular business hours (8:00 a.m. to 4:30 p.m., Monday through Friday), call (209) 577-5395. This DEIR also can be reviewed electronically at the Stanislaus County library (1500 I Street, Modesto, California) which is serving as a document repository.

Written comments concerning this DEIR can be submitted at the public meeting described above or at any time during the DEIR public review period. All comments must be received by 5:00 p.m. on the final date of public review as identified in the NOA, and directed to the name and address listed below:

Jim Alves, Associate Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95354
P.O. Box 642, Modesto, CA 95353
jalves@modestogov.com

Submittal of written comments via e-mail (Microsoft Word or Adobe PDF format) is preferred. Written comments received in response to this DEIR during the public review period will be addressed in a Response to Comments section of the Final EIR.

1.5 Proposed Program Location and Setting

The Proposed Program is located in the City and several locations within Stanislaus County, California (Figure 1-1). The study area encompasses two distinct customer location categories: (1) the contiguous service area, and (2) outlying service areas. Together, the contiguous service area and outlying service areas constitute this DEIR's "study area." The City's contiguous service area is primarily defined by the current Sphere of Influence (SOI), Salida, North Ceres, and some unincorporated Stanislaus County "islands" within and adjacent to the SOI (Empire is within the SOI). The outlying service areas include Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock. (Figure 1-2).

More specifically, outlying service areas include the unincorporated community of Del Rio, located approximately 2 miles north of the City's SOI boundary; Ceres (Walnut Manor) located roughly 0.5 mile south of the City's SOI boundary; the unincorporated community of Grayson, located approximately 14 miles west of the City's SOI boundary; and a portion of the City of Turlock, located approximately 7 miles southeast of the City's SOI boundary.

In general, water distribution in the portion of the service area in and contiguous to the City is divided by the Tuolumne River. The area north of the Tuolumne River is referred to as North Modesto, and is within the service area of Modesto Irrigation District (MID). The area south of the Tuolumne River is referred to as South Modesto, and is within the Turlock Irrigation District (TID) service area.

1.6 Background and Existing Water System

The City has been providing potable water service to its urban area since 1895 through the purchase and acquisition of several private water companies and, as a result, has become the primary domestic water purveyor in Stanislaus County, serving not only the City of Modesto, but also Salida, Ceres (Walnut Manor), Grayson, Del Rio (Hillcrest), and North, South, and Central Turlock. The City implements a Water Conservation Program, which combines a strong education program with watering restrictions and prohibition of water waste. In the early 1990s, the City, MID, and the Del Este Water Company formed a partnership to use a portion of MID's surface water rights for municipal uses. Today, the water is stored in Don Pedro Reservoir, which is jointly owned by MID and TID. From Don Pedro Reservoir, MID releases water through its power generation facilities directly into the river. From MID's Upper Main Canal at La Grange, water is delivered to Modesto Reservoir. From Modesto Reservoir, MID may release water to its Lower Main Canal for irrigation purposes or to the Modesto Regional Water Treatment Plant (MRWTP) for municipal and industrial purposes, largely through City facilities (MID 2017).

The MID-owned and operated MRWTP was developed as the result of the partnership that was formed between MID, the City and the Del Este Water Company, and became operational in 1995. Construction of the MRWTP allowed the City to purchase treated surface water from MID, which greatly reduced the City's reliance on groundwater pumping and addressed an increasing local groundwater overdraft condition that was emerging at the time (City of Modesto 2016). The MRWTP delivers treated surface water to the City's service area to combine with groundwater sources to meet the City's water supply needs for those municipal customers within the City's SOI north of the Tuolumne River (southern boundary of MID's service area), including the communities of Salida and Empire. Areas served by the City of Modesto that lie outside the MID water service boundary (i.e., south of the Tuolumne River), including the community of Grayson, parts of Ceres and Turlock, and the portion of the Modesto system south of the Tuolumne River, are served exclusively by groundwater.

The MRWTP, in addition to storage and delivery facilities, initially provided 30 million gallons per day to the City. For a number of years, the City and MID have been working together on the MRWTP Phase Two Expansion, which became operational in 2017, and expanded the capacity of the plant to provide the City with up to an additional annual average of 30 million gallons per day (mgd), for a total annual average of up to 60 mgd.

Water treatment, pumping, storage, and conveyance infrastructure is operated and maintained by the City's Utilities Department, Water Operations Division. Potable water resources delivered by the City's system to customers originate from two sources: treated surface water purchased from the MID, and groundwater pumped from the many wells located throughout the contiguous service area and the outlying areas.

The key components of the City's water system are storage tanks and booster pump stations, groundwater wells, and a transmission/distribution pipeline network. These facilities in the contiguous service area are described below and shown in Figure 1-3; while facilities in the outlying service areas are shown in **Figure 1-4, 1-5, 1-6, and 1-7**.

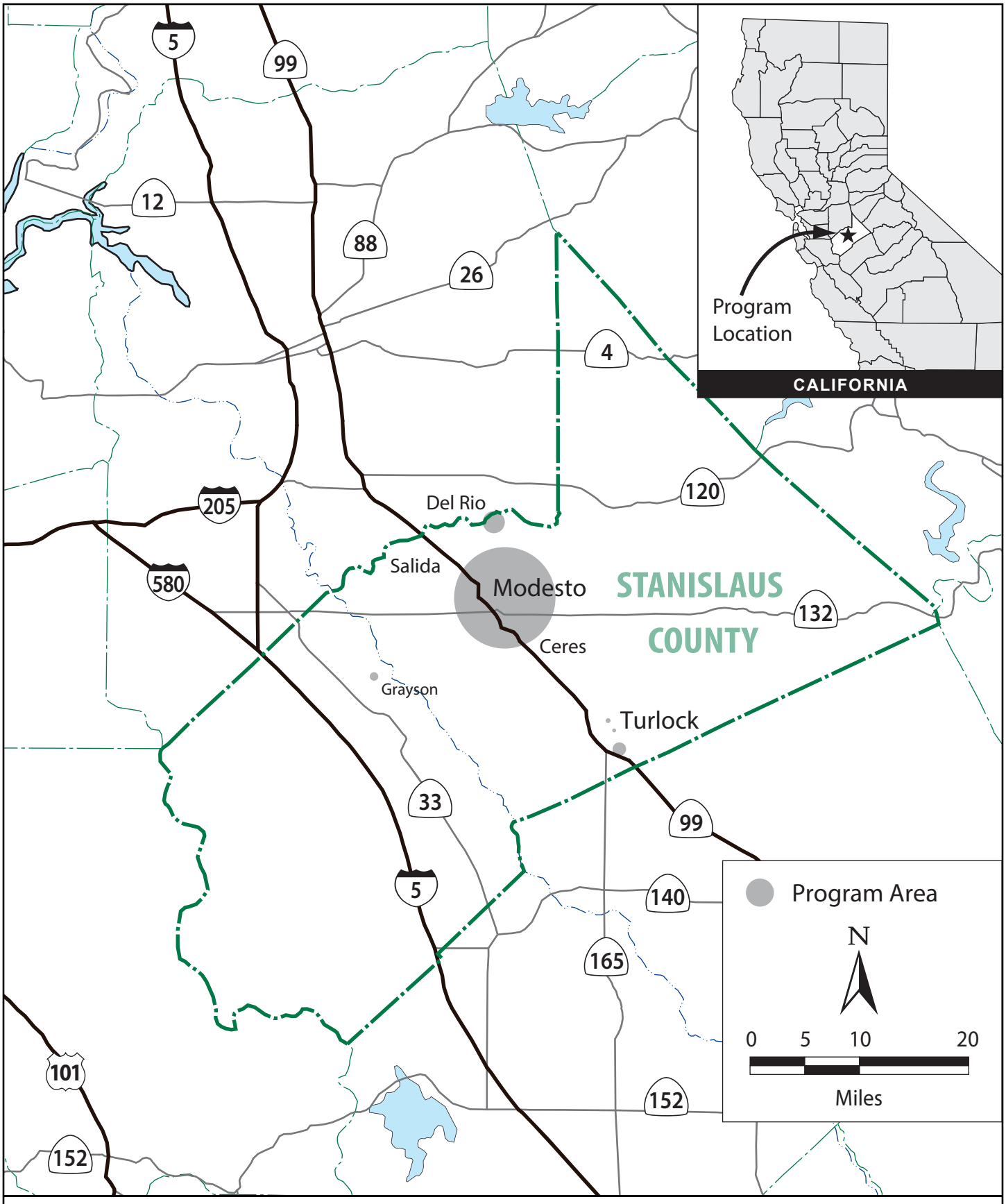

Figure 1-1.
Project Location

Prepared by:
Horizon
WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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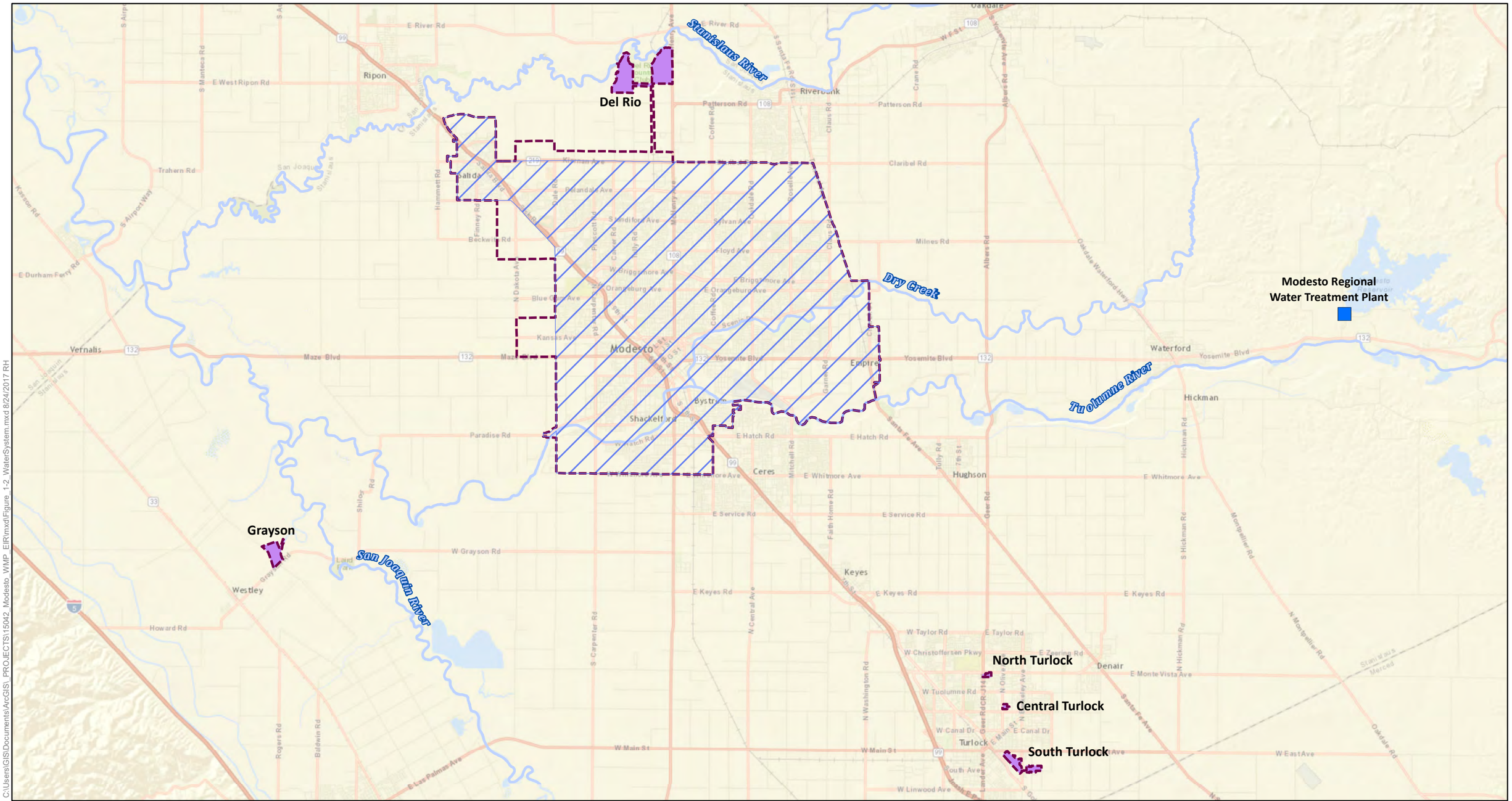

Figure 1-2
Overview of Contiguous and Outlying Service Areas

City of Modesto
Water Master Plan EIR

Horizon WATER and ENVIRONMENT

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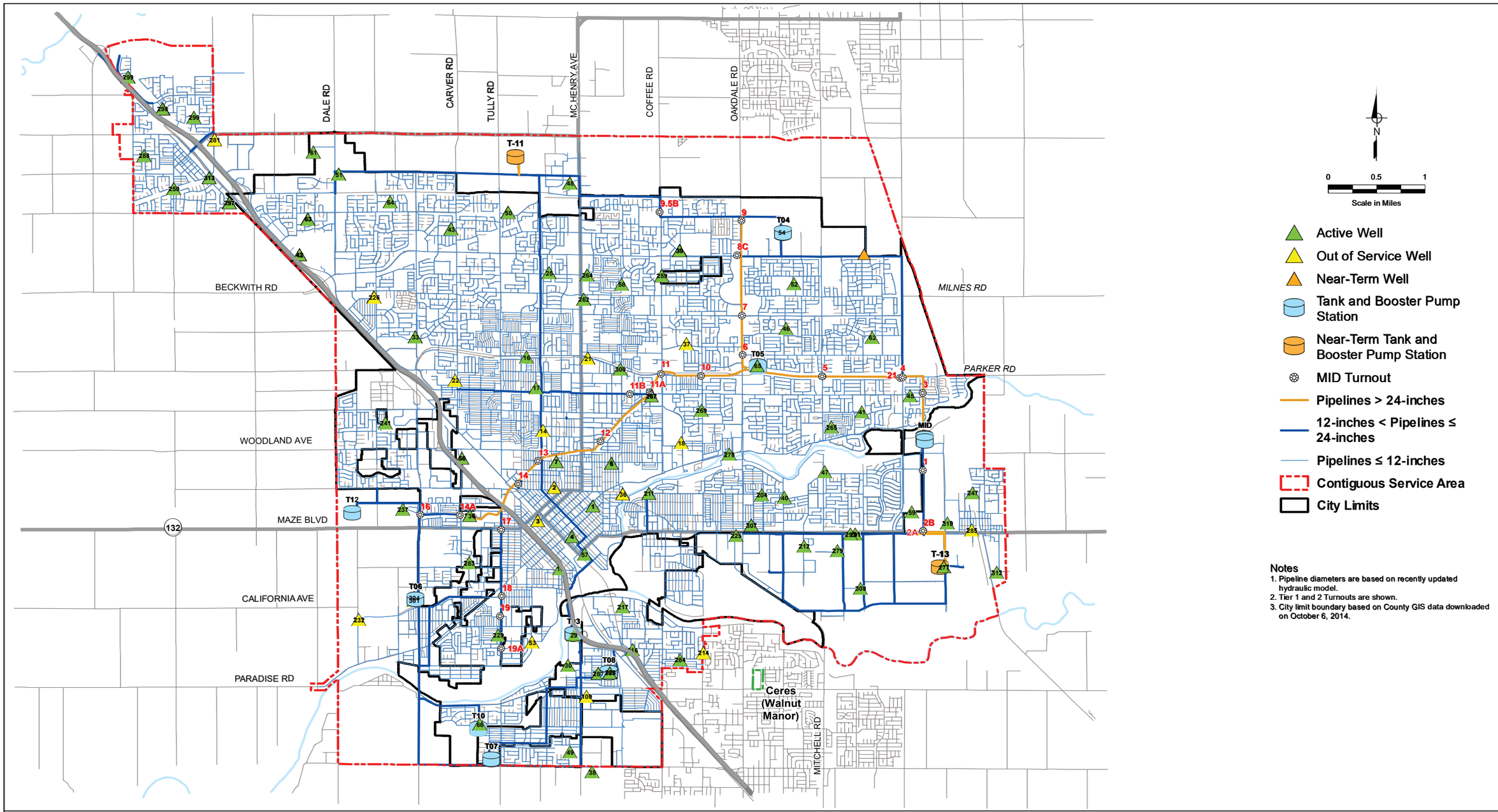

Notes

1. Pipeline diameters are based on recently updated hydraulic model.
2. Tier 1 and 2 Turnouts are shown.
3. City limit boundary based on County GIS data downloaded on October 6, 2014.

Source: West Yost 2016

Figure 1-3.
Existing Contiguous Service Area Water System Facilities

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WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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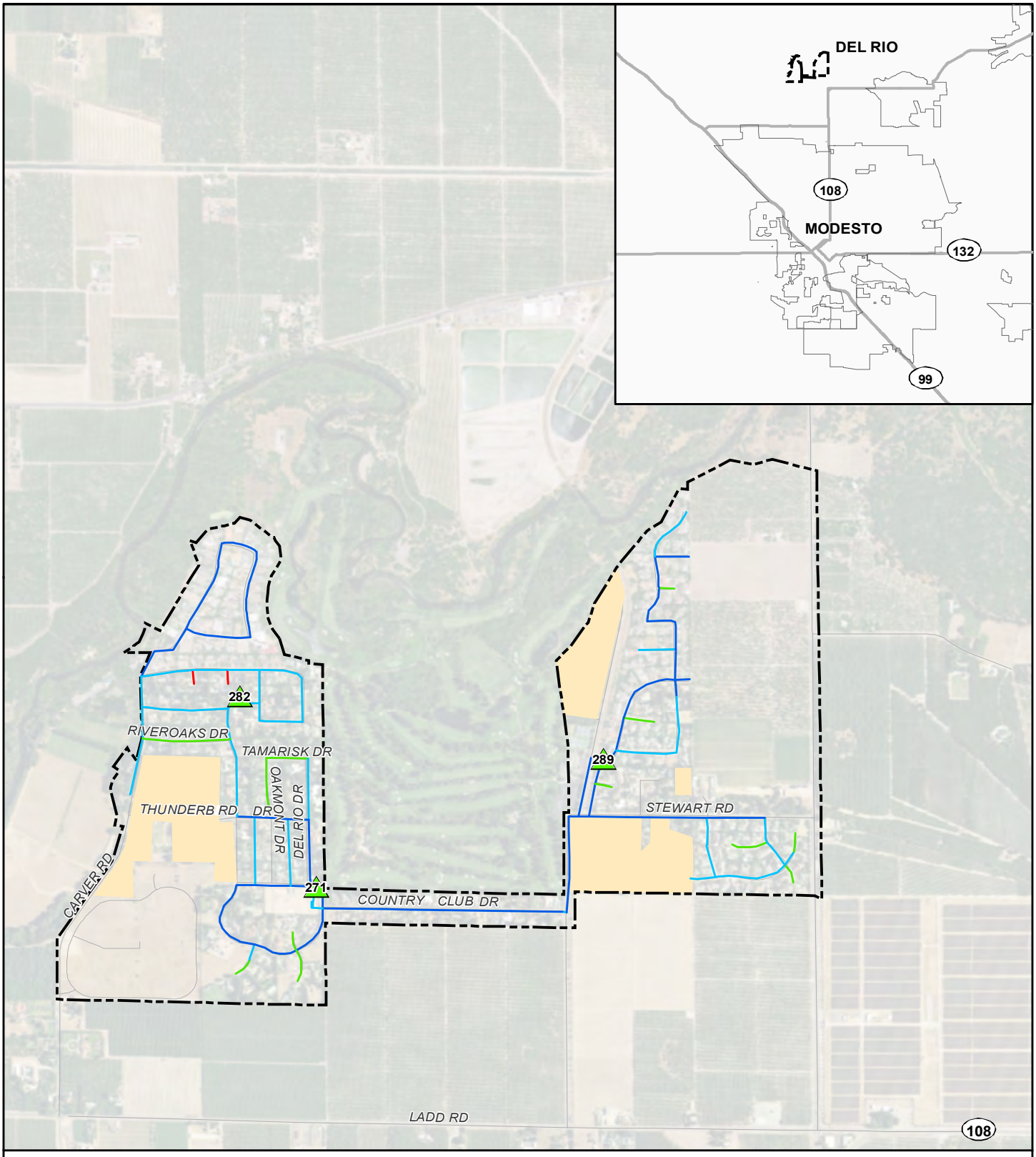

Source: West Yost 2017

N

0 750 1,500

Scale in Feet

Active Well

4-inch Pipeline

6-inch Pipeline

8-inch Pipeline

10-inch Pipeline

Existing Parcel Not Currently Served by City

Del Rio Service Area

Figure 1-4
Existing Del Rio Water Facilities

Horizon WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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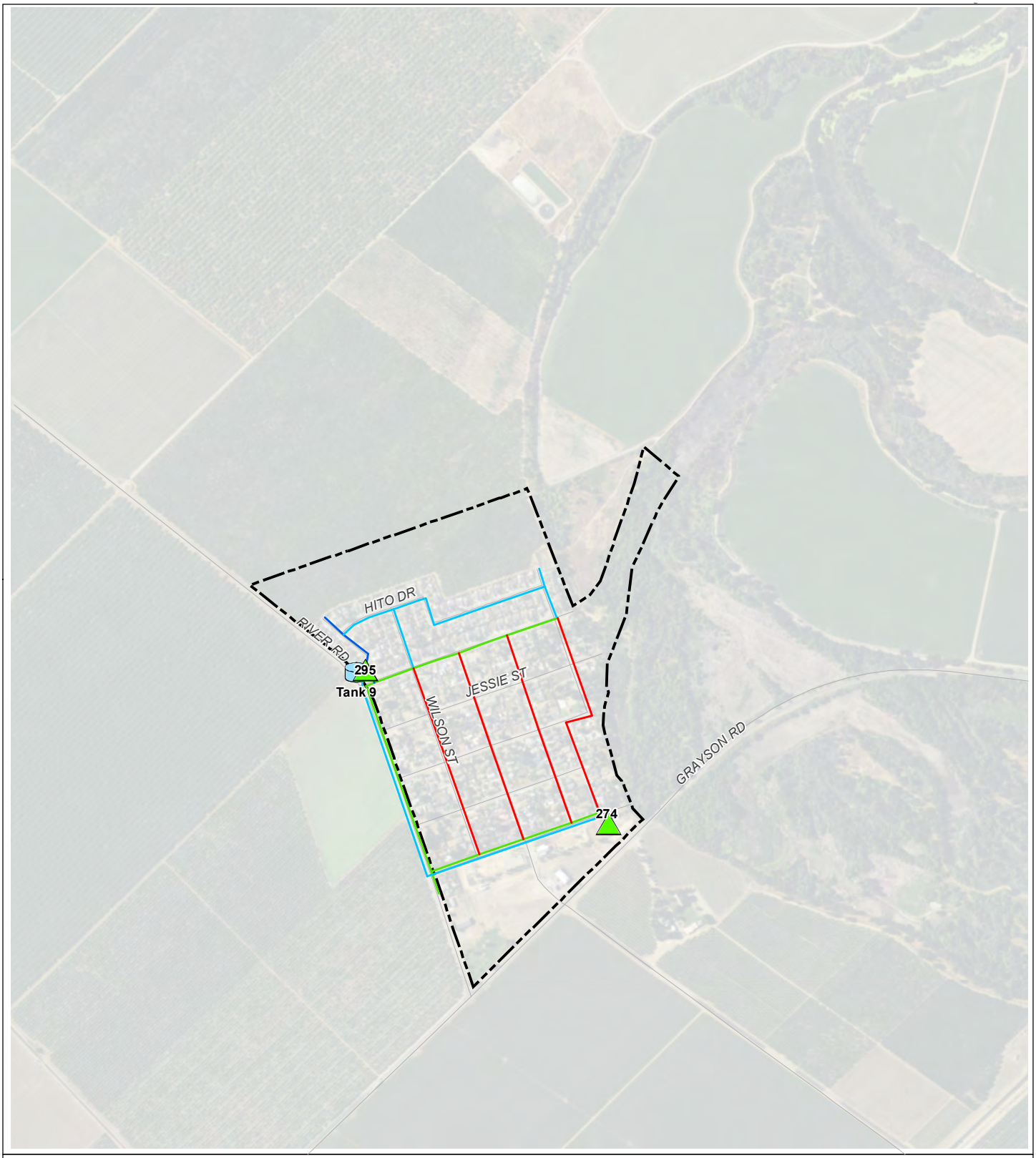

Source: West Yost 2017

N

0 500 1,000

Scale in Feet

Active Well

4-inch Pipeline

6-inch Pipeline

8-inch Pipeline

10-inch Pipeline

Existing Tank and BPS

Grayson Service Area

Figure 1-5
Existing Grayson Water Facilities

Horizon WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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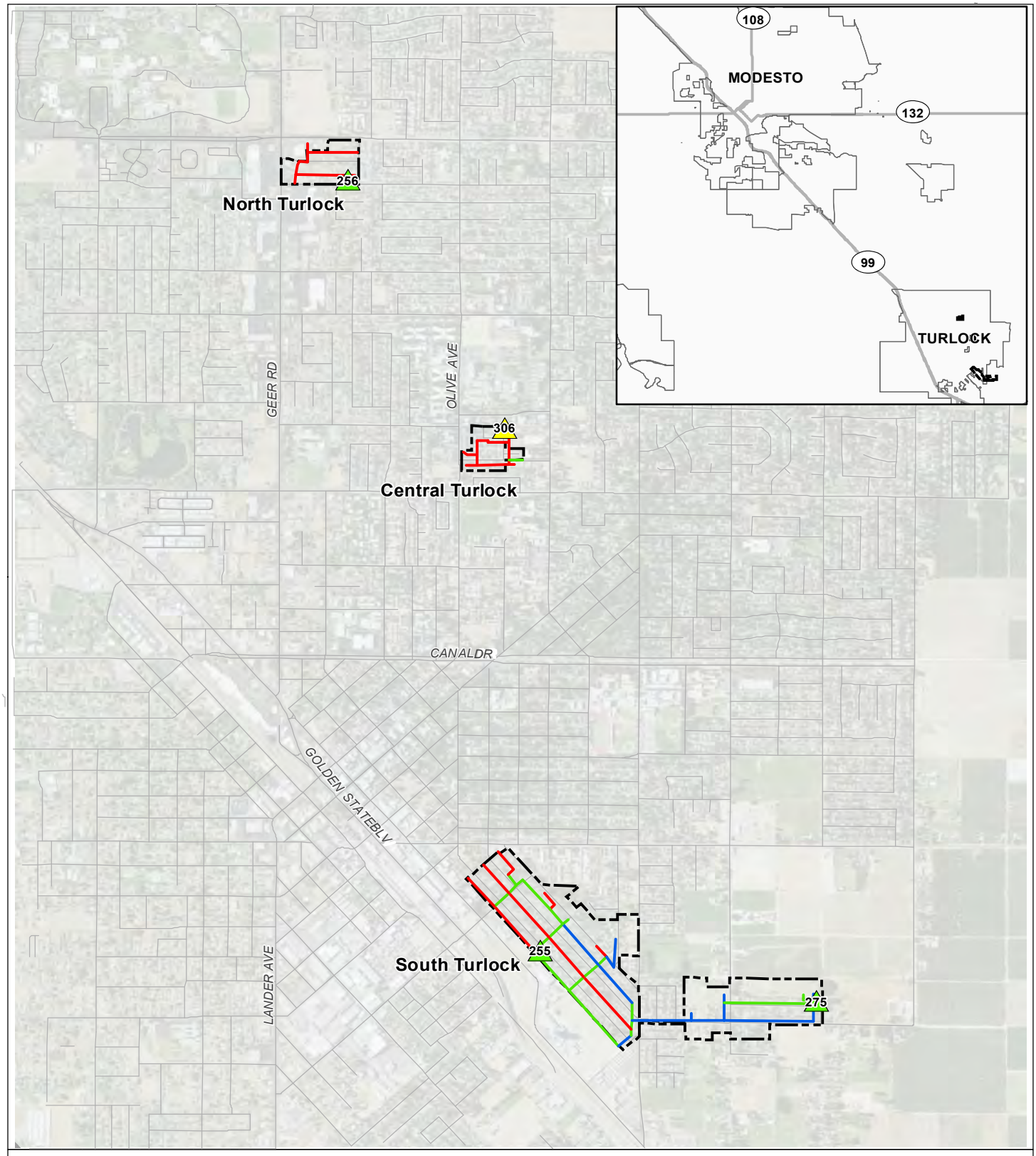

Source: West Yost 2017

N

0 1,000 2,000

Scale in Feet

Active Well

Out of Service Well

4-inch Pipeline

6-inch Pipeline

8-inch Pipeline

Turlock Service Area

Figure 1-6
Existing Turlock Water Facilities

Horizon WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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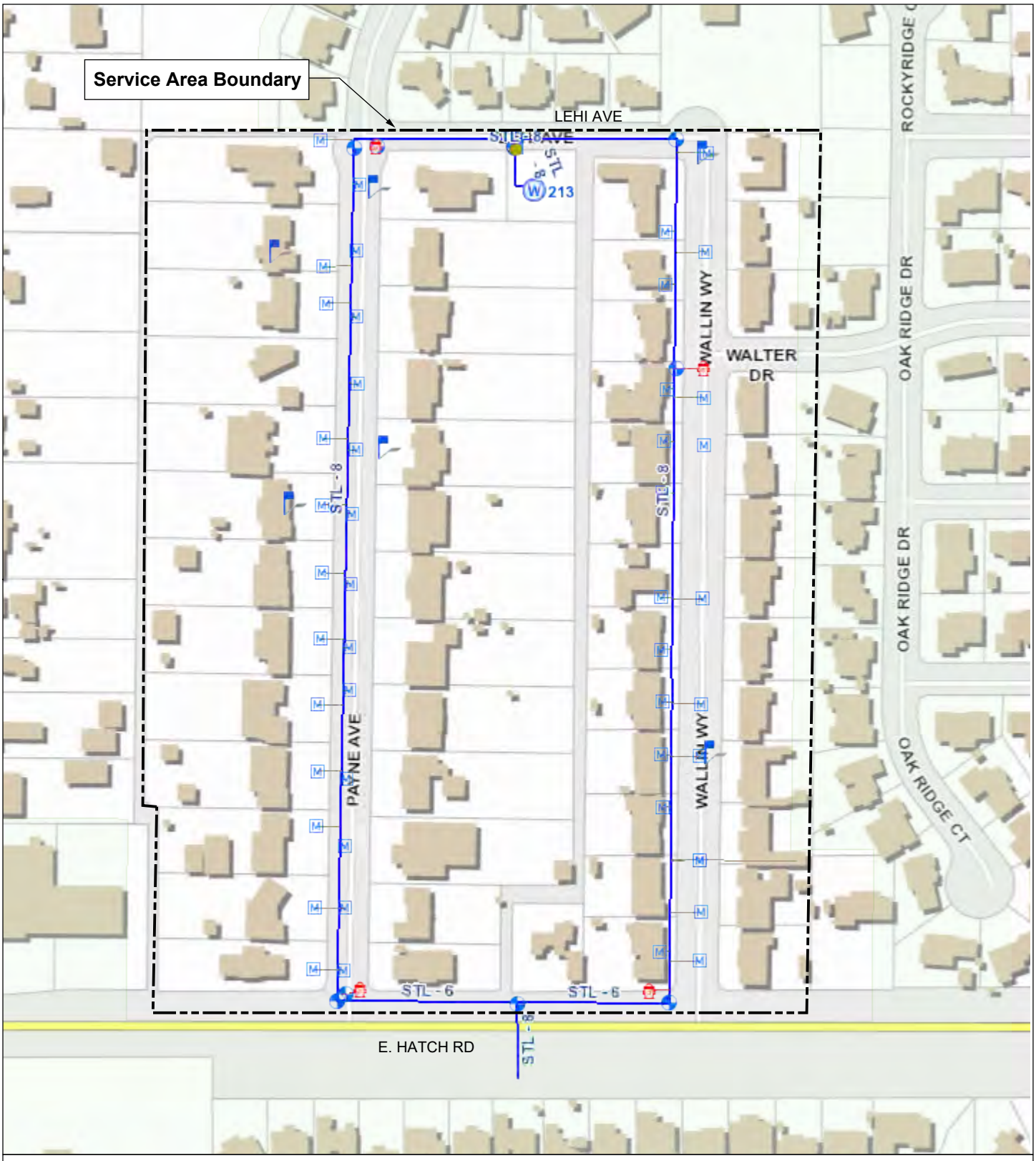

Source: City of Modesto 2019

N

0 100 200

Scale in Feet

PRV

GPS Main Lines

<all other values>

<Null>

ABANDONED

ACTIVE

GPS Leaks

GPS Lateral Lines

GPS Fire Lines

GPS_PressurePt

GPS Wells

Active

Inactive

GPS Valves

ABANDONED

Figure 1-7
Existing Ceres (Walnut Manor) Water Facilities

Horizon WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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1.6.1 Existing Storage Tanks and Booster Pump Stations

The contiguous service area contains 10 at-grade storage tanks; eight of which are owned and operated by the City, and two owned and operated by MID. The total existing storage capacity in the contiguous service area is approximately 22.1 million gallons (MG).

Each tank operated by the City is equipped with its own booster pump station. MID's two storage tanks are served by one booster pump station and are collectively known as the MID Terminal Reservoirs facility. Thus, there are a total of nine existing booster pump stations in the contiguous service area. Each booster pump station has multiple pumps, with the largest unit reserved as a standby unit at each pump station. Additionally, each booster pump station is equipped with a generator for backup power. The total existing and near-term booster pumping capacity is approximately 212 mgd.

No water storage tanks or booster pump stations currently exist in the outlying service areas of Del Rio or Turlock. However, one water storage tank was recently installed to service the Del Rio area. The Del Rio water storage tank was included in the City's 2010 Water System Engineer's Report (WSER) and was the subject of a separate EIR (City of Modesto 2017).

In Grayson, the City system includes one at-grade storage tank, which receives and stores groundwater from the area's two wells and whose booster pump station is equipped with two pumps and a backup generator. The location of this storage tank is shown in **Figure 1-3**. This tank was constructed in the early 1990s and has been well maintained.

Table 1-1 provides a summary of the existing storage tanks and booster pumps in the City's water service area.

Table 1-1. Existing Storage Tanks and Booster Pumps

Location	No. of Storage Tanks	Storage Capacity (MG)	No. of Booster Pump Stations	Booster Pump Capacity (gpm)
Contiguous Area	10	22.1	9	119,375
Del Rio	0	—	0	—
Ceres (Walnut Grove)	—	—	—	—
Grayson	1	0.22	1	900
Turlock	0	—	0	—

Notes: gpm = gallons per minute; MG = million gallons

1.6.2 Existing Groundwater Wells

The contiguous service area contains 77 active groundwater wells (out of a total of 92 existing groundwater wells), as shown in Figure 1-3, with a total well capacity of 99 mgd. A new

well (Well 67 Grogan Park) is anticipated to be completed in 2017. Some wells have been decommissioned as a result of arsenic, uranium, perchloroethylene (PCE), trichloroethylene (TCE), dibromo-chloropropane (DBCP) or nitrate concentrations in excess of drinking water regulatory maximum contaminant levels (MCLs). The active wells have production capacities ranging from 275 to 2,400 gallons per minute (gpm). The base source of water supply within the contiguous service area is treated water from the MRWTP. The groundwater wells supply water from the groundwater basin as needed to help meet operational, emergency, and/or fire-flow demand. They also provide water supply to the area south of the Tuolumne River, which is outside of MID's service area and hence not served by the MRWTP. Groundwater wells are equipped with pumps that discharge water into the distribution system as needed. Thirty-one of the 77 active wells in the contiguous service area are equipped with generators for backup power (West Yost 2017a). The City is in the process of replacing Wells 226 and 229.

In addition to the contiguous service area wells, the City has a total of 18 groundwater wells (17 are active wells) in the outlying service areas. Groundwater well locations in the outlying service areas are shown on Figures 1-4 through 1-7. In most of the outlying areas, groundwater wells are directly connected to the distribution system because there are no storage tanks, with the exception of Grayson as discussed below. The City system currently includes three groundwater wells in Del Rio and four in Turlock. The Del Rio Tank and Wells Project includes a new well (Well 68), and a replacement well (Well 271). As previously noted, these two wells were included in the City's 2010 WSER and are the subject of a separate EIR that was recently completed. In Grayson, the City system includes two groundwater wells that pump directly to the storage tank (Tank 9). One of these wells is equipped with a generator for backup power. The City is in the process of replacing Well 274.

Table 1-2 summarizes the quantities of active and inactive groundwater wells and the production capacity range for wells in the City's service areas.

Table 1-2. Existing Groundwater Wells

	No. of Active Groundwater Production Wells	No. of Inactive Groundwater Production Wells	Range of Production Capacity (gpm)
Contiguous Area	77	15	275 to 2,400
Del Rio	3	0	395 to 800
Ceres (Walnut Grove)	1	0	242
Grayson	2	0	200 and 350
Turlock	4	1	209 to 350

Notes: gpm = gallons per minute.

1.6.3 Existing Transmission and Distribution Pipelines

The contiguous service area contains approximately 914 miles of underground pipeline, with pipes ranging in size from 2 to 60 inches in diameter. Pipelines within the City are generally

classified as transmission mains (12 to 24 inches in diameter) or the smaller distribution pipelines (2 to 12 inches in diameter), which transport water supplies from the transmission mains to water users. The material type of the pipelines varies depending on the age of the pipeline but include polyvinyl chloride (PVC) and asbestos cement (for most distribution pipelines), or cast iron, welded steel, ductile iron, and reinforced concrete pipe for older pipelines. In addition to the City's pipelines, there are MID-owned transmission mains (24 to 60 inches in diameter) that transfer treated surface water supplies from the MRWTP into the City's water distribution system. The City can control these surface water supplies into its water distribution system via 25 active turnouts within the contiguous service area that each have a hydraulically operated control valve. The existing pipeline grid in the contiguous service area is shown in **Figure 1-3**.

Pipelines located in the outlying service areas are shown in **Figure 1-4** through **Figure 1-7**. The Del Rio service area includes approximately 39,900 linear feet of City-owned distribution pipeline, ranging from 4 to 10 inches in diameter. The Grayson service area includes approximately 16,700 linear feet of City-owned pipeline, including pipes running between the two wells and the storage tank. Pipes located in the Grayson service area range from 4 to 10 inches in diameter. The Turlock service area includes approximately 23,600 linear feet of City-owned distribution pipeline, ranging in size from 4 to 8 inches in diameter.

Table 1-3 summarizes the transmission and distribution pipeline lengths and diameters for the City's contiguous and outlying service area review.

Table 1-3. Existing Transmission and Distribution Pipeline

	Total Length (miles)	Range of Size (inched in diameter)
Contiguous Area	914	2 to 60
Del Rio	7.6	4 to 10
Ceres (Walnut Grove)	0.7	6 to 8
Grayson	3.1	4 to 10
Turlock	4.5	4 to 8

Source: West Yost 2017b.

1.6.4 Relationship to 2010 Water System Engineer's Report

The 2017 Water Master Plan and the City's 2016 WSER, which is described further in Chapter 2, *Program Description*, are separate and distinctly different documents from the City's 2010 WSER. The CIPs in the 2010 WSER were evaluated in the EIR certified in 2010 (State Clearinghouse #2008092095) (City of Modesto 2009).

Since the 2010 WSER was prepared, the City has constructed some of the water infrastructure facilities identified in it. As previously mentioned, two planned groundwater wells and a water storage tank for the Del Rio area were included in the 2010 WSER and were also evaluated in a separate tiered EIR. The 2017 Water Master Plan and the City's 2016 WSER includes CIPs previously identified in the WSER and newly identified CIPs.

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Chapter 2
PROGRAM DESCRIPTION

2.1 Overview

This chapter describes the 2017 Water Master Plan (WMP; Proposed Program) and discusses its purpose and objectives, location, proposed capital improvement projects (CIPs), construction methods and schedule, and necessary permits and approvals. Background reports used to prepare this chapter include the following:

- *City of Modesto Water Master Plan,* prepared by West Yost Associates. Final Draft (September 2017a);
- *City of Modesto Water System Engineer's Report* (WSER), prepared by West Yost Associates. Final Draft (May 2016); and
- 2010 Water System Engineer's Report Draft Program Environmental Impact Report (City of Modesto, December 2009).

2.2 Purpose and Objectives

The City has developed a proposed WMP whose underlying purpose is to define the City's long-term water supply and infrastructure needs, and guide management of its water service system. The WMP identifies recommended and prioritized CIPs for system-wide implementation that are needed to deliver safe and reliable water and that would effectively meet water demand requirements for existing and future City customers through buildout of the City's adopted General Plan.

The objectives of the proposed WMP are as follows:

- To implement and support the City's economic goals and General Plan by planning for and providing water infrastructure in a timely and cost-effective manner to serve new and existing development.
- To clearly define the City's long-term water supply needs (from both groundwater and the Modesto Irrigation District's [MID's] surface water supplies) and identify the associated infrastructure required to deliver these supplies to existing and future customers.
- To provide the flexibility, system redundancy, and reliability at a reasonable cost to accommodate possible changing future conditions (regulatory, climate, additional conservation, etc.).
- To repair and replace aging water infrastructure.

- To ensure adequate water infrastructure and services are available to serve new growth within the General Plan area, the City's sphere of influence (SOI), and the outlying service areas.
- To plan for state-of-the-art facilities that reliably and economically meet changing regulatory requirements.
- To provide safe and reliable water supply by planning for and constructing appropriately sized storage facilities, redundancies, and alternate (back up) power supplies for key facilities.
- To provide adequate storage capacity to meet operational, fire flow, and emergency storage needs.
- To maintain system pressures that meet regulatory requirements and peak demand conditions.
- To provide transmission and distribution pipelines to safely and reliably convey water throughout the water system.
- To provide safe and reliable water that meets regulatory water quality requirements.
- To evaluate a groundwater aquifer storage and recovery program.
- To sustainably utilize and protect groundwater resources.

2.3 Program Location

The Proposed Program is located in the city of Modesto and other communities in Stanislaus County, California, in the central San Joaquin Valley. The city is centrally located within California, approximately 70 miles southeast of Sacramento, 85 miles east of San Francisco, 90 miles northwest of Fresno, and 35 miles west of the foothills of the Sierra Nevada range. The City's contiguous service area is limited to the current SOI, Salida, North Ceres, and some unincorporated areas within and adjacent to the SOI including Empire. The outlying service areas include Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock. Collectively, the contiguous service area and outlying service areas constitute the Proposed Program's study area. These areas are shown in **Figure 2-1**.

2.4 Service Areas

2.4.1 Contiguous Service Area

The City has been providing potable water service to its urban area since 1895 through the purchase and acquisition of several private water companies. The City of Modesto water system currently serves a population of approximately 260,000 people in California's Central Valley. The City is currently the largest retail water supplier in Stanislaus County. **Table 2-1** provides a 35-year population forecast for the contiguous and outlying service areas. This forecast is also included in Chapter 15, *Population and Housing*, of this EIR. Water demands for the City's contiguous water

service area at buildout (year 2050) would be approximately 100,000 acre-feet/year (af/yr), based on the projected estimates from the City's WMP (West Yost 2017a). Available City water supplies at the year 2050 would be approximately 115,000 af/yr (West Yost 2017a).

2.4.2 Del Rio

Del Rio is located approximately 4 miles north of the City of Modesto. The Del Rio service area is approximately 540 acres, primarily residential, and is considered 57 percent developed. Currently, there are no interconnections with any other water systems; the City's contiguous water system is within 4 miles. The future areas of development in the Del Rio service area are located primarily in the east and southwest with a small amount of infill development. The Del Rio service area was originally provided with water service by the Del Este Water Company, but in the mid-1990s the City acquired the Del Este Water Company and began providing water service.

The Del Rio water system currently requires a new storage tank (and associated pump station), new well, replacement well, backup generators, and pipelines to correct existing supply deficiencies. The City's Utilities Department has conducted environmental review on these improvements, collectively known as the Del Rio Tank and Wells Project (City of Modesto 2017), which was certified by the City Council on September 5, 2017, and is expected to be completed in 2019.

The future Del Rio service area would include additional acreage that would expand the service area to the north, east, and southwest. According to the *Del Rio Community Plan* (Stanislaus County 1992), "future planned development land use" (primarily residential) is proposed for the northwest and eastern portions of the service area, while development in the southwestern area would be residential. Full buildout of the service area would require additional pipelines and pumping capacity, as recommended, to provide adequate water service to meet the anticipated demand of 1,480 af/yr at buildout (2050 or before) (West Yost 2017b). The current Del Rio Tank and Wells project includes improvements needed to address existing water system deficiencies, and does not include the improvements needed for future buildout.

2.4.3 Grayson

The town of Grayson is located approximately 14 miles west of Modesto along County Road J16 (Grayson Road). Due to water quality issues at the existing groundwater wells, pumped groundwater has historically been treated through an ion exchange system at Well 295, then stored in Tank 9 prior to being pumped into the distribution system. The Grayson water system requires a new production well, a replacement well, backup generators, replacement tank, additional booster pumps, and pipelines to correct existing supply deficiencies (West Yost 2017c). It has not been determined if the replacement well (Well 274) would require treatment. The Grayson system has no interconnections with other water systems, and there are no nearby water utilities with potential for interconnection.

The Grayson service area is approximately 120 acres, primarily residential, and is considered to be mostly developed, with approximately 30 acres remaining to be developed. The capital improvements recommended to address the current deficiencies would also adequately serve the buildout demand of 258 af/yr (West Yost 2017c).

Table 2-1. Population Projections for the City of Modesto's Contiguous and Outlying Water Service Areas

Year	Contiguous Service Areas				Outlying Service Areas				Total Contiguous Service Area [1]	Total Contiguous and Outlying Service Area [2]
	City of Modesto	Salida	Empire	North Ceres (Bystrom)	Del Rio	Ceres (Walnut Manor)	Grayson	Turlock (Portions)		
2015	218,375	13,750	4,189	4,008	1,021	154	960	1,146	255,906	259,187
2020	232,943	14,667	4,189	4,008	1,233	154	996	1,146	271,392	274,920
2025	248,483	15,646	4,189	4,008	1,444	154	1,032	1,146	287,910	291,686
2030	265,060	16,690	4,189	4,008	1,656	154	1,068	1,146	305,531	309,555
2035	282,743	17,803	4,189	4,008	1,868	154	1,104	1,146	324,327	328,599
2040	301,605	18,991	4,189	4,008	2,079	154	1,140	1,146	344,377	348,896
2045	321,726	20,258	4,189	4,008	2,291	154	1,176	1,146	365,765	370,352
2050	343,189	21,609	4,189	4,008	2,502	154	1,212	1,146	388,579	393,594

Notes:

[1] The Total Contiguous Service Area population includes the population of the contiguous communities shown above as well as the populations of Bret Harte, Shackelford, and West Modesto, which are county areas served by the City. The Bret Harte, Shackelford, and West Modesto communities are built out and have populations, respectively, of 5,152, 4,750, and 5,682.

[2] The Total Contiguous and Outlying Service Area populations includes the contiguous and outlying service area populations of the communities shown above as well as the additional communities Bret Harte, Shackelford, and West Modesto in the contiguous service area.

Source: West Yost 2017a.

2.4.4 Turlock

The City's outlying water service area in Turlock is made up of three small, separate service area islands (North, Central, and South) located within the City of Turlock. The Turlock service area is located approximately 14 miles south of Modesto. The entire Turlock service area contains approximately 130 acres, primarily residential, and is considered fully developed (built out). The Turlock service area has two existing emergency water supply connections to the City of Turlock water system in the North and Central service area islands. The South service area island currently has no emergency interconnections with the City of Turlock water system. The Turlock water system currently requires rehabilitation or replacement of a well, backup generators, and pipelines to correct existing supply deficiencies, upsizing of existing system emergency connections, and one new emergency intertie (West Yost 2017d). The Turlock service area is already fully built out and has a projected buildout demand of 293 af/yr (West Yost 2017d).

2.5 Proposed CIP Improvements

The Proposed Program, as analyzed in this EIR, is the collection of CIPs proposed in the WMP and the 2016 WSER. Proposed CIPs were determined by evaluating the City's ability to serve current, future, and buildout[1] demands for its contiguous and outlying service areas, and assessing the following system components in a hydraulic evaluation within the WMP (West Yost 2017a): groundwater pumping capacity; storage capacity; demands (peak and fire flows); and distribution system needs. In addition, water supply requirements under existing and buildout situations were evaluated.

The City's water system CIPs are divided into 22 categories, which are described in detail in the 2016 WSER (West Yost 2016). These categories are used to group and develop budgets for each of these water system improvements/programs, based on the type of improvement, and to allocate costs between existing and future customers. **Table 2-2** lists the City's water system CIP categories.

[1] **Future** improvements are water facilities that are *required* to be installed by the City (e.g. wells, pumps, replacing deficient water mains). **Buildout** components are facilities to be paid for and constructed by developers for specific development projects (such as extension pipelines) guided by the Land Use Plan (City of Modesto 2019).

Table 2-2. Summary of CIP Categories

Category No.	Project Category	Updated as Part of Water Master Plan or Engineer's Report	Description
1	MRWTP Phase II Expansion	Project Complete	This project is complete and provided funding to expand MID's MRWTP capacity from 30 million gallons per day (mgd) to 60 mgd.
2	City-Side Downstream Improvements	Engineer's Report	This project is near completion and provides funding for the Industrial Tank and Booster Pump Station, Codoni Transmission Mains, and the Yosemite Transmission Mains.
3	Improvements for South Modesto	Water Master Plan	Provides funding to increase the delivery reliability to customers in South Modesto by providing additional transmission mains, distribution mains, tanks, and booster pumping capacity.
4	Water Quality Related Studies	Engineer's Report	Provides funding for system-wide water-quality-related studies to manage the City's groundwater/ surface water resources.
5	SCADA System Upgrades	Engineer's Report	Provides funding for SCADA system upgrades to improve the City's operation and management of the water system.
6	New Corporation Yard	Engineer's Report	Provides funding for a new Water Division Corporation Yard.
7	Existing Tank Improvements	Engineer's Report	Provides funding for interior and exterior enhancements to water storage tanks to improve efficiency and prolong their useful life.
8	Extend Water Mains	Engineer's Report	Provides funding to extend water mains into developing areas and to complete distribution pipeline "looping."

Category No.	Project Category	Updated as Part of Water Master Plan or Engineer's Report	Description
9	Strengthen and Replace Water System	Water Master Plan	Provides funding to replace and upgrade deficient water mains, which may also include "looping" improvements.
10	Install New Wells	Water Master Plan	Provides funding to replace older wells (taken out of service for water quality or production capacity) or construct new wells.
11	Wellhead Treatment	Water Master Plan	Provides funding for wellhead treatment or blending facilities for wells that are offline due to water quality.
12	Purchase & Install New Generators	Water Master Plan	Provides funding to purchase and install new generators to ensure reliable water service throughout the water system.
13	Water System Security Enhancements	Engineer's Report	Provides funding to make security enhancements (e.g. fencing. signage) to facilities identified in the 2003 Water System Vulnerability Assessment.
14	Groundwater Management Program	Engineer's Report	Provides funding to support projects and studies related to managing groundwater resources.
15	Urban Water Management Plan	Engineer's Report	Provides funding to support completion of a UWMP every 5 years to help ensure reliability of water supply.
16	Water Master Plan	Engineer's Report	Provides funding to support completion of future WMPs to evaluate the adequacy of water system to serve existing and future customers.
17	Water System Evaluation	Engineer's Report	Provides funding to support as-needed engineering studies and water system evaluations.

Category No.	Project Category	Updated as Part of Water Master Plan or Engineer's Report	Description
18	New Water Tanks	Water Master Plan	Provides funding to construct new tanks and booster pumping stations and other associated facilities.
19	Water Meters	Engineer's Report	Provides funding to purchase and install new automated meter readers throughout the service area.
21	New or Replacement Pumps	Engineer's Report	Provides funding to replace deficient water pumps at wells and booster pump station that are too costly to repair.
22	Utility Cuts	Engineer's Report	Provides funding to cover costs associated with utility construction (e.g., paving, valve replacement, leak repairs).

Notes:

mgd = million gallons per day; MID = Modesto Irrigation District; MRWTP = Modesto Regional Water Treatment Plant; SCADA = supervisory control and data acquisition; UWMP = urban water management plan; WMP = water master plan

Category 20 was a project that had been completed and is no longer an active category for the purposes of this analysis. The WSER category numbers have remained unchanged to be consistent with past WSERs.

Improvements can be grouped into three primary types to meet the Proposed Program's objectives:

- ***Existing Water System Improvements*:** The WMP identifies CIP improvements that are recommended to improve the City's capability of meeting existing water demands. These CIPs are referred to as "Existing System CIPs." These projects would meet existing demands and would be implemented to address any issues with the City's existing water system infrastructure, storage deficiencies, or distribution needs. Thus, they would generally involve improvements, upgrades, or replacements of existing City water system facilities.

- ***Future and Buildout Water System Project Improvements*:** These projects would be implemented in phases, at the appropriate time to address future development needs within the City's water service area based on growth planned by the City and local governments in the outlying service areas. Future improvements identified in this document are new water facilities that the City would be required to install to address future planned development (within its service area), as described in the City's General Plan (City of Modesto 2019). The Proposed Program supports a buildout of the City's SOI.

Proposed system improvement projects to meet water demands in 2050 as described in the WMP are referred to as "Buildout System CIPs." Buildout CIPs are similar to future CIPs in that they support planned future development as opposed to existing development. However, buildout facilities are those that are needed at buildout of the land use plan, and that would be funded by the developer of a particular area (not the City) to support water service to those specific new development areas since the facilities are exclusively required to support those new development areas.

- ***Program Improvements*:** These improvements would occur more periodically and over time (e.g., updating the WMP, updating the Urban Water Management Plan). Additionally, efforts that are regional in nature are included in this category (e.g., the Aquifer Storage and Recovery [ASR] Program).

The CIPs proposed in the WMP and 2016 WSER include new water storage tanks, improvements to existing tanks, new and replacement groundwater wells, groundwater monitoring wells, pump stations, transmission mains, distribution pipelines, supervisory control and data acquisition (SCADA) system upgrade, water quality related studies, wellhead treatment, emergency generators, water system security enhancements, groundwater management, water master plan updates, maintaining and calibrating a hydraulic model of the water system, evaluations of the water system, and water meters for the contiguous water service area and/or outlying water service areas. Each of these types of improvements is summarized below and discussed further in Section 2.5, "Proposed CIP Improvements." The ASR Program is described in Section 2.6. The CIPs would be implemented within the City's contiguous and outlying service areas, as described in Section 2.5, below.

CIPs planned in each of the service areas are shown in Figure 2-1 and **Figure 2-2** and discussed further below.

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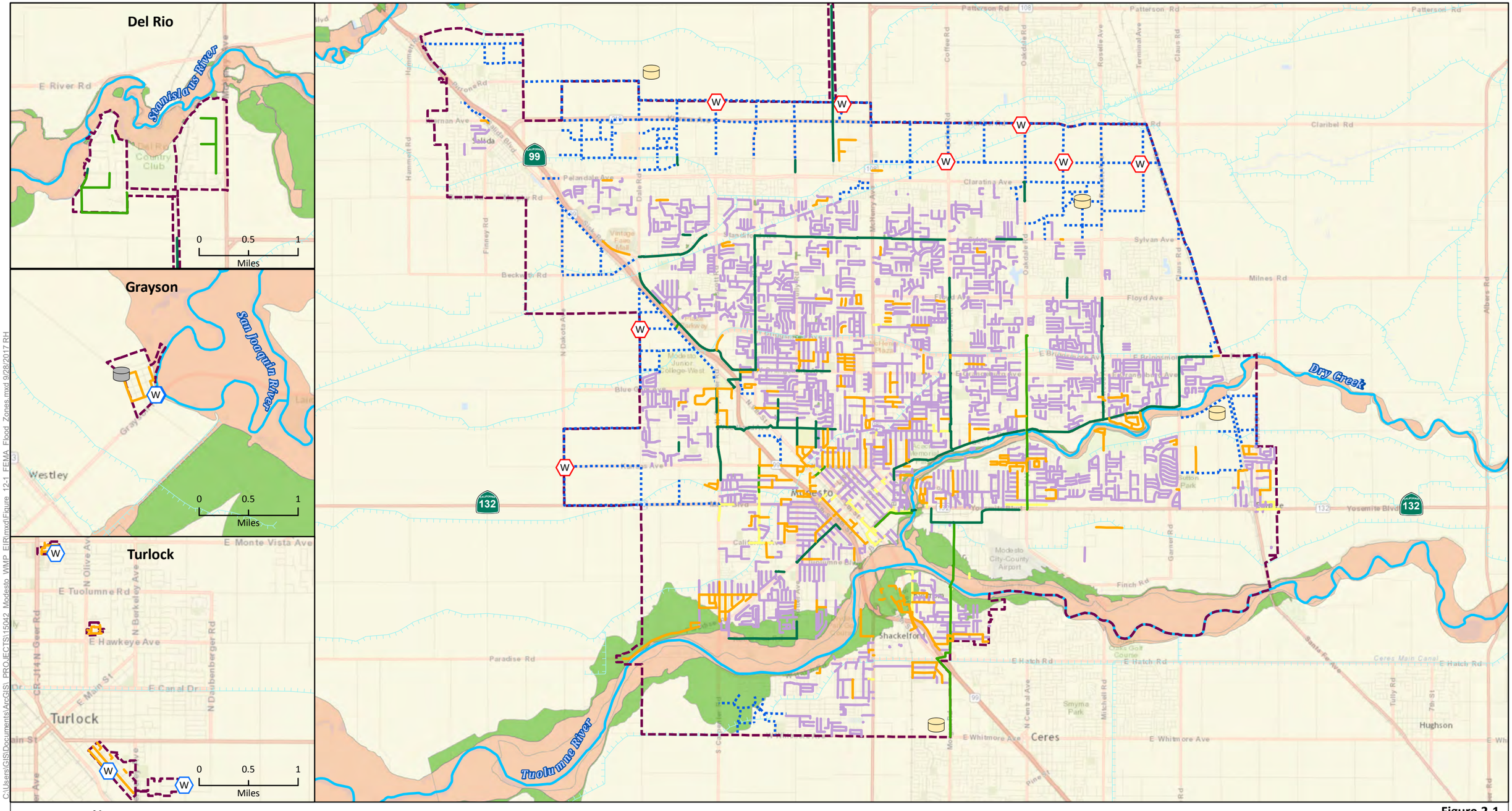

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Horizon WATER and ENVIRONMENT

Proposed Components for Existing Water System

- Tank
- Well
- Fire Flow Improvements
- Grid Improvements

Proposed New Water System Components

- Future Tanks
- Future Well Sites
- Build Out Pipelines
- Fire Flow Improvements
- Grid Improvements
- Strengthen and Replace
- Build Out Pipes

Other Features

- WMP Study Area
- Rivers
- Canals

Flood Zone

- 100-Year Flood Zone
- 500-year Flood Zone

Source: Federal Emergency Management Agency

Figure 2-1
Surface Waters and FEMA Flood Zones in the Study Area

City of Modesto
Water Master Plan EIR

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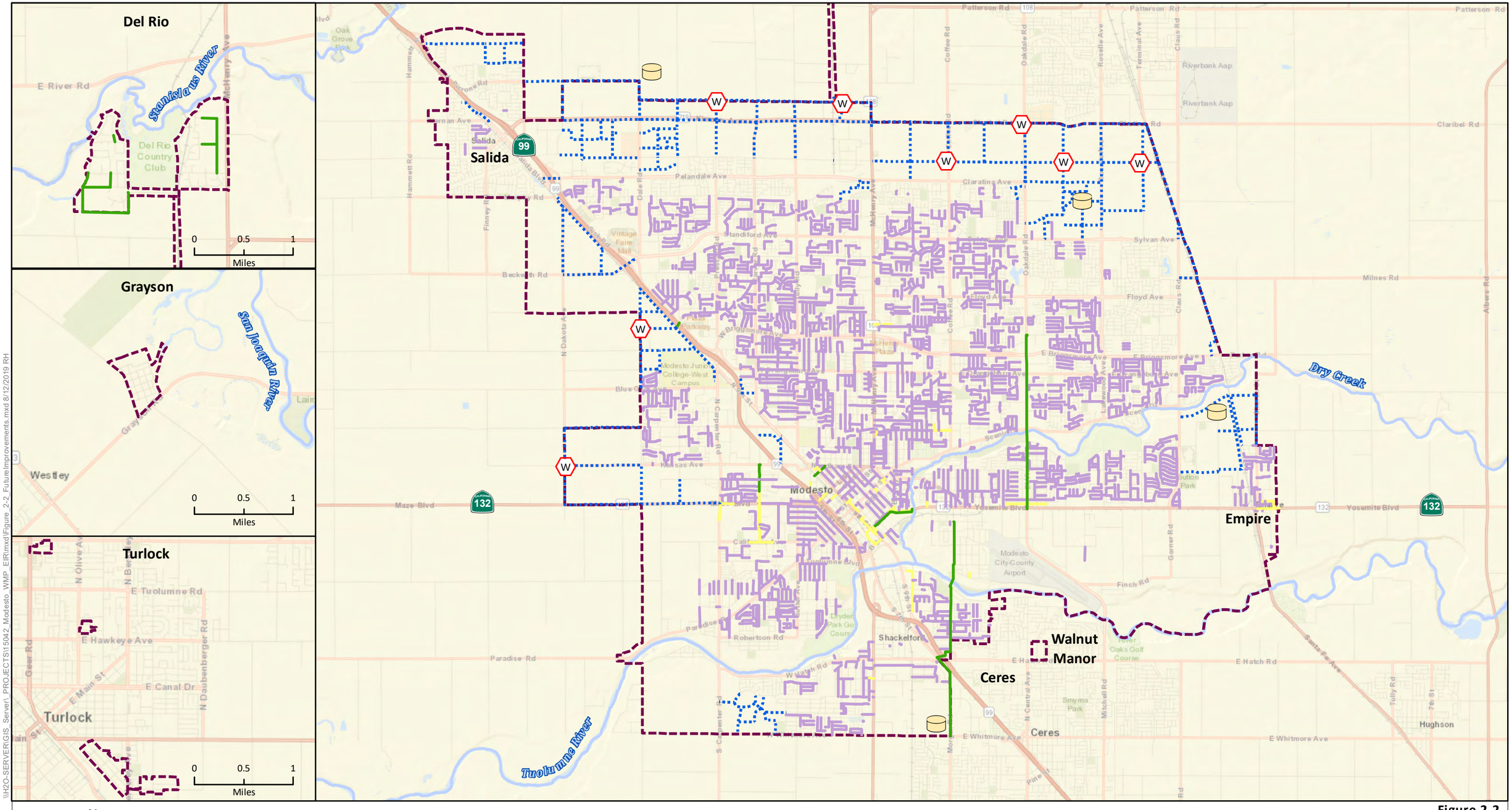

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Proposed New Water System Components

- Future Tanks
- Future Wells (W)
- Build Out Pipelines
- Fire Flow Improvements
- Grid Improvements
- Strengthen and Replace
- WMP Study Area

Figure 2-2
Proposed Future and Buildout Improvements to Modesto Water System

Horizon WATER and ENVIRONMENT

City of Modesto
Water Master Plan EIR

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2.5.1 CIP Improvements Outside of this Program

Some of the 22 categories of CIPs described in the 2016 WSER have already been completed or were in the process of being constructed. CIPs that have been completed or are currently being constructed are briefly mentioned here but are not part of the Proposed Program and, as such, are *not* analyzed as proposed CIP improvements in this DEIR.

- **MRWTP (Category 1 of WSER).** As described in Chapter 1, this project is complete and involved the expansion of MID's MRWTP capacity from an average annual flow of 30 million gallons per day (mgd) to 60 mgd.

- **City-side Downstream Improvements Related to MRWTP Expansion (Category 2 of WSER).** Two proposed improvements in the City-operated water supply infrastructure that distributes treated surface water from the MID-operated MRWTP facilities have been or are in the process of being constructed to correct low peak hour pressures and distribute additional treated surface water. These improvements include a completed Codoni Transmission Mains Pipeline project and an Industrial Tank/Booster Pump Station project (comprised of a 4-MG industrial tank and a 12-mgd booster pump station). One additional improvement in this WSER category has not yet been constructed and therefore is analyzed as part of the Proposed Program and discussed further in Section 2.5.2, "Proposed CIP Facilities."

- **New Corporation Yard (Category 6 of WSER).** The City has purchased property (47.4 acres on Litt Road) to consolidate and relocate the Water Division's existing and future maintenance and operations activities. The 2010 Water Master Plan EIR evaluated this project and a Finding of Conformance to General Plan Master EIR was prepared in 2015 (EA UTL No. 2015-09). As of October 2019, construction of this project is nearing completion. The project includes the construction of a new building (approximately 30,000 square feet), and site development (parking, landscaping, lighting, security measures, vehicle wash station, refueling station, etc.). The site would also be used to store soil, concrete, and asphalt removed during construction of water projects for later reuse as part of the City's recycling program.

- The Water Division's existing maintenance and operations facilities are currently spread over multiple locations, including the City's Jefferson Street Corporation Yard, Tank 6 on Carpenter Road, and Codoni Avenue. Once the maintenance and operations facilities are amalgamated at the single location, the Water Division would vacate the City's Jefferson Street Corporation Yard for use by other City departments.

- Equipment and materials would be removed from Tank 6, which would continue to be in active service, and from Codoni Avenue, which is the future site of the Industrial Tank and Pump Station.

- **Del Rio Tank and Wells Project.** The City has purchased property (3.96 acres on Ladd Road) for a proposed 0.23-MG water storage tank, 1.0 mgd booster pump station, and new 1,000-gallon-per-minute (gpm) water supply well to address existing system deficiencies. These improvements are collectively known as the Del Rio Tank and Wells Project, and have been addressed by a separate CEQA document. An EIR for the Del Rio

Tank and Wells Project (SCH#2015072055), was certified by Modesto's City Council along with associated findings, documents and project approval on September 5, 2017 by Resolution 2017-347.

2.5.2 Proposed CIP Facilities

The following is a brief description of the Proposed Program water infrastructure categories identified in the WMP and WSER. As previously noted, Category 1, the MRWTP Phase II Expansion, and Category 6, the New Corporation Yard, are not listed, as these projects are completed or are currently under construction. Included here are descriptions of the category components (storage tanks and booster pump stations, groundwater wells, etc.) proposed to be installed or upgraded to alleviate existing deficiencies and accommodate water service demands associated with future development within the contiguous and outlying service areas. The locations of existing facilities needing improvements are known. The exact locations of some of these new facilities have yet to be finalized; however, in some cases tentative sites have been identified.

Individual facilities/improvements identified below would be designed and constructed on an as-needed basis and as funding becomes available. As final design and locations of Program components are identified, project-level CEQA review would be completed. All CIPs are evaluated at a program level of detail in this DEIR, since they are improvements that the City would likely construct in the future, but designs of these improvements have not been advanced to a level at which a detailed evaluation can be completed. As such, a more general, programmatic analysis of these improvements is included in this DEIR.

Category 2 of WSER: City-Side Downstream Improvements Related to MRWTP Expansion

The City's water supplies include groundwater and treated surface water from MID's MRWTP, which is transported to the City's distribution system through MID transmission mains. The Proposed Program provides for the design, construction, and rights-of-way acquisition for a City-side downstream improvement[2] necessary to accommodate the increased MRWTP expanded capacity (60 mgd) and further integrate the MID transmission mains with the City's distribution system. This improvement project would assist in correcting low pressures currently observed during peak hour conditions, distribute the additional treated surface water, and benefit existing and future customers. Two other improvement projects in this WSER category were completed or are currently under construction, and are not analyzed in this Program EIR. This improvement project is described in **Table 2-3**.

[2] City-side downstream improvements refer to City-operated water system facilities that are downstream of MID's surface water supply infrastructure that transports treated surface water from the MRWTP to the City.

Table 2-3. Summary of Proposed City-Side Downstream Improvements (Category 2)

Project Name	General Location	Description	Key Objective
Yosemite Transmission Mains	Lapham Drive to 7th and B Street	Construct 14,000 linear feet (lf) of 16-inch-diameter pipeline from the intersection of 7th/B Streets; in S. Morton, Yosemite Blvd, S. Santa Rosa, Mono Drive, Empire Avenue and Lapham Drive to the intersection of Lapham and Spenker.	Correct low peak hour pressures and distribute additional treated surface water

Category 3 of WSER: Improvements for South Modesto and North Ceres and Category 9 of WSER: Strengthen and Replace Water System

Under Category 3 of the WSER, the City would implement improvements to increase delivery reliability to customers in South Modesto and North Ceres. Types of improvements proposed in this area include new transmission pipelines that would strengthen the interconnectivity with North Modesto and more effectively distribute the water. These improvements would benefit both existing and future water consumers because the South Modesto service area is not completely built out.

Category 9 of the WSER replaces and upgrades deficient water mains throughout the water system service area that have reached the end of their useful life, are undersized, aged, and/or steel pipe. Typically, strengthen-and-replacement projects upgrade/replace pipes, valves, fire hydrants, blow-offs, meters, and other appurtenances as needed. Where possible, pipes are abandoned in place to minimize disruption to existing services, although removal and replacement in the same trench is sometimes necessary.

Similar to the water main extensions described for Category 8 of the WSER, replacement pipelines would be sized per the City's adopted standards, but the sizing would need to be verified by project-specific engineering as a part of final design, and possibly adjusted from that identified in the WMP. Pipelines would generally be constructed within the public right-of-way, following the alignment of existing or future planned streets and easements, wherever feasible.

Other pipeline improvements would include grid improvements to improve the hydraulic transmission of the water system, and fire-flow-related improvements. The fire-flow-related improvements are prioritized by the water system's existing flows compared to the required minimum fire flows of 1,500 gpm. Lower-Priority Fire Flow Improvements are in areas with available fire flow of less than two-thirds of the required fire flow. High-Priority Fire Flow Improvements are located in areas that have even less available flows to meet the fire flow requirements and, thus, are more urgently needed than the Lower-Priority Fire Flow Improvements.

Table 2-4 and **Table 2-5** provide a summary of proposed pipeline improvements under WSER Categories 3 and 9 for the City's existing system and the future and buildout system, respectively.

Table 2-4. Proposed Pipeline Improvements for City's Existing Contiguous and Outlying Service Water Systems (Categories 3 and 9 of WSER)

Pipeline Type/Name	Description	Total Pipeline Length (linear feet)	Objective
Contiguous Service Area			
Fire flow improvements for existing contiguous systems			
High-Priority Fire Flow	New 8-inch-diameter pipes	153,230 lf	Pipeline Improvement (Category 9 WSER) + Improve existing distribution system's water flow rates and pressures to ensure sufficient for emergency firefighting (Category 3 WSER)
High-Priority Fire Flow	New 12-inch-diameter pipes	8,360 lf	Pipeline Improvement
Lower-Priority Fire Flow	New 8-inch-diameter pipes	860 lf	Pipeline Improvement
Lower-Priority Fire Flow	New 12-inch-diameter pipes	72,100 lf	Pipeline Improvement
Grid Improvements for existing contiguous systems			
EXGRID-01	Construct new 12-inch-diameter pipelines along Briggsmore Avenue between Held Drive and Claus Road; Along Claus Road between Briggsmore Avenue and Scenic Drive	5,630 lf	Distribution/Transmission Improvement
EXGRID-02	Construct new 12-inch-diameter pipelines along Scenic Drive between Claus Rd and Lakewood Avenue	5,430 lf	Distribution/Transmission Improvement

Pipeline Type/Name	Description	Total Pipeline Length (linear feet)	Objective
EXGRID-03	Construct new 12-inch-diameter pipelines along Lincoln Oak Drive, between Kodiak Drive and Floyd Avenue; Along Roselle Avenue between Floyd Avenue and Briggsmore Avenue	5,540 lf	Distribution/Transmission Improvement
EXGRID-04	Construct new 12-inch-diameter pipelines along Lakewood Avenue between Orangeburg Avenue and Scenic Drive	4,330 lf	Distribution/Transmission Improvement
EXGRID-05	Construct new 12-inch-diameter pipelines along Scenic Drive between Lakewood Avenue and Oakdale Road	5,680 lf	Distribution/Transmission Improvement
EXGRID-06	Construct new 12-inch-diameter pipelines along Scenic Drive between Orangeburg Avenue and Burney Street	10,430 lf	Distribution/Transmission Improvement
EXGRID-07	Construct new 12-inch-diameter pipelines along Coffee Road between Rumble Road and Briggsmore Avenue	5,180 lf	Distribution/Transmission Improvement
EXGRID-08	Construct new 12-inch-diameter pipelines along Coffee Road between Briggsmore Avenue and Scenic Drive	6,870 lf	Distribution/Transmission Improvement
EXGRID-09	Construct new 12-inch-diameter pipelines along Oakdale Road between Claratina Avenue and Mable Avenue; Along Sylvan Avenue between Oakdale Road and Palmwood Drive; Along Sylvan Avenue between Coffee Road and McHenry Avenue	8,160 lf	Distribution/Transmission Improvement

Pipeline Type/Name	Description	Total Pipeline Length (linear feet)	Objective
EXGRID-10	Construct new 12-inch-diameter pipelines along Standiford Avenue between McHenry Avenue and Carver Road	8,200 lf	Distribution/Transmission Improvement
EXGRID-11	Construct new 12-inch-diameter pipelines along Carver Road between Standiford Avenue and Orangeburg Avenue	9,250 lf	Distribution/Transmission Improvement
EXGRID-12	Construct new 12-inch-diameter pipelines along Standiford Avenue between Prescott Road and Dale Road; Along Veneman Avenue between Bridle Path Lane and Conant Avenue; Along Tully Road and American Avenue South of Bangs Avenue	7,210 lf	Distribution/Transmission Improvement
EXGRID-13	Construct new 12-inch-diameter pipelines along Sisk Road between Rumble Road and Briggsmore Avenue; Along Orangeburg Avenue between Briggsmore Avenue and Martin Avenue	10,160 lf	Distribution/Transmission Improvement
EXGRID-14	Construct new 12-inch-diameter pipelines along Orangeburg Avenue between Carlton Avenue and Tully Road; Along Orangeburg between Carver Road and Martin Avenue, Along Martin Avenue between Orangeburg Avenue between Orangeburg Avenue and Clayton Avenue; Along Clayton Avenue (across Highway 99 assuming Jack and Bore) to Blue Gum Avenue	5,760 lf	Distribution/Transmission Improvement

Pipeline Type/Name	Description	Total Pipeline Length (linear feet)	Objective
EXGRID-15	Construct new 12-inch-diameter pipelines along Coldwell Avenue between Virginia Avenue and 9th Street; Along College Avenue between Yale Avenue and Stoddard Avenue; Along Tully Road between Yale Avenue and Stoddard Avenue; Along Kearney Avenue between Cecil Way and Coldwell Avenue; Along Woodland Avenue between 9th Street and Emerald Avenue	12,500 lf	Distribution/Transmission Improvement
EXGRID-16	Construct new 12- and 16-inch-diameter (respectively) pipelines along Emerald Avenue/Woodland Avenue between Highway 99 and Carpenter Road; Along Carpenter Road	5,620 lf (12-inch)	Distribution/Transmission Improvement
		2,310 lf (16-inch)	Distribution/Transmission Improvement
EXGRID-17	Construct new 12-inch-diameter pipelines along Lapham Drive between Spenker Avenue and Empire Avenue; Along Empire Avenue between Lapham Drive and Mono Drive; Along Mono Drive between Empire Avenue and South Santa Rosa Avenue; Along South Santa Rosa between Yosemite Boulevard and Mono Drive, and along Yosemite Boulevard (assuming Jack and Bore) below existing bridge to Connect to Pipelines along Morton Boulevard.	8,170 lf	Distribution/Transmission Improvement (Category 3 and Category 9)

Pipeline Type/Name	Description	Total Pipeline Length (linear feet)	Objective
EXGRID-18	Construct new 12-inch-diameter pipelines along 5th Street between G Street and H Street; Along H Street between 5th Street and South Washington Street; Along Paradise Avenue between South Washington Street and Sutter Avenue; Along Chicago Avenue between Allen Avenue and Florette Avenue	4,900 lf	Distribution/Transmission Improvement
EXGRID-19	Construct new 12-inch-diameter pipelines along Sutter Avenue between Pelton Avenue and Robertson Road; Along Robertson Road between Sutter Avenue and Vernon Avenue	5,850 lf	Distribution/Transmission Improvement
EXGRID-20	Construct New 16-inch-diameter pipeline along the Virgina Corridor between Bangs Avenue to Ladd Road to Connect the City's Contiguous Service Area and the Del Rio Outlying Area for supply reliability	10,650 lf	Supply Reliability
		Total	**97,920 lf / 18.5 miles**
Del Rio Service Area			
Pipeline improvements for existing Del Rio systems			
—	Install 8-inch pipeline along Carver Road between Riveroaks Drive and Thunderbird Drive	230 lf	Fire Flow
Grayson Service Area			
Pipeline improvements for existing Grayson systems			
—	Replace 6-inch-diameter pipelines along Minnie Street from Tank 9 to Laird Road to 8-inch	810 lf	Fire Flow
—	Replace 4-inch-diameter pipelines along Laird Road from Minnie Street to Amelia Street to 8-inch	700 lf	Fire Flow

Pipeline Type/Name	Description	Total Pipeline Length (linear feet)	Objective
—	Replace 4-inch-diameter pipelines along Stakes and Charles Street from Minnie to Mary Street to 8-inch	1,640 lf	Fire Flow
—	Replace 6-inch-diameter pipelines along River Road from Mary Street to Amelia Street to 8-inch	750 lf	Fire Flow
—	Replace 6-inch-diameter pipeline along Mary Street from Laird to River Road to 8-inch	710 lf	Fire Flow
Turlock Service Area			
Pipeline improvements for existing Turlock systems			
—	Replace North Service Area Island 4-inch diameter pipelines to 8-inch	2,300 lf	Fire Flow
—	Replace Central Service Area Island 4-inch diameter pipelines to 8-inch	2,400 lf	Fire Flow
—	Replace South Service Area Island 4-inch diameter pipelines to 8-inch	5,700 lf	Fire Flow

Table 2-5. Proposed Improvements for City's Future and Buildout Contiguous and Outlying Service Water Systems (Categories 3 and 9 of WSER)

Pipeline Type/Name	Description	Total Pipeline Length (linear feet/miles)	Objective
Contiguous Service Area			
Fire flow improvements for future contiguous systems			
—	New 8-inch-diameter pipes	2,360 lf	Ensure future distribution system's water flow rates and pressures are sufficient for emergency firefighting
—	New 12-inch-diameter pipes	34,700 lf	Ensure future distribution system's water flow rates and pressures are sufficient for emergency firefighting (Category 3 and 9 of WSER)
Strengthen and replace improvements for future contiguous systems			
—	Upsize existing small-diameter pipelines to 8-inches in diameter	1,379,580 lf	Strengthen and replace to accommodate future development (Category 3 and 9 of WSER)
Grid Improvements for future contiguous systems			
FTGRID-01	Construct new 16-inch-diameter pipelines along Oakdale Road between Merle Avenue (downstream of Turnout 6) and Lapham Drive	12,080 lf	Distribution/Transmission Improvement
FTGRID-02	Construct new 16-inch-diameter pipelines along Yosemite Boulevard between North Morton Boulevard and D Street; Along D Street between Yosemite Boulevard and 10th Street	3,100 lf	Distribution/Transmission Improvement

Pipeline Type/Name	Description	Total Pipeline Length (linear feet/miles)	Objective
FTGRID-03	Construct new 16-inch-diameter crossing across Highway 99 (assuming Jack and Bore) at the intersection to Conant Avenue and Sisk Road to Brink Avenue	2,460 lf	Distribution/Transmission Improvement
FTGRID-04	Construct new 16-inch-diameter pipelines along South Santa Cruz Avenue between Mono Drive and Monterey Avenue; along South Santa Cruz Avenue from Monterey Avenue; across the Tuolumne River (assuming Deep Horizontal Directional Drilling [HDD]) to River Road; along Herndon Road between River Road and Joyce Avenue; Across Highway 99 (Assuming Deep HDD) to East Hatch Road and Morgan Road; along Morgan Road between East Hatch Road and East Whitmore Avenue	16,090 lf	Distribution/Transmission Improvement (Category 3 of WSER)
Del Rio Service Area			
Pipeline improvements for future Del Rio Systems			
—	Install 10-inch future development pipelines	12,000 lf	Grid
Grayson Service Area			
Pipeline improvements for future Grayson Systems			
N/A	N/A		
Turlock Service Area			
Pipeline improvements for future Turlock Systems			
N/A	N/A		

Category 3 of WSER: Improvements for South Modesto and North Ceres and Category 18 of WSER: New Water Storage Tank Improvements

New or replacement storage tanks are proposed within the contiguous outlying service areas to meet the existing and/or future service areas fire-flow requirements, peak demands, and generally improve service reliability. Any proposed storage tanks would have an associated booster pump station with a backup power supply and pipelines connecting to the existing water system. The tanks would be either aboveground steel or concrete tanks, or partially buried concrete tanks. Exterior coating of new pump stations and tanks would appear similar to existing structures seen throughout Modesto, and earth tones with non-reflective finishes would be used to coat aboveground components.

Aboveground tanks could be as high as 35 feet and have a diameter up to 250 feet. Partially buried tanks would typically have an exposed height of between 10 and 15 feet and a diameter up to 250 feet. Based on similar water tanks in the study area, it is assumed that each 4- to 6-million-gallon tank would require approximately 3 acres. Based on other pump station buildings seen throughout the Modesto region, associated pump station buildings may be approximately 20 feet tall and encompass an area of 2,000 to 2,500 square feet.

Based on the water system analysis, the tanks would have a storage capacity ranging from 0.2 to 5 million gallons. Each tank would be matched with an appropriately sized booster pump station of 7- to 9-mgd capacity and a diesel generator as a backup power supply.

Proposed new storage tank improvements to address existing and future water system needs are summarized in **Table 2-6**.

Table 2-6. Summary of Proposed Storage Tanks for Existing and Future Water System (Categories 3 and 18 of WSER)

Project Name	Description	Key Objective
Existing System Improvements		
Grayson	Repair or replace Tank 9 (0.2 MG capacity) and add two new pumps (50-horsepower [HP] each)	Address existing storage deficiency
Future and Buildout System Improvements		
South Modesto Storage Tanks for Future Service Area	Construct new 2.6 MG storage tank in South Modesto and construct new booster pump station of 7.8 mgd capacity.	Address future storage deficiency
North Modesto Storage Tanks for Future Service Area	Construct three new storage tanks in North Modesto, including at the Terminal Reservoir (total 10.9 MG storage capacity) Construct two new booster pump stations of 8.7 mgd capacity each at two tanks, excluding Terminal Reservoir tank	Address future storage deficiency and maximize the existing pumping capacity of Terminal Reservoir Booster Pump Station

Project Name	Description	Key Objective
Buildout System Improvements for Del Rio	Expansion of booster pump station constructed with new 0.23 MG storage tank to provide an additional 1.0 mgd for a total Del Rio booster pump station capacity of 2.0 mgd	Address future supply deficiencies

Category 4 of WSER: Water Quality Related Studies

This category includes a variety of system-wide water-quality-related studies and activities needed to identify cost-effective methods to manage groundwater resources for meeting the City's water supply needs. Studies may include research, analysis of existing data, modeling, and field investigations (including but not limited to dynamic flow profiling, geophysical investigations, borings, construction of monitoring wells, groundwater monitoring).

Category 5 of WSER: SCADA System Upgrades

This category includes SCADA system upgrades to improve the City's operation and management of the water system. The City would prepare a SCADA Master Plan that would guide the system upgrades in the near and long term. Upgrades may include hardware at remote sites, hardware at centralized location(s), programming, and reporting.

Category 7 of WSER: Existing Tank Improvements

Improvements to existing tanks (and their sites) may include but are not limited to repainting the outside, recoating the inside, structural repairs, general repairs (such as replacement of interior ladders or vent screens), inlet/outlet modifications, emergency overflow modifications, electrical and/or monitoring equipment (i.e., SCADA) upgrades, replacement of hardware and gaskets.

Category 8 of WSER: Extend Water Mains

This program extends water mains, on an as-needed basis, into developing areas throughout the contiguous and outlying service areas to meet the demands of growth. Typically, this includes the installation of 12-inch-diameter and larger pipes, fire hydrants, and valves on a half-mile grid. Projects to complete distribution pipeline looping are included to improve service reliability to new water service areas. Large-diameter transmission mains may require cathodic protection systems to prevent or control corrosion within the system.

New pipelines would be sized to allow the system to meet the City's adopted standards (City of Modesto 2014) for Maximum Day plus fire flow demand and Peak Hour demand. The sizing of the pipelines would need to be verified by project-specific engineering as a part of final design, and possibly adjusted from that identified in the Engineer's Report. The City would extend water mains to future development areas as summarized in **Table 2-7**.

Pipelines would generally be constructed within the public right-of-way, following the alignment of existing or future planned streets and easements, wherever feasible. Prior to constructing

buildout pipelines on agricultural or undeveloped lands, the City typically requires developers to provide right-of-way dedications for utility improvements.

Table 2-7. Proposed Water Main Extensions (Category 8 of WSER)

Project Name	Description	Total Pipeline Length (linear feet)	Key Objective
Contiguous Service Area	Construct new 12-inch-diameter pipelines	344,450	Extend Water Mains
Contiguous Service Area	Construct new 16-inch-diameter pipelines	18,520	Extend Water Mains

Category 10 of WSER: Install New Wells and Category 11 of WSER: Wellhead Treatment

New wells are proposed within the contiguous and outlying service areas in order to meet existing and future demands along with improving service reliability. In addition to the new wells that are proposed, the Program would entail improvements to several existing wells, including installation of generators for backup power.

Typically, the wells would have a pumping capacity between 750 and 2,000 gpm. All new wells would have a diesel generator as a backup power supply, chlorination equipment, monitoring equipment, SCADA, security features. Depending on the site location, new wells may be constructed within a block wall enclosure or within a pump house. Well sites would be designed to allow for future treatment and future monitoring equipment. Based on similar wells in the study area, it is assumed that new wells would typically occupy a 10,000-square-foot area.

Replacement wells are proposed within the contiguous and outlying service areas. Wells that have been offline for some time may be destroyed then replaced on the existing well site, on an adjacent site, or in the service area. Existing improvements are typically upgraded with the construction of the replacement well. Improvement upgrades may include, but are not limited to, monitoring equipment, SCADA equipment, security features, electrical system, flush lines, and emergency generators.

Wellhead treatment may be required for wells throughout the water service area that are offline due to levels of contaminants that exceed California Drinking Water MCLs. The program includes evaluating various wellhead treatment technologies and well treatment alternatives. Wellhead treatment would be selected based on the contaminants of concern present. Improvements to the well site may include, but are not limited to, concrete slabs, enclosures, or block buildings to house treatment systems, monitoring equipment, SCADA equipment upgrades, electrical system upgrades, security features, flush lines, and emergency generators. Treatment and non-treatment alternatives would be considered for each well and may include, but are not limited to, one or a combination of the following technologies: coagulation/filtration, oxidation, coagulation assisted microfiltration, lime softening, sorption processes, ion exchange, microfiltration, ultrafiltration, reverse osmosis, electrodialysis reversal, and blending. Waste streams generated by various

technologies may include but are not limited to backwash water, dewatered sludge, backwash water, spent media, liquid brine, and concentrated streams. Waste disposal would depend on the constituents present in the waste and may include discharge to publicly owned treatment works, off-haul for disposal, landfill, or approved California hazardous landfill. Treatment systems may generate materials containing toxins, hazardous materials, heavy metals, and/or radio nucleotides. Testing and pre-treatment may be required prior to hauling and/or disposal.

Within the contiguous service area, the City would construct up to 13 new wells to support the future system development. These wells would be equipped with backup generators to ensure that a "firm" or reliable water supply could be delivered in the event of a power outage and, thus, result in an additional 11,700 gpm (16.8 mgd) firm groundwater supply capacity. Conceptual proposed well locations for eight wells that would have firm groundwater supply capacity are shown in Figure 2-2. The locations of the additional five wells would be determined through analysis of available land that overlies good groundwater production capability and good quality water. Outlying service areas would also require replacement or new wells to meet existing and future service system needs, as shown in **Table 2-8**. For the Turlock service area, as a method to minimize potential wellhead treatment needs, the Proposed Program may include a total of three full-size (8-inch-diameter) emergency interties. These proposed interties are summarized in Table 2-8**.**

Table 2-8 provides a summary of proposed well improvements in the contiguous and outlying service areas to meet existing and future service system area demands.

Table 2-8. Summary of Proposed Groundwater Well Improvements for Existing and Future Water System (Categories 10 and 11 of WSER)

Project Name	Description	Key Objective
Existing System Improvements		
All Service Areas	Replacement wells as needed to address water quality, well construction related issues, or regulatory requirements. Replacement wells may be constructed at existing wells sites, adjacent to existing wells sites, or at other locations throughout the various service areas.	Supply
All Service Areas	Well head treatment as needed to address water quality or regulatory requirements. Well head treatment may be constructed at existing well sites, adjacent to existing well sites, or at other locations throughout the various service areas.	Supply

Project Name	Description	Key Objective
Grayson	New well with 400 gpm capacity, backup generator, and SCADA. It is unknown if treatment will be needed for the new well. This could include potential upgrades to existing ion exchange system at Well 295 site, or new treatment system at the well 274 site, based on treatment requirements.	Supply
Turlock	Rehabilitate or replace Well 255	Supply
Turlock	Three total emergency interconnections to City of Turlock water system for the North, Central, and South Service Area Islands	Supply
Future and Buildout System Improvements		
Contiguous Service Area	Thirteen (13) new wells, resulting in an additional 11,700 gpm (16.8 mgd) firm groundwater supply capacity	Supply

Category 12 of WSER: New Generators

Emergency generators provide backup power to various booster pump stations for tank and well sites throughout the water system. There is an existing storage capacity deficiency in the City's water supply system that could be offset by installing emergency backup power generators at 18 wells within the City's contiguous water system. By installing these backup power generators and because the City's water supply includes groundwater wells, the groundwater basin can account for a portion of the City's water storage capacity requirement (Emergency Groundwater Storage Credit). Emergency generator sizing is dependent on the application, but can be 20 feet long by 9 feet wide by up to 15 feet high with fuel storage. Emergency generators would be operated monthly for brief testing and maintenance purposes and used as necessary during power outages or similar emergency situations. **Table 2-9** provides the specific proposed emergency generator improvements for the contiguous and outlying service areas.

Table 2-9. Proposed Backup Generator Improvements for the Contiguous and Outlying Service Areas (Category 12 of WSER)

Project Name	Description	Objective
Contiguous Service Area		
Existing System Improvement	Backup generators on Wells 1, 4, 7, 16, 45, 47, 48, 50, 51, 58, 217, 237, 241, 267, 278, 284, 287, and 312	Backup Power

Grayson		
Existing System Improvement	Replacement generator for Well 274 and a backup generator at the existing booster pump station	Supply
Turlock		
Existing System Improvement	Backup generators for Wells 255, 256, and 275	Supply

Category 13 of WSER: Water System Security Enhancements

This ongoing program provides fencing, security signage, lighting, and other security measures to be implemented at well and tank sites throughout the water system. New lighting at these facilities would be consistent with outdoor lighting currently used at similar facilities found throughout the Modesto area.

Category 14 of WSER: Groundwater Management

This program develops projects identified through the Integrated Regional Groundwater Management Plan (IRGMP) in the Modesto Groundwater Sub-basin and the Groundwater Management Plan (GWMP) in the Turlock Groundwater Sub-basin. The City of Modesto has partnered with other agencies to develop Groundwater Sustainability Agencies in each Sub-basin in accordance with Sustainable Groundwater Management Act (Water Code section 10720 et seq.*)*. Projects include but are not limited to groundwater quality monitoring, groundwater replenishment studies, and continued participation in regional groundwater-related activities.

Category 15 of WSER: Urban Water Management Plan

An Urban Water Management Plan (UWMP) (City of Modesto 2016) was developed and would be updated every 5 years in compliance with the Urban Water Management Planning Act of 1983. The Act was amended by passage of the Water Conservation Act of 2009, which requires local agencies to establish water use targets that would result in a 20 percent savings by 2020. Using information generated by the WMP, the UWMP outlines measures to ensure the reliability of the water supply, and includes conservation programs such as residential plumbing retrofits, recycled water implementations, and water system audits.

Category 16 of WSER: Water Master Plan

The ongoing program would provide recurring updates to the WMP and the completion of the associated CEQA compliance. The WMP evaluates the hydraulic and operational performance of the City's water system and addresses, among other items, future sources of supply, water quality issues, water demands, conjunctive use strategies, water system modeling updates, and capital improvements for both existing and future customers. Data collection and analysis is required as part of the preparation effort, and may include field data collection, fire flow testing, system monitoring, and other information needed for calibration of the hydraulic model.

Category 17 of WSER: Water System Evaluation

This ongoing program provides "as-needed" engineering studies and water system evaluations throughout the water service area. Studies and evaluations are typically related to demand expectations, supply capabilities, potential loss of key groundwater production wells, hydraulic modelling support, and other water-system-related activities. Data collection and analysis may include field data collection, fire flow testing, system monitoring, and other information needed for hydraulic model update(s).

Category 19 of WSER: Water Meters

The City is in the process of installing water meters on services throughout the water service areas, as well as upgrading existing obsolete meters. This multi-year endeavor is mandated by state law and must be completed by 2025.

Category 21 of WSER: New or Replacement Pumps

On an as-needed basis, deficient water pumps at wells and booster pump stations are replaced, typically due to age, being beyond their useful life, and/or too costly to repair.

Category 22 of WSER: Utility Cuts Program

Pavement repairs related to utility construction activities, such as the installation of water lines, valve replacement, water connections, and leak repairs, are required on an as-needed basis.

2.6 Proposed Aquifer Storage and Recovery Program

The proposed ASR Program would identify areas within the Modesto Groundwater Subbasin where groundwater augmentation may occur both to aid in maintaining basin groundwater levels and to provide for storage of seasonally-available surplus treated surface water[3] (obtained via existing infrastructure from the MRWTP as supplied under agreements with MID) in the subsurface for future use. The ASR Program has been conceptually evaluated and appears to be a viable water supply management tool for the City but additional studies, tests, and planning are required to develop and implement this program (West Yost 2017a). As part of the Proposed Program, additional groundwater modeling, pilot tests, and/or plans would be developed to identify and implement potential studies, projects, and/or programs to further develop the ASR Program. The proposed ASR Program is a key step in understanding basin hydrodynamics for development of a long-term groundwater banking, conjunctive use, and basin management program.

The City's proposed ASR Program would pump MRWTP-treated surface water that meets drinking water standards to one or more injection wells via the City's existing drinking water distribution system. During periods of injection, both water users and the injection well system would receive water from the MRWTP. Water would later be extracted from the aquifer as needed and conveyed to water users in the same distribution system. This type of ASR Program poses a low threat to the beneficial uses of the aquifer, because the water that would be stored in the aquifer

[3] Seasonally-available surplus treated surface water would typically be available during the winter and spring months in normal and wet years (West Yost 2017a).

would be treated to meet all drinking water standards. Other advantages of the ASR program and using direct injection wells to transport surface water into the aquifer, as compared to a spreading basin, includes preventing the loss of water through evaporation and the smaller land area needs for the program.

To support implementation of this program, the City would evaluate existing wells for suitability as ASR injection wells, identify regulatory requirements, review source water quality and seasonal variability, develop hydrogeological characteristics such as transmissivity, and evaluate movement and perimeter interactions of injected water in the subsurface. As part of this evaluation, a pilot demonstration test program may be performed to empirically verify the conclusions of past ASR evaluations and develop site-specific data regarding the effectiveness, impacts, and economics of an ASR program. Additional objectives of further ASR Program evaluations, including a potential pilot demonstration test, would be to verify that recovered water meets all drinking water standards and other water quality perceptions (i.e. taste, odor, visual clarity), verify that injected water remains geochemically stable during storage and recovery, and verify the beneficial impacts to basin water levels from the ASR operations (West Yost 2017a).

2.7 Construction

2.7.1 Phasing of Construction

Because of the magnitude of the capital improvement costs associated with implementation of the WMP, improvements would be implemented in phases as funding sources become available. It is estimated that buildout of the water system improvements would occur through 2050.

The precise order of project phasing would depend on the sequencing of specific parcel development and the general patterns of the City's future growth. Other than the development applications currently being processed by the City, the majority of the CIPs identified in the WMP cannot be prioritized with certainty at this time. Even projects identified as existing system projects that would be anticipated to be more near-term than future system projects do not have a defined timeline and would be analyzed in the future at a project level following further design of these improvements.

In general, construction activities for the Proposed Program would generally occur Monday through Friday between 7:00 a.m. and 5:00 p.m., excluding City-observed holidays. Because there may be weather constraints, some construction activities may need occur on weekends or holidays, or in the event of emergency, outside normal working hours.

2.7.2 Construction Methods

Construction of proposed improvements to the City's water service system would involve several types of activities: site preparation; demolition and removal of some existing facilities; earthwork (grading and excavation); pipeline and well installation; and facility construction. These activities are described below. As indicated in Section 2.7.1, "Phasing of Construction," construction would occur throughout the Program planning period and within the construction period for each improvement; there would be periods of more intensive activity and associated peaks in

construction traffic, typically during ground-disturbing activities, followed by longer periods of reduced activity.

All water system facilities proposed under the WMP and corresponding post-construction site improvements would be designed and constructed in compliance with the City's Standard Specifications (City of Modesto 2014), which details requirements related to a variety of topics, including but not limited to permits for construction, storm drainage, water system, utilities and trenching, grading, driveways, demolition plans, and traffic striping and signs.

Site Preparation

Site preparation would include clearing and grubbing at each CIP site. Clearing and grubbing would be conducted using standard excavators, bulldozers, and hand labor. Depending on the CIP, other site preparation work may involve demolition of existing facilities/structures, excavation, import, and placement of fill, and compaction. Demolition work would be required to remove improvements and structures from property acquired by the City for various well and/or tank improvements.

To the extent feasible, excavated soil would be reused on site. If required, fill would be delivered to project sites by conventional haul trucks with a capacity of up to 20 cubic yards [cy] per load. Fill material would be placed with an excavator and compacted with a compactor/roller.

Water Storage Tanks

Water storage using at-grade and/or tanks and their associated booster pump stations would involve (but would not be limited to) construction of the following:

- Concrete pads and foundations for the tank, booster pump station, and generator for backup power would consist of concrete or asphalt paving.
- Masonry block building to house booster pumps, process piping, and electrical equipment.
- Above- and below-ground process piping.
- Electrical and control systems housed in secure enclosures.
- Standby generator for a backup power supply during any power outage.
- The entire pump station and tank site would be fenced, gated, and locked.
- The pump station building would be designed to architecturally blend in with other existing buildings in the area. The pump station's building design would include selecting materials and paint colors that are compatible with the existing colors of the surrounding area. The transition of base and accent colors used will relate to changes in the building material or texture, or the change of building surface planes.

- Storm drainage facilities would be installed to allow all-weather maintenance and vehicle access to the site. Proposed storm drainage systems include an on-site retention basin to capture any overflow from the storage tank or booster pumps.
- All lighting would be internally directed to reduce light or glare.
- Based on other pump station buildings seen throughout the Modesto region, associated pump station buildings may be approximately 20 feet tall and encompass an area of 2,000 to 2,500 square feet.
- Standby diesel generators would be installed in inside the booster pump station or in an acoustically designed and insulated structure outside the booster pump station.
- Chain-link fencing would be installed around the perimeter of the site for security purposes.

Figure 2-3 depicts a typical storage tank with booster pump stations. The depth of excavation for construction of tanks, booster pumps, and appurtenances can reach 20 feet. Construction of new water storage tanks typically extend from several months to 1.5 years. Booster pump stations are typically incorporated into the design and construction of tanks and/or wells.

Groundwater Wells

Construction of new wells would involve (but is not limited to) construction of the following.

- Drilling of the well.
- Pumping of the well during initial capacity and production testing.
- Concrete pads and foundations for the well's motor and pump and standby generator.
- Masonry block building to house the well (if required), related equipment, process piping, and electrical equipment.
- Subsurface or inline sand removal equipment.
- Above- and below-ground process piping and valving.
- Electrical and control systems housed in secure enclosures.
- SCADA equipment may include antenna.
- Standby emergency generator for a backup power supply during any power outage.
- The entire pump station and tank site would be fenced (or perimeter masonry block enclosure), gated, and locked. The well house building (if required) would be designed to architecturally blend in with other existing buildings in the area.
- Flush line installed for well discharges to wastewater collection system.

- Storm drainage facilities would be installed to allow all-weather maintenance and vehicle access to the site.
- All lighting would be internally directed to reduce light or glare.
- Standby diesel generators would be installed in acoustically designed and insulated structures.
- Chain-link fencing would be installed around the perimeter of the site for security purposes.

Figure 2-3 shows the typical components that would be constructed at a new groundwater well site. Typical construction durations for installation of new and replacement wells would range from approximately 1 to 1.5 years. Security upgrades and emergency generator installations would typically have a duration of 3 to 6 months.

a) Water storage tank and booster pump stations.

b) Water storage tank in the distance.

c) Groundwater well station within a public park. Building houses monitoring equipment.

d) Groundwater well station near a public school as seen from a road.

Horizon WATER and ENVIRONMENT

Figure 2-3
Typical City Water Storage Tanks and Groundwater Wells

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Pipelines

For new pipelines that would be installed beneath existing streets, the general process for pipeline installation involves digging a trench, installing the pipe, and backfilling the trench (referred to as "cut and cover"). In existing streets, the cut-and-cover method involves removing the asphalt, roadway base, and underlying soil; materials would generally be replaced at the completion of the program, but some excess materials may be disposed off-site. The depth and width of the trenches would vary depending upon the size of the pipe, City and County standards, and consideration of other existing utility lines. In general, the depth of excavation for open trench construction for pipelines typically ranges from 5 feet to 11 feet deep or more. Construction crews may close one lane of traffic temporarily during pipe installation. In general, the maximum length of an open trench would be the distance necessary to accommodate the amount of pipe that can be laid in one day, typically 200 to 400 feet. For new water transmission mains or distribution pipelines, typically 200 to 400 feet can be laid with one crew working. A typical crew size includes five workers. In the event multiple crews are working on a particular pipeline project, more than 400 feet of new pipeline can be installed. If a pipeline is required to be installed over an existing line, typically the cut-and-cover method would be used and the existing pipe would be cut, capped or hot tapped (using a valve), and removed; the replacement pipe would then be installed as described above and the surface improvements restored.

To the extent feasible, pipeline construction activities would occur within the limits of the City or County right-of-way boundaries, City utility easement, and/or construction easement. The width of the construction area varies both on the extent of applicable easements and pipeline diameter. For the purposes of this analysis, the approximate width of the construction areas would be 20 feet. Depending on the project location, construction crews may close one lane of traffic temporarily during pipe installation.

Pipelines may also be installed by the jack-and-bore method, typically when the open trench method is not practical and/or possible. For example, when transmission mains or water distribution pipelines are required to cross a railroad, Caltrans right-of-way, an irrigation canal, local water bodies (i.e., Dry Creek or the Tuolumne River) or needs to be buried very deep beneath the ground surface. This method of construction would also be used to avoid sensitive habitats (wetland and riparian habitats) and special-status plants, particularly for construction of Program components that cross the Tuolumne River and Dry Creek, such as FTGRID-01 and FTGRID-04.

The jack-and-bore method requires the construction of insertion pits, pipe jacking (pipes pushed behind the small tunneling machine), and application of a lubricant to maintain pressure and prevent the shafts and the tunnel from collapsing. Launch and receiving pits for trenchless construction typically would be up to 15 feet deep. The tunneling machine is controlled by a computer and is typically accurate. The construction crews first establish the launch pit and a receiving pit on either side of the waterway or utility crossing. Temporary dewatering may be needed at the pits. Horizontal directional drilling (HDD) may also be used when the open trench method is not practical and/or possible. HDD is a steerable trenchless method of installing underground pipe in a shallow arc along a prescribed bore path by using a surface-launched drill rig, with minimal impact to the surrounding area.

Pipelines constructed across major waterways such as the Tuolumne River could be attached to an existing vehicle or pedestrian bridge. The water piping would typically be installed inside a steel

casing and may be contained within the bridge deck, with no visible changes to the outward appearance of the bridge.

Staging Areas

Staging areas would be needed to store pipe, construction equipment, and other construction-related material. The precise locations of staging areas are not known at this time and would be determined just prior to construction. Staging areas would likely be established along the pipeline routes where space is available, such as vacant lots, parcels, or parking lots. In some cases, staging areas may be used for longer duration for CIPs that require construction in one location (e.g., new tank or groundwater well). In other cases, such as when pipeline construction moves along the route, the staging area would also shift to minimize hauling distances and avoid disrupting any one area for extended periods. Staging areas would not be located in environmentally sensitive areas and would be subject to investigation during the project planning phase. The City would reserve the authority to approve the locations of the staging areas as part of the contracts for construction of their respective facilities.

Testing, Disinfection, and Flushing

Prior to use of newly constructed water system improvements, water system facilities, such as pipelines, must be tested, disinfected, and flushed in accordance with the requirements detailed in Section 6, Water System Design, of the City's most current Standard Specifications. Tanks and wells would also be flushed following construction and prior to use in the water system. Specific activities associated with hydrostatic pressure testing would include but not be limited to slowly filling new pipeline sections with water from the existing system, expelling air from the pipeline, equalizing the pipeline pressure to existing system pressure for at least 24 hours, ensuring the hydrostatic pressure meets all defined requirements, determining leakage, and carefully examining new exposed system components during testing. Disinfection would occur after hydrostatic pressure tests were completed. One of the prescribed disinfection methods in the City's standard specifications, which comply with American Water Works Association (AWWA) standard methods, would be used to disinfect all new water mains and appurtenances. After completion of the disinfection process, the heavily chlorinated water would be dechlorinated to neutralize the chlorine and flushed from the new pipelines/water system facilities until the residual chlorine concentration meets the City's established requirements. The de-chlorinated water would be disposed of in the storm drainage system or sanitary sewer system.

2.7.3 Construction Equipment

In general, the main pieces of equipment that may be used during construction activities are:

- well drilling equipment
- rollers
- pavers
- bulldozer
- backhoe
- welders
- track-mounted excavator
- front-end loader
- ten-wheel dump truck
- compressors/jack hammers
- paving equipment
- water truck
- flat-bed delivery truck
- boom truck
- concrete truck
- cement and mortar mixers

- crane
- compactor
- end dump truck
- forklift
- grader
- mowing equipment (e.g., weed eaters, commercial lawnmowers)
- generator sets

The consumption of energy for equipment and vehicles would be minimized by reusing excavated soils on site and reducing vehicle and construction equipment idling for each project.

2.8 Operations and Maintenance

Operation of the Proposed Program would primarily involve the operation, inspection, and maintenance of the water system. The pump stations, storage tanks, and wells are manually and remotely controlled through an automated SCADA system.

The City would inspect the entire water system on an annual basis to determine whether maintenance is needed, though individual water system components may be inspected more frequently. Maintenance activities for storage tanks include the periodic cleaning of a tank's inside (with the use of a vacuum system) to maintain capacity and functioning and occasional recoating of the tank, as needed. Tank maintenance and repair activities would typically have an approximate duration of 3 to 6 months, depending on the extent of repairs or modifications required. Tank sites are inspected on a minimum weekly basis, and tank interiors are inspected a minimum of every 3 years. Maintenance activities associated with wells include various mechanical tests and meter calibration (with equipment specific to those activities) and general maintenance of treatment systems (e.g., treatment system flushing or regeneration). Wells are inspected on a minimum weekly basis. Water meters for commercial or larger water use customers are inspected annually. Residential water meters and system fire hydrants are inspected on an as-needed basis.

The City inspects the wells and pump stations and pipelines on a regular basis (numerous times during the wet months and less frequently the remainder of the year) to ensure optimal performance. In general, pump stations are inspected a minimum of once per week. Pressure points are inspected a minimum of two times a week, and water valves are inspected every 3 years. Maintenance of the pump stations and pipelines is performed on an as-needed basis.

2.9 Permits and Approvals

Table 2-10 provides a summary of potential permits that may be required for the Proposed Program's CIPs. Specific permits would vary for each CIP depending on a variety of factors, including but not limited to the specific site conditions at individual CIP locations and the proposed construction methods for an individual CIP. The state and local agencies identified below would be considered responsible agencies under CEQA.

In addition to the City, the EIR for the Proposed Program would be used by various regulatory agencies issuing permits, as well as other approvals and consultations for the Proposed Program. Specifically, information about the Proposed Program and the environmental analysis would be used by several agencies as part of their decision-making process regarding applicable regulations.

Agencies that may have regulatory authority over various aspects of the Proposed Program are also identified in Table 2-10.

Table 2-10. Potential Permit and Regulatory Requirements for CIPs under the Proposed Program

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
U.S. Army Corps of Engineers (USACE)	Clean Water Act Section 404	Authorizes dredge or fill materials in waters of the United States	Section 404 permit
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act	Protects special-status wildlife species from "take" by Program activities	Section 7 or Section 10 consultation
National Marine Fisheries Service	Endangered Species Act	Protects special-status fish species from "take" by Program activities	Section 7 or Section 10 consultation
State Water Resources Control Board (SWRCB)	Clean Water Act, Porter-Cologne Water Quality Control Act	Regulate pollutant discharges into surface waters	Section 401 water quality certification, General Construction Permit under National Pollutant Discharge Elimination System
California Department of Fish and Wildlife	Fish and Game Code Section 1602	Applies to activities that will substantially modify a river, steam, or lake; includes reasonable conditions necessary to protect those resources	Streambed Alteration Agreement
California Department of Transportation (Caltrans)	Section 660 of the California Streets and Highways Code	Applies to pipeline construction activities that occur beneath Caltrans right-of-way	Encroachment permit

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
California State Lands Commission	General Lease-Public Agency Use	Applies to pipeline construction activities across Tuolumne River	Approval of improvements under General Lease
Central Valley Regional Water Quality Control Board (RWQCB)	Clean Water Act, Porter-Cologne Water Quality Control Act	Regulate pollutant discharges into surface waters	Section 401 water quality certification, Basin Plan oversight, National Pollutant Discharge Elimination System permit
Central Valley Flood Protection Board	Water Code 8710, California Code of Regulations Title 23	Applies to pipelines crossing Dry Creek and the Tuolumne River	Encroachment permit
San Joaquin Valley Air Pollution Control District (SJVAPCD)	Rule 8021	Limit fugitive dust emissions from construction	Construction notification form
Modesto Irrigation District (MID)	N/A	Permission to conduct work involving or affecting MID facilities	Encroachment permits
Turlock Irrigation District (TID)	N/A	Permission to conduct work involving or affecting TID facilities	Encroachment permits
Stanislaus County	N/A	Compliance with County ordinances and policies	Temporary construction easement
City of Modesto	N/A	Required for construction on City-owned parcels	Temporary construction easement
City of Turlock	N/A	Compliance with City ordinances and policies	Temporary construction easement

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
City of Ceres	N/A	Compliance with City ordinances and policies	Temporary construction easement

Chapter 3
INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

3.1 Overview

Chapters 4 through 17 of this DEIR describe the potentially affected environmental resources and potential environmental impacts (and proposed mitigation measures) of the Proposed Program. The regulatory setting discussion in each chapter identifies applicable federal, state, and local plans, policies, and regulations.[1] Each chapter also describes the existing environmental setting and background information on the resource topics to help the reader understand the environmental conditions that could be affected by the Proposed Program. In addition, each chapter includes a discussion of the criteria used in determining the significance levels of the Proposed Program's environmental impacts. Finally, for any identified significant impacts, where feasible, mitigation measures are proposed to reduce the adverse effects of significant impacts.

This chapter summarizes the EIR study area, describes the DEIR's consideration of baseline conditions, describes terminology used throughout this DEIR, defines who is responsible for implementing proposed mitigation measures, and describes resource sections that have been eliminated from further consideration in the DEIR.

3.2 EIR Study Area

The study area for this DEIR encompasses the service area for the WMP that would be addressed by the various CIPs, including both the contiguous service area and outlying areas. The City's contiguous service area includes the current SOI, Salida, North Ceres, and some unincorporated areas within and adjacent to the SOI including Empire. The outlying service areas consist of Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock.

3.3 Characterization of Baseline Conditions

Under CEQA, the environmental setting, or "baseline," serves as a gauge to assess changes to existing physical conditions that would occur as a result of a Proposed Program. In accordance with State CEQA Guidelines (14 CCR Section 15125), for purposes of this DEIR, the environmental setting is generally the existing physical conditions in and around the Proposed Program area as those conditions exist at the time the NOP was published (2016).

3.3.1 Planning Context

At the time this DEIR was prepared, the City was in the process of developing a General Plan Amendment and updating the General Plan Master EIR. Because those documents were not published at the time this DEIR was prepared, this document continues to rely on relevant policies

[1] CEQA Guidelines Section 15125 requires an EIR to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans. This discussion is included in Chapter 13, Land Use.

from the *City of Modesto Urban Area General Plan* (2008a), as well as the *Stanislaus County General Plan* (2016), the *City of Ceres General Plan* (1997), and the *City of Turlock General Plan* (2012a) for the outlying areas.

3.4 Significance of Environmental Impacts

According to CEQA, an EIR should define the threshold of significance and explain the criteria used to determine whether an impact is above or below that threshold. Significance criteria are identified for each environmental resource topic to determine whether implementation of the Program would result in a significant environmental impact when evaluated against the baseline conditions as described in the environmental setting. The significance criteria vary depending on the environmental resource topic. In general, effects can be either significant (above threshold) or less than significant (below threshold). In some cases, a significant impact will be identified as significant and unavoidable if no feasible mitigation measure(s) is/are available to reduce the impact to a less-than-significant level. If a program is subsequently adopted despite identified significant impacts that would result from the program, CEQA requires the lead agency to prepare and adopt a statement of overriding considerations describing the social, economic, and other reasons for moving forward with the program despite its significant impact(s). (See generally CEQA Guidelines sections 15092, 15093, 15126.2)

3.4.1 Terminology Used in Impact Analyses

This DEIR uses the following terminology to describe environmental effects of the Proposed Program:

- A finding of *no impact* is made when the analysis concludes that the Program would not affect the particular environmental resource or issue.
- An impact is considered *less than significant* if the analysis concludes that there would be no substantial adverse change in the environment and that no mitigation is needed.
- An impact is considered *significant* if the analysis concludes that there could be a substantial adverse effect on the environment.
- An impact is considered *less than significant with mitigation* if the analysis concludes that there would be no substantial adverse change in the environment with the inclusion of the mitigation measures described.
- An impact is considered *significant and unavoidable* if the analysis concludes that there could be a substantial adverse effect on the environment and no feasible mitigation measures are available to reduce the impact to a less than significant level.
- *Mitigation* refers to specific measures or activities adopted to avoid, minimize, rectify, reduce, eliminate, or compensate for an impact.
- A *cumulative impact* can result when a change in the environment results from the incremental impact of a project when added to other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects. The cumulative impacts analysis in this DEIR

focuses on whether the Proposed Program's incremental contribution to other significant cumulative impacts caused by past, present, or probable future projects is cumulatively considerable (i.e., significant).

- Because the term "significant" has a specific usage in evaluating impacts under CEQA, it is used only to describe the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" have been used when not discussing the significance of an environmental impact.

3.4.2 Program-Level Analysis

As described in Chapter 2, *Program Description,* the DEIR impact analysis considers the Proposed Program components at a programmatic level of detail. All CIPs are evaluated at a program level of detail because, although the City would likely construct these projects in the future, the design of these improvements has not been advanced to a level at which a detailed evaluation can be completed, and specific locations for some improvements are yet to be determined. As such, a more general, programmatic analysis of these improvements is included in this DEIR. Tables 2-1 through 2-8 provide an overview of all projects considered throughout the DEIR.

This Program EIR can be used to streamline the task of preparing environmental documents on later parts of the program. This Program EIR may provide the basis, through preparation of an environmental checklist, for determining whether the later activity may have any significant effects that have not been evaluated as part of the Proposed Program. It can be incorporated by reference to address regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the Program as a whole. Also, it can focus the CEQA review of a subsequent project to permit discussion solely of new effects that have not been considered previously.

Impacts of the Proposed Program are considered based on the potential for various types of proposed improvements to have a significant impact on the physical environment, in the context of appropriate mitigation measures. For example, subsurface improvements, including but not limited to new and/or replacement water mains, would not result in a visible change to the surroundings and therefore are unlikely to have aesthetic impacts. Similarly, proposed improvements to the existing water system, such as strengthening and replacement projects, would not have growth-inducing impacts. Proposed Program improvements located outside of riparian zones would not have biological impacts related to riparian habitat. Agricultural resources would not be affected by Proposed Program improvements in developed areas.

Each resource chapter includes an impact summary table that clearly identifies the impact significance, both before and after mitigation. For some resource chapters, the impact analyses are discussed collectively and no subheading is shown.

3.5 Mitigation Measures

As lead agency, the City will be responsible for ensuring that mitigation measures identified in this DEIR and adopted by the City are fully implemented as part of the Proposed Program. Mitigation measures would be incorporated into contract specifications to be implemented by either contractors or City staff, and monitored by the City. The draft MMRP presented in Appendix E identifies the responsible parties for carrying out requirements specified in the mitigation

measures throughout the design, construction, and operation phases of the Program. A final MMRP will be adopted by City Council with certification of the Program EIR.

3.6 Resource Areas Eliminated from Further Analysis

The following CEQA checklist resource topics have been eliminated from further analysis based on the nature and scope of the Proposed Program activities. A brief summary and description of these resource topics are provided below.

3.6.1 Forestry Resources

The Proposed Program would not result in the loss of forest lands or the conversion of forestland to non-forest use. Stanislaus County has tracts of hardwood forest, as indicated in its General Plan (Stanislaus County 2016), but these are not located in any area affected by the Program activities. For this reason, the Proposed Program would not adversely affect forest lands and would not conflict with lands zoned for forest land or timberland uses.

3.6.2 Mineral Resources

Based on review of the *Stanislaus County General Plan* (2016) and California Department of Conservation (CDOC) Surface Mining and Reclamation Act Mineral Lands Classification mapping (CDOC 2016), there are no known mineral resource zones, historic or active mines or quarries within the study area. In addition, construction and operation of the proposed components would not directly affect mineral production sites or prevent future availability of mineral resources. As a result, the Proposed Program would have no impact on mineral resources.

3.6.3 Public Services

Public services include police, fire, schools and parks serving the study area and outlying areas outside the city limits in Stanislaus County. The Proposed Program involves upgrades to the City's water distribution and supply system that would accommodate growth projected within the City's water service areas and under the respective general plans of Modesto, Ceres, Turlock, and Stanislaus County (City of Modesto 2019a, City of Ceres 1997, City of Turlock 2012a, Stanislaus County 2016). This growth would not result in any significant effects on police or fire services beyond those evaluated in the *Master Environmental Impact Report for the Urban Area General Plan* (City of Modesto 2019b) and the City of Turlock's *General Plan Environmental Impact Report* (City of Turlock 2012b).

During construction of Program facilities, incidents could require law enforcement, fire protection, or emergency services; however, many proposed components are located within the urban areas of Modesto, Ceres, and Turlock, which are currently served by existing public services like police and fire protection, schools, and parks. The remaining outlying areas in unincorporated Stanislaus County receive police and fire protection services from Stanislaus County Sheriff's Department, California Highway Patrol, and the Stanislaus Consolidated Fire Protection Districts. The temporary increase in such incidents would not be substantial and would not result in the need to construct new or physically altered governmental facilities to maintain acceptable service ratios or response times or meet performance objectives.

Operation and maintenance activities described in Chapter 2, *Program Description,* would be substantially the same in nature as existing maintenance and operation activities, although additional facilities would be constructed that would require staff maintenance; therefore, operation of the Proposed Program would not substantially change the demand for public services and would not create a need for new or physically altered governmental facilities to maintain acceptable service ratios or response times or meet performance objectives of public service providers. Construction and operation of the Proposed Program would not substantially affect public services to a level that would require new or modified government facilities, and this impact would be less than significant.

3.6.4 Recreation

The Proposed Program would not directly generate increased demand for recreational facilities. Increased demand for parks or recreation facilities due to population growth is addressed in Chapter 15, *Population and Housing*, as described above. Program components would be constructed in Fairview Neighborhood Park, Creekside Golf Course, and Thousand Oaks Park, and in roadways near several other parks. If required, the temporary closure of these facilities could result in a short-term increase in use of other nearby parks and recreational facilities. However, the Proposed Program would not substantially increase the use of any existing parks or recreational facilities such that physical deterioration of those facilities would occur or be accelerated. In addition, the Proposed Program does not include recreational facilities and would not directly require the construction or alteration of any such facilities. Therefore, based on the above discussion, there would be a less-than-significant impact on recreational uses or facilities.

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Chapter 4
AESTHETICS AND VISUAL RESOURCES

4.1 Overview

This chapter describes the existing aesthetic resources within the study area and pertinent federal, state, and local plans and policies regarding the protection of visual and scenic resources. The impacts on scenic resources, public views of scenic vistas, visual character of the study area, and nighttime views from construction and operation of the Proposed Program are evaluated, and mitigation is proposed to address the impacts found to be significant.

The term "aesthetics" refers to visual resources and the quality of what can be seen or overall visual perception of the environment, and may include such characteristics as building scale and mass, design character, and landscaping. Visual impacts are analyzed through an examination of views and/or viewsheds. Views refer to visual access and obstruction of prominent visual features, including both specific visual landmarks and panoramic vistas. Viewsheds refer to the visual qualities of a geographic area. The geographic area is defined by the horizon, topography, and other natural features that give an area visual boundary and context. Viewshed impacts are typically characterized by the loss and/or obstruction of existing scenic vistas or other major views in the area of the Program site that are available to the general public. Sensitive viewers are individuals or groups who are particularly affected by changes to the aesthetics of the surrounding area. View analysis is based upon relative visibility with regard to viewing location and proposed on-site development.

4.2 Regulatory Setting

4.2.1 Federal Laws, Regulations, and Policies

Other than the National Historic Preservation Act, which is discussed in Chapter 8, *Cultural and Paleontological Resources*, there are no federal regulations pertaining to visual resources that would affect this Program.

4.2.2 State Laws, Regulations, and Policies

California Scenic Highway Program

The California Scenic Highway Program was established in 1963 under Sections 260–263 of the Streets and Highways Code. The Scenic Highway Program includes a list of highways that are either designated or eligible for designation as scenic highways (California Department of Transportation [Caltrans] 2017a). In Stanislaus County, the only designated scenic highway is Interstate 5 (Caltrans 2017b). There are no highways near the study area that are eligible for designation as scenic highways or have been officially designated.

4.2.3 Local Laws, Regulations, and Policies

Stanislaus County General Plan

The *Stanislaus County General Plan's* Conservation/Open Space Element encourages the protection and preservation of natural and scenic areas throughout the County (Stanislaus County 2016). Although the Conservation/Open Space Element does not identify specific policies concerning the preservation of scenic views of aesthetic resources, the following goal and policy apply to the Proposed Program:

Goal One. Encourage the protection and preservation of natural and scenic areas throughout the County.

Policy One. Maintain the natural environment in areas dedicated as parks and open space.

Policy Two: Assure compatibility between natural areas and development.

City of Modesto Urban Area General Plan

Chapter VII of the *City of Modesto Urban Area General Plan* (City of Modesto 2019a), "Environmental Resources and Open Space," establishes policies which are intended to guide development within the City's Planning Districts. The pertinent aesthetic and visual resource policies from the general plan are listed below.

Policy VII-B.7[a]. Visual corridors of the river will be protected and enhanced.

Policy VII-B.7[b]. Visual corridors and access points on the riverfront will be recreated through development.

Policy VII-B.7[q]. The scenic resources of Public Trust lands and resources shall be considered as protected as a resource of public importance. Permitted development shall be cited and designed to protect scenic views associated with Public Trust lands and resources.

Additionally, the City's inventory of Landmark Preservation Sites (listed in Section V-8 of the General Plan Master EIR [City of Modesto 2019b] and further discussed in Chapter 8, *Cultural, Paleontological, and Tribal Cultural Resources,* of this DEIR) includes not only historic structures, but also several landmark trees.

Del Rio Community and Salida Community Plans

The *Del Rio Community Plan* (Stanislaus County 1992), which was incorporated in the *Stanislaus County General Plan*, does not identify specific policies or regulations related to preservation of scenic views or aesthetic resources. Similarly, the *Salida Community Plan* (Stanislaus County 2007), which was incorporated in the *Stanislaus County Plan,* does not identify policies or regulations related to aesthetics.

Ceres General Plan

The Ceres General Plan 2035 (2018) contains the following goal and policies related to aesthetics:

Goal 2.B. Foster a distinctive city identity to support civic pride and Ceres' appeal.

> **2.B.1 Place-Based Development.** Encourage development consistent with Ceres' history, location in the Central Valley, and evolving demographics to promote community identity and pride.
>
> **2.B.2 Visual Distinction.** Provide visual distinction for key entry points to the City.
>
> **2.B.3 Greenbelt.** In cooperation with Stanislaus County and the City of Hughson, seek to establish a permanent greenbelt between Ceres and Hughson.
>
> **2.B.4 Gateways.** Create gateways to provide distinctive entrances to Ceres, particularly at key access points along the SR 99 corridor, along the major entrances on Mitchell Road, and at transitions from Modesto and Ceres on Crows Landing Road.

City of Turlock General Plan

The Turlock General Plan (2012) notes the scenic value of the city's historic characteristics, but does not identify specific policies or regulations concerning the preservation of scenic views of aesthetic resources pertaining to the Proposed Program. However, the City of Turlock has adopted the Beautification Master Plan to foster the city's identity and improve aesthetics through targeted planting and street designs.

Tuolumne River Regional Master Plan

A joint powers authority comprised of the City of Modesto, the City of Ceres, and Stanislaus County (the County) adopted the Tuolumne River Regional Park (TRRP) Master Plan in December 2001 (EDAW 2001a). This plan is intended to shape development of active- and passive-use parkland along the river corridor, including its span through Modesto. The TRRP Master Plan EIR (EDAW 2001b) refers to the Tuolumne River as "a significant natural landscape feature" that has unique trees and rock outcroppings. The plan further states:

> The visual experience of the river corridor includes areas that are of high visual quality, and other areas where the visual environment has been degraded by urban development. Along the river corridor, the area with the highest existing visual quality is the eastern-most portion of the park, which supports a majestic, mature oak woodland on the north bank.

Public visual access to the river, parks, and enhanced/restored riparian areas is and will be provided throughout the regional park. The TRRP Master Plan specifically designates several land-based "vista points" within proposed park development and enhancement areas, but the plan does not specify policies in relationship to these features. The TRRP Master Plan also identifies several "river overlooks" within the park-enhancement areas. Based on information available for the Proposed Program, WMP components would not be located in proximity to these river overlooks and would not be visible from future vista points or river overlooks.

4.3 Environmental Setting

Modesto and the City's contiguous areas including Salida, North Ceres, and Empire; and outlying service areas (e.g., Del Rio, Grayson, Ceres [Walnut Manor], and portions of Turlock) are located in the Central Valley, a broad and generally flat area bordered by the Sierra Nevada mountain range to the east and the Coast Ranges to the west. Due to the region's flat topography and openness, extensive views are accessible across the valley. Figure 2-1 shows existing water system improvements within the service area.

4.3.1 Modesto

Modesto is rural in nature, characterized by its predominantly agricultural lands and associated infrastructure. Features that contribute to the rural and agricultural character of the area include orchards, row crops, vineyards, cleared fields, hay bales, farm structures, farming and ranching equipment (such as tractors), and farmhouses. Pockets of urban development bordering the agricultural areas provide contrast to this rural character. Agricultural and residential/urban areas in the Modesto region have abrupt boundaries, lacking transition and beginning where the other ends. The City's visual quality is low-to-moderate because of the general lack of visual continuity and coherence. Modesto's historic downtown is one square mile and has a historic-style main street at the city center, surrounded by old, established neighborhoods and mature trees and landscaping.

Agricultural and industrial buildings, such as silos, warehouses, and factory buildings, remain visually prominent and contribute to the overall visual quality of the region. Recent development, including big-box and chain commercial shopping areas, is commonly seen on the outskirts of Modesto. The new water storage tank and groundwater well sites to the north of Modesto are in predominantly agricultural areas with some single-family residential uses nearby (see Figure 2-2). The 5 MG water storage tank site to the south of Gomes Road would be located adjacent to two existing tanks. The 2.6 MG tank site in southern Modesto consists of a vacant parcel with commercial and residential uses to the south.

The Tuolumne River runs along the southern edge of Modesto, and the Stanislaus River runs roughly parallel to the northern boundary of the Modesto urban area. Dry Creek drains into the Tuolumne River from the northeast in the southeastern portion of Modesto.

4.3.2 Ceres

Ceres is located immediately south of Modesto but only the northern portion of Ceres and the Walnut Manor area of Ceres are within the City's service area. Land uses in North Ceres predominantly consist of industrial and residential uses. As North Ceres is bordered by the Tuolumne River to the north and Highway 99 to the west, riparian vegetation along the river and the highway itself are the most prominent visual features in the area. Walnut Manor is a residential neighborhood in Ceres bordering North Central Avenue and East Hatch Road that is surrounded by predominantly residential uses.

4.3.3 Salida

The community of Salida, located northwest of Modesto, is characterized by a combination of agricultural uses, open space, industrial, and residential development. Salida is known for cultivating almonds and is home of the major Blue Diamond processing facility.

4.3.4 Empire

Empire is located immediately east of Modesto and south of the Tuolumne River. Similar to other contiguous areas, Empire is also an agriculturally active region with residential development.

4.3.5 Del Rio

The community of Del Rio is located roughly 2.5 miles north of Modesto. Del Rio is situated along the south bank of the Stanislaus River and is characterized by agricultural uses, open space, residential development, the Del Rio Golf and Country Club, and the Stanislaus River itself.

4.3.6 Grayson

The community of Grayson is located approximately 11 miles southwest of Modesto and 6.5 miles northwest of the city of Patterson. This small rural residential and agricultural community is situated on the west bank of an old channel of the San Joaquin River. Grayson was once an active port known for transporting grains along the river. Prominent visual features include the surrounding agricultural operations and riparian vegetation along the San Joaquin River.

4.3.7 Turlock

Turlock is a growing community that is characterized by residential, commercial, and industrial development, the SR 99 corridor, and California State University, Stanislaus.

The City of Turlock's *Beautification Master Plan* is a tool that aids the City of Turlock in enhancing Turlock's visual image. The Master Plan identifies landscaping improvements and wayfinding signage improvements for the following corridors and roadways: the SR 99 corridor, Golden State Boulevard, Christoffersen Parkway, Monte Vista Avenue, Fulkerth Road, West Main Street, East Avenue, Geer Road, and Lander Avenue, and Secondary Corridors along Taylor Road, West Tuolumne Road, Hawkeye Avenue, and East Canal Drive (City of Turlock 2010).

The City of Modesto's Turlock water service area is an independent water system made up of three small, separate service area islands ("Northern," "Central," and "Southern," as shown in Figure 1-2) located within the City of Turlock's water system. The Northern service area is bounded by East Monte Vista Avenue to the north, James Lane to the east, Hedstrom Road to the south, and Geer Road to the west. The Central service area is bounded by Debone Avenue to the north, Runyan Drive to the south, Colorado Avenue to the east, and North Olive Avenue to the west. The Southern service area is basically a two-service block area, connected via a pipeline along Brier Road. The entire Turlock service area contains approximately 99 acres, primarily residential, and is considered fully developed.

4.4 Impact Analysis

4.4.1 Methodology

The Proposed Program includes, but is not limited to, four primary types of improvements, as identified in the WMP and WSER: storage tanks, groundwater wells, pumps and pump stations, and pipelines. The visual impact analysis evaluates the visual changes that would occur from construction and operation of the Proposed Program, using the standards of quality, consistency, and symmetry typically used for a visual assessment. The evaluation is based on a review of the local plans and policies discussed in Section 4.2.3, as well as maps and aerial photographs.

Visual effects were assessed based on the Program's potential to substantially alter scenic resources or to degrade the visual character of the site. Subsurface improvements, such as pipelines and subsurface portions of wells, would not be visible and therefore are not expected to affect visual resources.

The evaluation of temporary or short-term visual impacts considers whether construction activities could substantially degrade the existing visual character or quality of the site or surrounding area, as well as the duration over which any such changes would occur. Because of their short-term nature, construction activities occurring in an area for less than one year are typically considered to have a less-than-significant effect on visual quality. However, construction activities occurring in an area for over one year have been evaluated for potentially significant visual impacts.

Proposed activities with long-term visual effects, such as constructing new or altered structures, grading roads, removing trees, and introducing new sources of light and glare can permanently alter the landscape in a manner that could affect the existing visual character or quality of the area, depending on the perspective of the viewer. In determining impact potential, the assessment considers the visual sensitivity of the project area. Since damage to scenic resources such as trees, rock outcroppings, and other features of the built or natural environment would typically constitute a long-term effect, the potential for project implementation to damage scenic resources is evaluated solely as a long-term effect and is not included in the analysis of construction-related impacts.

4.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

4.4.3 Environmental Impacts

Impact AES-1: Adverse Effects on Scenic Vistas (*No Impact*)

No designated scenic vistas or viewpoints exist in the study area. As described in Section 4.2.3, above, proposed WMP components would not be visible from vista points and scenic overlooks identified in the TRRP Master Plan due to distance. **No impact** on existing scenic vistas are likely as a result of the Proposed Program.

Impact AES-2: Damage to Scenic Resources (*Less than Significant*)

As noted in Section 4.2.2, the only state-designated scenic highway in Stanislaus County is Interstate 5 which is over 4 miles away from the Proposed Program components. As such, the various Proposed Program components would not be located in proximity to or visible from a scenic highway and there would be no impact on scenic resources located along a scenic highway. This impact would be **less than significant**.

Impact AES-3: Degradation of Visual Character or Quality of Site and Surroundings During Construction (*Less than Significant with Mitigation*)

Construction of proposed WMP components, including new storage tanks, groundwater wells, pipelines, generators, and other CIPs involving ground disturbing activities would be visible to various receptors near the construction work areas. For the various WMP components, nearby residents, patrons at nearby businesses, motorists, and recreationists using public roads would have temporary views of construction activities including heavy equipment operation, materials stockpiling of pipeline and other water system-related materials, and earth movement associated with trenching and grading. Views of pipeline construction activities would be likely be limited to several days at any given location since pipeline construction would likely progress at a rate of 200 to 400 feet per day. In contrast, construction of new and replacement wells would typically occur over a 1- to 1.5-year timeframe, and construction of new water storage tanks would extend over a longer period (typically several months up to 1.5 years, depending on size, construction method, site specific requirements, etc.). Depending on the size, wellhead treatment improvements typically require 3-12 months of construction and tank maintenance and repairs typically require 3-6 months of construction. Depending on where individual CIPs get built, views of these operations may be perceived as a degradation of the surrounding area's visual character. While such activities would be temporary and effects on the area's visual character would cease after construction is complete for a given CIP, disturbance could be significant for individual projects particularly if construction extends for over a year in a given area. Therefore, this impact would be significant. Implementation of **Mitigation Measure AES-1 (Locate Staging Areas Away from Public Areas and Install Screening)**, which requires that staging areas be sited away from public areas and that work areas are maintained as clean as practical, would reduce this impact to **less than significant with mitigation**.

> **Mitigation Measure AES-1: Locate Staging Areas Away from Public Areas and Install Screening.**
>
> For components located in residential areas and near public parks or trails, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. To the extent practicable, staging areas shall be

sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials.

Impact AES-4: Degradation of Visual Character or Quality of Site and Surroundings During Program Operations (*Less than Significant with Mitigation*)

Once constructed, all proposed pipeline components including fire flow improvements and grid improvements, extended and replaced water mains would be underground and would not be visible. Underground components would therefore have no impacts on the visual character of the surrounding area.

Aboveground components that would be constructed include new storage tanks, buildings to house booster pump stations and groundwater wells, and new or replacement water pumps at wells and/or booster pump stations. Wellhead treatment facilities will depend on the treatment method, and typically will include (but are not limited to) piping, treatment tanks approximately 15 feet high, monitoring equipment and appurtenances, structures and enclosures. Emergency generator sizing is dependent on the application, but can be 20 feet long by 9 feet wide by up to 15 feet high with fuel storage. In addition, ongoing system security enhancements would involve aboveground improvements such as new fencing, security signage, lighting and other security measures at well and tank sites. These facilities would be visible from surrounding areas and could alter the visual character of each individual site. Aboveground storage tanks could be as high as 35 feet and have a diameter up to 250 feet, while partially buried tanks could have an aboveground height between 10 and 15 feet and a diameter up to 250 feet. Based on other pump station buildings seen throughout the Modesto region, associated pump station buildings may be approximately 20 feet tall and encompass an area of 2,000 to 2,500 square feet. Other ancillary features that may be visible include new outdoor lighting and fencing and gates around the perimeter of new water infrastructure. Views of these facilities may be available from residential and agricultural areas, public roadways, parks, and other public areas.

While these facilities are unlikely to degrade the visual character or quality of views from agricultural areas along the outskirts of Modesto (northern, eastern and western areas of Modesto), they have potential to degrade the visual character or quality of views from public recreation and residential areas as these viewers tend to have longer duration views and have an expectation of higher quality views. As noted in Section 4.3.1, while the new water storage tanks would be constructed on parcels in predominantly agricultural areas, limited views would also be available from nearby residences that typically have a higher visual sensitivity. These tanks would also be visible from adjacent public roads and due to the large size of these facilities, would likely obscure views of orchard row crops and, depending on the vantage point, the Sierra Nevada mountain range in the distance. For this reason, impacts related to degradation of the visual character or quality of the site and surrounding area would be considered significant. Implementation of design considerations as described in **Mitigation Measures AES-2 (Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Settings)** would reduce this impact. Therefore, this impact would be considered **less than significant with mitigation**.

Mitigation Measure AES-2: Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Setting.

Where wells, tanks, pump stations and other above-ground facilities are located in proximity to or are readily visible from residential areas, recreational areas, or public roadways, the facility and fencing shall be designed to be consistent with the surrounding setting, to the maximum extent feasible. The following design elements shall be used to enhance the aesthetic appearance of proposed facilities and to integrate them with the existing visual setting:

- New storage tanks and pump station buildings shall be set back from public views and, upon completing Mitigation Measure AES-2, the City and/or contractor shall consider partially burying tanks to minimize view obstructions.
- Proposed facility designs shall integrate elements such as color, materials, and pattern of the surrounding landscape.
- The exterior of aboveground facilities shall be painted or include appropriate concrete admixtures to achieve low-glare, earth-tone colors that blend with the surrounding terrain and visual setting.
- Wherever possible, use of unpainted metallic surfaces and other reflective sources that may cause increased levels of reflectivity shall be eliminated.
- Wherever possible, install native landscaping and/or fencing to help screen views of the water treatment plant, pump station, and water storage tanks from public roads and adjacent residences.
- Any outdoor night lighting shall be motion-activated and include baffles that direct lighting onto the facility and minimize light spillage onto adjoining properties.

Impact AES-5: Permanent Source of Substantial Light or Glare (*Less than Significant with Mitigation*)

As described above under Impact AES-4, once constructed, all pipelines would be underground and would therefore not result in a new source of substantial light or glare.

New aboveground facilities that require on-site exterior lighting include new or replacement booster pump stations, storage tanks, wells, wellhead treatment facilities, generators, and water system security enhancements. New lighting at these facilities would be consistent with outdoor lighting currently used at similar facilities found throughout the Modesto area. Exterior coating of new pump stations and tanks would appear similar to existing structures seen throughout Modesto, and earth tones with non-reflective finishes would be used to coat aboveground components. However, because the exterior coating of proposed facilities has not been determined for aboveground facilities and there could be light spillage onto adjoining properties, permanent light or glare impacts would be considered significant. Implementation of Mitigation Measure AES-2 would ensure that outdoor lighting is motion-activated and directed downward

and that the exterior of new facilities use non-reflective finishes, reducing this impact to **less than significant with mitigation**.

Chapter 5
AGRICULTURAL RESOURCES

5.1 Overview

This chapter describes the regulatory setting and environmental setting, and impacts of the Proposed Program related to agricultural resources.

The regulatory and environmental settings and impact analysis for agricultural resources were developed through a review of:

- The California Department of Conservation's (CDOC's) *Stanislaus County Important Farmland Map* (2017a) and Williamson Act Lands geographic information systems (GIS) data for Stanislaus County (2016a);
- The *Stanislaus County General Plan* (2016a);
- The Stanislaus County Public Parcel Viewer – Zoning Map (2016b)
- The Stanislaus Local Agency Formation Commission Policies and Procedures (Stanislaus LAFCO 2015);
- The *Del Rio Community Plan* (Stanislaus County 1992);
- The *Salida Community Plan* (Stanislaus County 2007);
- The *City of Modesto Urban Area General Plan* (2019);
- The *City of Turlock General Plan* (2012); and
- The *Ceres General Plan 2035* (2018).

5.2 Regulatory Setting

There are no federal laws, regulations, and policies regarding agricultural resources pertinent to the Proposed Program.

5.2.1 State Laws, Regulations, and Policies

California Department of Conservation – Farmland Mapping and Monitoring Program

Developed by the California Department of Conservation, the Farmland Mapping and Monitoring Program (FMMP) provides consistent, timely and accurate data for use in assessing agricultural land resource status in California. The program utilizes a combination of GIS, aerial imagery, local

agency comments, and other relevant information to combine soil quality data and current land use information to produce Important Farmland Maps.

The FMMP maps out five different farmland categories as well as urban, nonagricultural and natural vegetation, semi-agricultural and rural commercial land, rural residential land. These five categories are listed below (CDOC 2004):

- Prime Farmland – lands with the best combination of physical and chemical features able to sustain long-term production of crops. The land must be cropped and supported by a developed irrigation water supply that is dependable and of adequate quality during the grow season. It must also have been used for production during the previous four years.

- Farmland of Statewide Importance – lands similar to Prime Farmland but with minor shortcomings such as greater slope or less ability to store moisture.

- Unique Farmland – soils of lower quality that are used for producing California's leading agricultural crops. These lands are usually irrigated but may include non-irrigated orchards or vineyards.

- Farmland of Local Importance – lands such as dryland grains and irrigated pastures that are not considered Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

- Grazing Land – land on which the existing vegetation is suited to the grazing of livestock

California Land Conservation Act (Williamson Act)

The California Land Conservation Act, more commonly referred to as the Williamson Act, was passed in 1965 as a means to preserve agricultural and open space lands by discouraging "premature and unnecessary conversion to urban uses" (Government Code Section 51220[c]). Through this act, local governments and landowners may choose to forgo the possibility of developing their lands, or convert their property into nonagricultural or non-open space use for a set amount of time determined in a contract. In return, they would receive lower property taxes. Contracts have an initial term of ten years with renewal occurring automatically each year after that. Local governments are permitted to negotiate longer initial contract terms that exceed ten years (CDOC 2014).

According to the 2015 Stanislaus County Agricultural Report, 575,549 acres of the County are registered under Williamson Act contracts. This accounts for approximately 60 percent of the total amount of acres within the county (Stanislaus County 2016a). The following land classifications are found either within or around the planned locations of the Proposed Program components:

- Williamson Act – Prime Agricultural Land

- Williamson Act – Non-Renewal

- Non-Williamson Act – Urban and Built-Up Land

Williamson Act lands designated as "non-renewal" are lands in which either the local government or landowner have initiated the nonrenewal process.

5.2.2 Local Laws, Regulations, and Policies

Stanislaus County Local Agency Formation Commission (LAFCO)

The Stanislaus County Local Agency Formation Commission's (LAFCO's) mission is to "discourage urban sprawl, preserve open space and prime agricultural lands, promote the efficient provision of government services and encourage the orderly formation of local agencies" (LAFCO 2012). In order to achieve their mission as well as to meet Government Code Section 56668(e) requirements, which requires LAFCO to consider the effect of a proposal on the maintenance of the physical and economic integrity of agricultural lands, they adopted the Agricultural Preservation Policy on September 26, 2012. The goals of this policy are as follows:

- Guide development away from agricultural lands where possible and encourage efficient development of existing vacant lands and infill properties within an agency's boundaries prior to conversion of additional lands;
- Fully consider the impacts a proposal will have on existing agricultural lands;
- Minimize the conversion of agricultural land to other uses; and
- Promote preservation of agricultural lands for continued agricultural uses while balancing the need for planned, orderly development and the efficient provision of services (LAFCO 2012).

On March 25, 2015, LAFCO amended the policy to include specific regulations regarding the use of in-lieu fees for acquiring and managing agricultural conservation easements (LAFCO 2015). LAFCO shall consider this policy, in addition to its existing goals and policies, as an evaluation standard for review of any proposals that could reasonably be expected to induce, facilitate, or lead to the conversion of agricultural land (LAFCO 2015). As required by the policy, a plan for agricultural preservation must be provided with any application for a sphere of influence expansion or annexation to a city or special district ("agency") providing one or more urban services (i.e., potable water, sewer services) that includes agricultural lands. Once the plan is provided, LAFCO will then evaluate it based on specific criteria that must be met (LAFCO 2015).

Stanislaus County General Plan

The *Stanislaus County General Plan*'s Land Use and Agricultural Elements includes goals and policies that are intended to promote and protect local agricultural resources. The main goals of the Agricultural Element are to strengthen the agricultural sector of the local economy, conserve the county's agricultural lands for agricultural uses, and protect the natural resources that sustain agriculture in Stanislaus County. The following goal and policies related to agricultural land include:

Land Use Element

Policy 16. Agriculture, as the primary industry of the County, shall be promoted and protected.

Agricultural Element

Goal 1. Strengthen the agricultural sector of our economy.

Policy 1.10. The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations.

Implementation Measure 1: The County shall require buffers and setbacks for all discretionary projects introducing or expanding non-agricultural uses in or adjacent to an agricultural area consistent with the guidelines presented in Appendix "A" of the Agricultural Element.

Buffer and Setback Guidelines

Appendix A of the *Stanislaus County General Plan* includes buffer and setback guidelines that are intended to physically avoid conflicts between agricultural and non-agricultural uses (Stanislaus County 2016a). The guidelines include the following:

- All projects shall incorporate a minimum 150-foot wide buffer. All buffers shall incorporate a solid wall and vegetative screen consistent with the following standards:
- Fencing: A 6-foot high wall of uniform construction shall be installed along any portion of a buffer where the project site and the adjoining agricultural operation share a common parcel line.
- Permitted uses within a buffer area shall include: public roadways, utilities, drainage facilities, landscaping, parking lots and similar low human intensity uses. Walking and bike trails shall be allowed within buffers provided they are designed without rest areas.
- Landscaping within a buffer setback shall be designed to exclude turf areas which could induce activities and add to overall maintenance costs and water usage.
- A landowner's association or other appropriate entity shall be required to maintain buffers to control litter, fire hazards, pests, and other maintenance problems when a project consists of multiple parcels which may be held, or have the potential to be held, under separate ownership.
- The Board of Supervisors may authorize the abandonment and reuse of buffer areas if agricultural uses on all adjacent parcels within a 150-foot radius of the project site have permanently ceased.

Del Rio Community Plan

The *Del Rio Community Plan* (Stanislaus County 1992), which was incorporated in the *Stanislaus County General Plan*, is a focused planning policy and land use planning document for the Del Rio area. The Community Plan acknowledges that agricultural use would be gradually confined to the southern portion of the community, with efforts made to decrease incompatibilities with adjacent agricultural and residential uses. The following goals and policies regarding agricultural resources are relevant to the Proposed Program:

Goal 2. Prime agricultural land in the Del Rio vicinity should be preserved in areas where incompatibility impacts between agricultural and residential uses can be minimized.

Goal 3. Further development in the Del Rio should be planned to ensure that adverse impacts on services and utilities, schools, transportation and circulation, agriculture, water, and air quality are appropriately mitigated.

Goal 7. The Del Rio Community shall not be allowed to become an example of inadequately planned leap-frog urban development on primer agricultural land which outpaces demand and overrides community sentiment.

The Plan includes the following standard for future residential development in southern Del Rio:

2. Planned developments adjacent to agricultural land shall be required to incorporate buffers, such as roads, green belts, or natural open spaces, between residential and ag use so as to minimize potential use incompatibilities.

Salida Community Plan

The *Salida Community Plan* (Stanislaus County 2007), which has also been incorporated in the *Stanislaus County General Plan,* serves as a land use planning and policy document for Salida, which is located northwest of Modesto. The County has designated lands that are suitable for open space or recreational use as Agriculture. Within the Plan's Amendment Area, this applies to the Stanislaus River Park, which comprises 244 acres. Note that this designation is not intended to accommodate agricultural activities within Community Plan boundary.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (2019) contains the following agricultural resources policies that are relevant to the Proposed Program:

Policy VII-D.3[a]. If a subsequent project is within the Baseline Developed Area or Downtown Area as identified on the General Plan Growth Strategy Diagram (Figure II-1), consider the project to have minimal effect on the conversion of agricultural lands, and no mitigation for that impact is required.

Policy VII-D.4[a]. Do not annex agricultural land unless urban development consistent with the General Plan has been approved by the City.

Policy VII-D.4[b]. Support the continuation of agricultural uses on lands designated for urban uses until urban development is imminent.

Policy VII-D.4[d]. Where necessary to promote planned City growth, encourage development of those agricultural lands that are already compromised by adjacent urban development or contain property required for the extension of infrastructure or other public facilities, before considering urban development on agricultural lands that are not subject to such urban pressures.

Policy VII-D.4[e]. For any subsequent project that is adjacent to an existing agricultural use, the project proponent may incorporate measures to reduce the

potential for conflicts with the agricultural use. Potential measures to be implemented may include the following:

(1) Include a buffer zone of sufficient width between proposed residences and the agricultural use.

(2) Inform residents about the possible exposure to agricultural chemicals. (City of Modesto 2019)

Ceres General Plan 2035

The *Ceres General Plan 2035* (2018) seeks to balance the need for growth while encouraging the conservation and enhancement of the area's agricultural and natural resources. Most of Ceres was developed on prime agricultural farmland and the goals and policies of the plan strive to maintain agricultural uses as long as possible.

Goal 4. A. To promote the productivity of agricultural lands surrounding Ceres and the continued viability of agriculture in Stanislaus County, and, recognizing the community's agricultural heritage and its contribution to the local economy, support the preservation of agricultural character where it has cultural or scenic significance.

4.A.2 Urban Expansion in Agricultural Areas. Ensure that development and the expansion of infrastructure in urban areas do not encourage the expansion of urban uses into areas designated for Agriculture on the Land Use Diagram, or otherwise reduce the viability of agricultural operations on lands designated for Agriculture.

4.A.5 Land Use Compatibility. Ensure that new development adjacent to agricultural uses is compatible with the continuation of the agricultural uses by minimizing conflicts through appropriate design criteria, such as site layout, landscaping, and buffers to provide adequate separation between habitable structures and active farmland.

The Stanislaus County General Plan also contains an agricultural buffer policy that would apply to unincorporated areas of the Planning Area.

4.A.6 Right to Farm. Continue to support the County's Right-to-Farm ordinance.

4.A.7 Farmland Mitigation. Minimize the loss of agricultural lands by developing a Plan for Agricultural Preservation upon application for a SOI expansion or annexation that includes agricultural land, consistent with the Stanislaus LAFCO Agricultural Preservation Policy.

Goal 4.B Conserve and, where possible, enhance open space lands for the preservation of natural resources, the managed production of resources, outdoor recreation, and public health and safety.

City of Turlock General Plan

The *City of Turlock General Plan* (City of Turlock 2012) includes several goals and policies that are intended to promote and protect local agricultural resources and to minimize conflict with urban uses. Goals and policies relevant to agriculture are listed below.

Land Use

Policy 2.9-a Agriculture belongs in unincorporated areas. Support Stanislaus and Merced County policies that promote continued agricultural activity on lands surrounding the urban areas designated on the General Plan Diagram.

Policy 2.9-c Encourage infill and more compact development to protect farmland. Relieve pressures to convert valuable agricultural lands to urban uses by encouraging infill development.

Parks and Open Space

Policy 6.1-d Minimize conflict. Minimize conflict between urban and agricultural uses.

Agriculture and Hydrology

Policy 7.2-a Preserve Farmland. Promote the preservation and economic viability of agricultural land adjacent to the City of Turlock.

Policy 7.2-b Limit Urban Expansion. Retain Turlock's agricultural setting by limiting urban expansion to designated areas and minimizing conflicts between agriculture and urban activities.

5.3 Environmental Setting

Stanislaus County consists of a flat topography, good-to-excellent soil quality, favorable climate, and availability of natural water (City of Modesto 2019). Agriculture is the County's leading industry, generating over $3.8 billion in agricultural commodities in 2015 alone (Stanislaus County 2016a). Approximately 768,000 acres of land throughout the County is categorized as farmland, with approximately 4,150 farms in operation (Stanislaus County 2016a). The County's leading commodities are currently almond crops and milk (Stanislaus County 2016a). Modesto is at the center of Stanislaus County's rich agricultural landscape. As the largest city in the County, Modesto is comprised of mostly urban and built-up land with its contiguous areas comprised of agricultural lands (CDOC 2017a).

Based on the most recent CDOC FMMP report, Stanislaus County has 249,967 acres of Prime Farmland, 33,172 acres of Farmland of Statewide Importance, 116,210 acres of Unique Farmland, and 26,029 acres of Farmland of Local Importance (CDOC 2016b). **Figure 5-1** shows important farmland in the Program vicinity. While the majority of proposed components would be located in urban and built-up areas of Modesto, the following Program components would be sited on lands classified as Prime Farmland: one water storage tank in Modesto, two water storage tanks in the outskirts of Modesto in unincorporated Stanislaus County, two wells in the northern portion of the WMP's contiguous study area in unincorporated Stanislaus County, two wells in the

western portion of the contiguous study area, and buildout pipelines along the outskirts of Modesto. Proposed components that would be sited on lands classified as Unique Farmland include two wells, one water storage tank, and build-out pipelines, all located in the northeastern area of the WMP's contiguous study area.

Aside from buildout pipelines planned along the outskirts of Modesto, the majority of proposed pipeline components in the WMP's contiguous study area including fire flow improvements, grid improvements, and strengthening and replacement pipelines would be sited within urban/developed areas. Similarly, in the City's outlying service areas, proposed components primarily include fire flow improvements in existing road rights-of-way.

5.4 Impact Analysis

5.4.1 Methodology

Impacts to agricultural resources from the Proposed Program components were assessed by reviewing the *2015 Stanislaus County Agricultural Report* (Stanislaus County 2015a), the General Plan policies of Stanislaus County, the City of Modesto, City of Ceres, and City of Turlock; Williamson Act maps; FMMP maps; and relevant federal and state regulations. Improvements in the Proposed Program include replacement or upgrade of existing facilities. Existing facilities are considered developed, and are not expected to have agricultural resources impacts. New facilities in the Proposed Program may be in developed areas, or within the public right-of-way, which again are not expected to have agricultural resource impacts; however, new facilities proposed in undeveloped areas would be subject to the analysis outlined in the following sections. The effects of construction, operation, and maintenance of the proposed facilities on existing agricultural resources was evaluated according to the significance criteria below.

5.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on agricultural resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Impacts on forestry resources are not evaluated in this DEIR because no zoning for forest land was identified in the Program area (City of Modesto 2019; Stanislaus County 2015b) and Stanislaus County had no land classified as Timberland Protection Zone as of 2001 (Shih 2002).

5.4.3 Environmental Impacts

Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use (*Significant and Unavoidable*)

Figure 5-1 shows Farmland and the general location of pipeline alignments and locations of future facilities associated with the Proposed Program. Program components were planned to serve future developed areas. However, these locations are preliminary and the exact alignments and locations of Program facilities are dependent upon County- and City-approved development plans and land ownership and/or easement agreements. Future roads and land uses would be refined as part of the development planning process and would identify future rights-of-way to be used for utility alignments and facilities, including Program components. In addition, some areas may be converted from Farmland to developed areas prior to construction of Program components. For the purpose of this analysis, Program components preliminarily located in or near Farmland areas were evaluated as if they would be located in Farmland, despite the potential for changes in their actual location or land use designation. Therefore, the evaluated impact area and potential impacts discussed below may overstate the Proposed Program's actual impact.

In addition, Program components located within the Baseline Developed Area or Downtown Area as identified in the City of Modesto Urban Area General Plan (2019), are considered to have minimal effect on agricultural lands and do not require mitigation for conversion of Farmland (City of Modesto 2019).

The impacts of development of the urban area of Modesto have been previously considered in the City of Modesto's General Plan Master EIR, and were found to be significant and unavoidable. While the majority of proposed pipelines would be constructed within existing roadways or in urban/developed areas, some proposed build-out pipelines and grid improvements in Del Rio would be installed on land that is designated as Prime Farmland. Some build-out pipelines in the northeastern portion of the study area would be installed on land designated as Unique Farmland. Prior to constructing build-out pipelines on agricultural or undeveloped lands, the City typically requires developers to provide right-of-way dedications for utility improvements. Ground disturbing activities associated with these improvements would temporarily affect lands designated as Farmland. All of these pipeline improvements would be installed to serve areas planned for growth and would involve either open trench methods or trenchless methods at irrigation or utility crossings (e.g., jack and bore methods). Since the pipeline components would be underground, any disturbance to Farmland would be temporary, Farmland could be returned to pre-construction conditions after construction is complete, and land could continue to be used for agricultural purposes.

Aside from build-out pipelines, the following WMP components would be constructed on Prime Farmland:

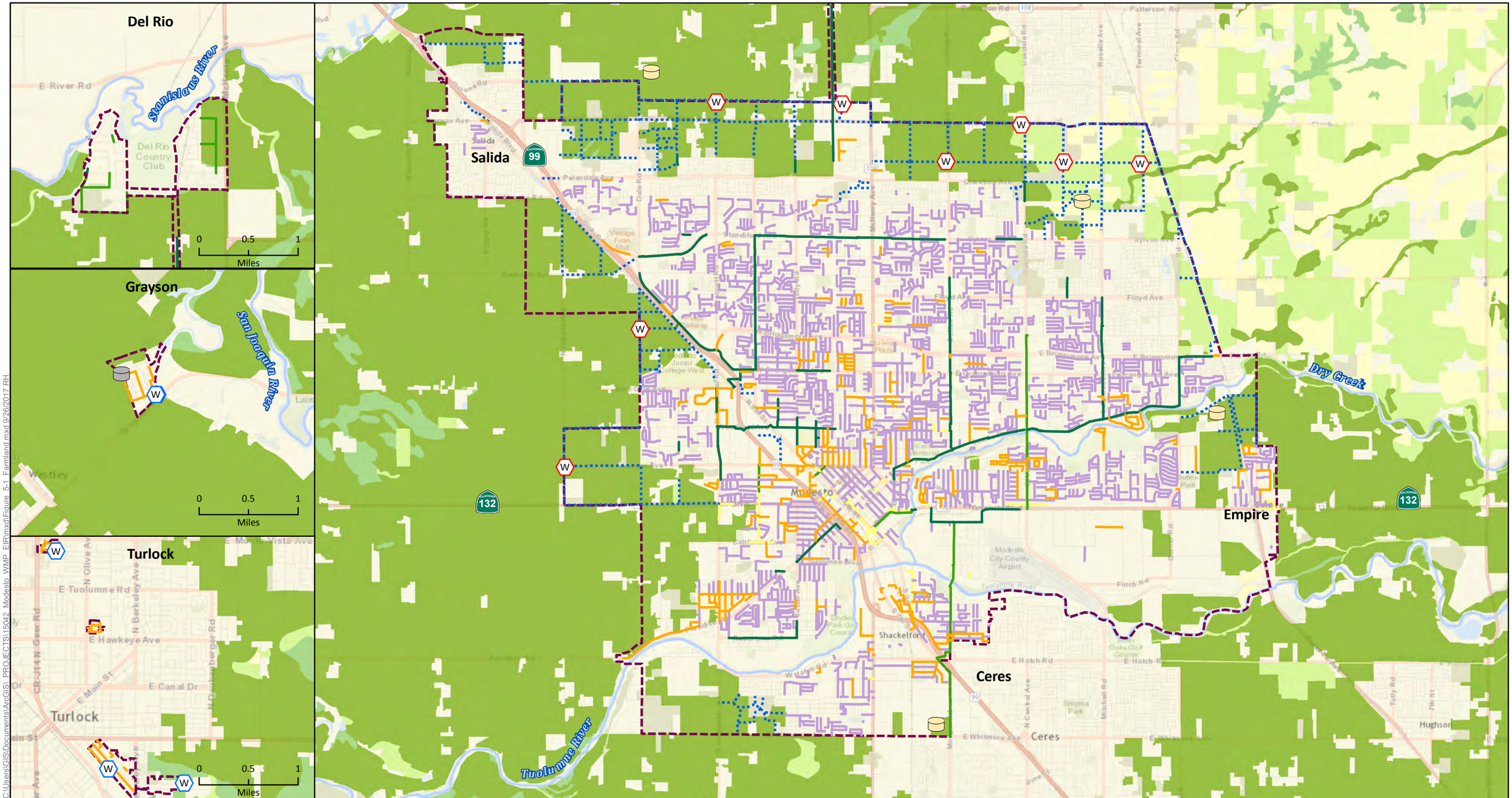
- three water storage tanks (one in northern Modesto east of Dale Road, one in eastern Modesto south of Gomes Road, and one in southern Modesto west of Morgan Road and north of East Whitmore Road),
- two wells in the northern portion of the WMP's contiguous study area (north of Kiernan Avenue), and

- two wells in the western portion of the contiguous study area (west of Highway 99).

In addition, two new groundwater wells in northeastern Modesto would be constructed on Unique Farmland. The proposed tank east of Mable Avenue would also be constructed on land designated as Unique Farmland.

Based on similar wells and water tanks in the study area, it is assumed that new wells would occupy a 10,000 square-foot-area and each 4-6 million gallon tank would require approximately 3 acres. The proposed wells and tanks would result in the permanent conversion of approximately 10 acres of Farmland. This impact would be **significant**.

Considering LAFCO's Agricultural Preservation Policy (2015) and pursuant to Policy 2.15 in the *Stanislaus County General Plan,* the County policy requires that agricultural land converted to residential use be replaced at a 1:1 ratio with agricultural land of equal quality in Stanislaus County. However, since the Proposed Program is not a residential project, these policies do not apply to the Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing agricultural easements, the City has determined that this program is infeasible for the following reasons: (1) Stanislaus County policy is to mitigate the loss of and preserve Prime Farmland through the County's Farmland Mitigation Program, which is designed to address loss of farmland resulting from impacts of residential development, and the County policy is not to burden and increase the cost of new and improved public infrastructure that is needed by the community; and (2) the purchase of an agricultural conservation easement over other off-site agricultural land would not ultimately avoid or reduce the impact of converting Prime Farmland to non-agricultural uses caused by the Proposed Program because there still would be a net reduction in the total amount of Prime Farmland and therefore the easement over other land would not reduce the impact to a level of insignificance. No other feasible mitigation measures, such as restoration of Prime Farmland that has been previously converted or participation in another agricultural conservation easement program, have been identified to further reduce this impact. Therefore, this impact would be **significant and unavoidable**.



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Horizon WATER and ENVIRONMENT

Figure 5-1
Important Farmland

City of Modesto
Water Master Plan EIR

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Impact AG-2: Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract (*Less than Significant*)

Most pipeline components would take place within developed areas of the WMP study area. However, several storage tanks, wells, and buildout pipelines would be installed on land zoned for agricultural uses. **Table 5-1** summarizes Program components that are zoned for agricultural use in Stanislaus County.

Table 5-1. WMP Components Zoned for Agricultural Use

WMP Components	Location
2.9 MG water storage tank in unincorporated Stanislaus County (north of Modesto)	Northeast of Dale Road and Pirrone Road intersection
5.0 MG water storage tank	South of Gomes Road and north of La Coste Lane
Groundwater well and connecting buildout pipelines	North of Kiernan Avenue and about 0.5 mile east of American Avenue
Groundwater well and connecting buildout pipelines	About 1 mile east of Bangs Avenue and 0.5 mile south of Claribel Road
Groundwater well and connecting buildout pipelines	Immediately southwest of Oakdale Road and Claribel Road intersection
Groundwater well and connecting buildout pipelines	About 0.5 mile west of the Plainview Road and Roselle Avenue intersection
Groundwater well and connecting buildout pipelines	Immediately southwest of the Plainview Road and Litt Road intersection
Groundwater well	Kansas Avenue and Dakota Avenue
Groundwater well and connecting buildout pipelines	About 0.25 mile north of Shoemake Avenue and 1 mile east of Dakota Avenue

In addition, based on review of California Department of Conservation's Williamson Act Lands map (CDOC 2012) and as shown in **Figure 5-2**, one new groundwater well (located near the Plainview Road and Litt Road intersection) would be sited on Williamson Act-Prime Agricultural land. Some build-out pipelines would be constructed adjacent to designated Williamson Act lands but those pipelines would be constructed within existing roadways. No other new WMP facilities would be sited on Williamson Act lands.

While the Program could conflict with lands zoned for agricultural uses or Williamson Act lands, according to Stanislaus County Ordinance Section 21.20.030 a Tier Three conditional use permit can be obtained for new facility construction planned on lands zoned for agricultural uses, including those subject to a Williamson Act contract. Specifically, the ordinance states that uses not directly related to agriculture can occur on lands that are not located on the County's most productive agricultural areas, which includes lands within LAFCO-approved spheres of influence of cities and/or community service districts serving unincorporated communities. Since the WMP

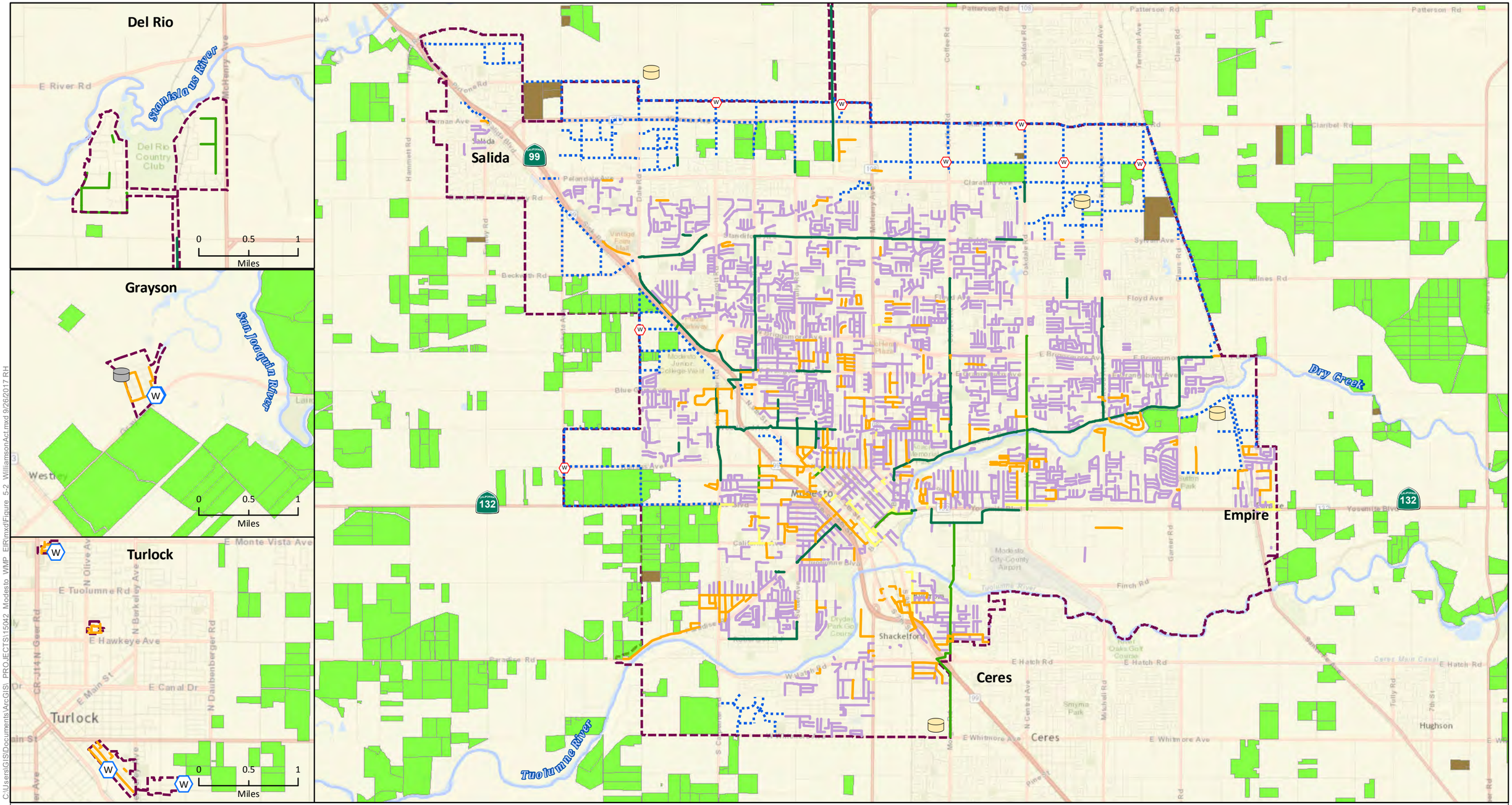
study area includes the City of Modesto's sphere of influence and outlying areas are within the City's service area, lands designated for agricultural uses would not qualify as "productive agricultural areas" as defined in Stanislaus County Ordinance Section 21.20.030. Allowable uses include construction of public facilities. As such, the proposed WMP components listed in Table 5-1 would meet conditional uses stated under Tier Three of this ordinance. Note that the requirements associated with County zoning do not apply to actions undertaken by the City; regardless, the City's actions would be consistent with the County's existing zoning (considering that public facilities are a conditionally approved use).

For these reasons, conflicts with Williamson Act lands and land zoned for agricultural uses would be **less than significant**.

Impact AG-3: Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use (*Significant and Unavoidable*)

The Proposed Program would not directly or indirectly induce substantial population growth during construction, but could result in the conversion of farmland to non-agricultural uses. The impacts of development of the urban area of Modesto have been previously considered in the City of Modesto's General Plan Master EIR, and were found to be significant and unavoidable.

This impact is discussed in more detail in Chapter 15, *Population and Housing* under Impact PH-3. Mitigation for specific development proposals that involve conversion of agricultural land, such as Mitigation Measure AG-1, would compensate for this impact; however, it would not avoid the conversion and reduce the impact to a less-than-significant level. In addition, the specifics regarding future development that may result in agricultural conversion are not known at this time, and implementation of this mitigation measure for such development is not considered feasible within the scope of the Proposed Program. Impacts are considered **significant and unavoidable**.



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Horizon WATER and ENVIRONMENT

Component Types of Existing Water System

- Tank
- Well
- Fire Flow Improvements
- Grid Improvements

Proposed New Water System Components

- Future Tanks
- Future Well Sites
- Build Out Pipelines
- Fire Flow Improvements
- Grid Improvements
- Strengthen and Replace

Williamson Act Contracts 2016

- Williamson Act Contract - Prime Agricultural Land
- Williamson Act Contract, non-renewal
- WMP Study Area

Source: California Dept. of Conservation, 2016

Figure 5-2
Williamson Act Contracts

City of Modesto
Water Master Plan EIR

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Chapter 6
AIR QUALITY

6.1 Overview

This chapter evaluates the Proposed Program's air quality impacts. The chapter first describes the air quality regulatory and environmental settings and then evaluates the Proposed Program's air quality impacts. The impact evaluation begins by describing the air quality significance criteria and the methodology used to evaluate significance, and then presents the impact evaluation. Mitigation measures are identified for impacts that are determined to be significant.

Air quality is described for a specific location as the concentration of various pollutants in the atmosphere. Air quality conditions at a particular location are a function of the type and amount of air pollutants emitted into the atmosphere, the size and topography of the regional air basin, and the prevailing meteorological conditions.

Key sources used in preparing this chapter are as follows:

- *Stanislaus County General Plan* Conservation/Open Space Element (Stanislaus County 2016a);
- City of Modesto Urban Area General Plan (City of Modesto 2019);
- SJVAPCD *Mitigation Measures* guidance document (SJVAPCD 2017d); and
- SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (SJVAPCD 2015a).

6.2 Regulatory Setting

6.2.1 Federal Laws, Regulations, and Policies

The Clean Air Act is implemented by U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: carbon monoxide (CO), lead, nitrogen dioxide (NO_2), ground-level ozone, sulfur dioxide (SO_2), and particulate pollution which is subdivided into particulate matter of aerodynamic radius of 10 micrometers or less (PM10) and particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5). Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health. **Table 6-1** shows the current attainment status for NAAQS.

Table 6-1. Attainment Status of the Federal and State Ambient Air Quality Standards

Contaminant	Averaging Time	Concentration	State Standards Attainment Status1	Federal Standards Attainment Status2
Ozone (O_3)	1-hour	0.09 ppm	N (Severe)	See footnote 3
	8-hour	0.070 ppm	N	
		0.075 ppm		N (Extreme)
Carbon Monoxide (CO)	1-hour	20 ppm	U/A	
		35 ppm		U/A
	8-hour	9.0 ppm	U/A	U/A
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm	A	
		0.100 ppm5		U/A
	Annual arithmetic mean	0.030 ppm	A	
		0.053 ppm		U/A
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	A	
		0.075 ppm		U/A
	24-hour	0.04 ppm	A	
		0.14 ppm		U/A
	Annual arithmetic mean	0.030 ppm		U/A
Particulate Matter (PM10)	24-hour	50 µg/m3	N	
		150 µg/m3		A
	Annual arithmetic mean	20 µg/m3	N	
Fine Particulate Matter (PM2.5)	24-hour	35 µg/m3		N (Moderate)
	Annual arithmetic mean	12 µg/m3	N	N (Moderate)
Sulfates	24-hour	25 µg/m3	A	
Lead (Pb)[6]	30-day average	1.5 µg/m3	A	
Hydrogen Sulfide (H_2S)	1-hour	0.03 ppm	U	
Vinyl Chloride[6] (chloroethene)	24-hour	0.010 ppm	A	
Visibility-Reducing Particles	8-hour (10:00 to 18:00 PST)	See footnote 4	U	

A – attainment
N – nonattainment
U – unclassified

ppm – parts per million
µg/m^3 – micrograms per cubic meter
PST – Pacific Standard Time

km – kilometer
PM10- particulate matter of aerodynamic radius of 10 microns or less
PM2.5- particulate matter of aerodynamic radius of 2.5 microns or less

Notes:

1. California standards for O_3, CO (except Lake Tahoe), SO_2 (1-hour and 24-hour averages), NO_2, PM10, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe CO, Pb, H_2S, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for Pb and the PM2.5 and PM10 annual standards), some measurements may be excluded. In particular, measurements are excluded that the California Air Resources Board (CARB) determines would occur an average of less than once per year.
2. National standards shown are the "primary standards" designed to protect public health. National air quality standards are set by the U.S. Environmental Protection Agency (USEPA) at levels determined to be protective of public health with an adequate margin of safety. National standards other than for O_3, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour O_3 standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is less than or equal to one. The 8-hour O_3 standard is attained when the 3-year average of the fourth highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour PM10 standard is attained when the 3-year average of the ninety-ninth percentile of monitored concentrations is less than 150 $\mu g/m^3$. The 24-hour PM2.5 standard is attained when the 3-year average of ninety-eighth percentiles is less than 35 $\mu g/m^3$. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM10 is met if the 3-year average falls below the standard at every site. The annual PM2.5 standard is met by spatially averaging annual averages across officially designated clusters of sites and then determining whether the 3-year average of these annual averages falls below the standard.
3. The national 1-hour O_3 standard was revoked by USEPA on June 15, 2005. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. However, the attainment status has not yet been updated based on this revised 8-hour standard. It is likely that the region will remain in nonattainment.
4. Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per km when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment resulting from regional haze and is equivalent to a 10-mile nominal visual range.
5. To attain this standard, the 3-year average of the ninety-eighth percentile of the daily maximum 1-hour average at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).
6. CARB has identified Pb and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined. Although the vinyl chloride CAAQS remains in force, current regulatory efforts are under ARB's Air Toxics Program.

Sources: SJVAPCD 2017a, CARB 2017a, USEPA 2017

USEPA and, in California, the California Air Resources Board (CARB) regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that might release criteria pollutants and/or toxic air contaminants (TACs), known at the federal level as hazardous air pollutants (HAPs). These regulations are 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAP). Large sources of emissions may be classified as major sources and are subject to the Clean Air Act Title V program. In addition, USEPA has regulations involving emission criteria for off-road sources, such as emergency generators, construction equipment, and vehicles as well as other releases of toxic chemicals.

6.2.2 State Laws, Regulations, and Policies

California Clean Air Act

CARB sets standards for criteria pollutants in California that are more stringent than NAAQS and includes the following additional contaminants: visibility-reducing particles, hydrogen sulfide (H_2S), sulfates, and vinyl chloride. The Proposed Program is located in the San Joaquin Valley Air Basin (SJVAB) and managed by SJVAPCD, which manages air quality in Stanislaus County for attainment and permitting purposes.

CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Statewide Truck and Bus Regulations

On December 12, 2008, CARB approved a regulation to substantially reduce emissions of diesel particulate matter (DPM), oxides of nitrogen (NO_X), and other pollutants from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance standards and requirements between 2011 and 2023. Affected vehicles included on-road, heavy-duty, diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds. The regulation was updated in 2011 and 2014 with revisions that provide more compliance flexibility and reflect the impact of the economic recession on vehicle activity and emissions. Heavy-duty trucks used during construction of Proposed Program components would be required to comply with this regulation.

In-use, Off-road Diesel Vehicle Regulation

In 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use, off-road, heavy-duty diesel vehicles in California. The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. In December 2011, major amendments were made to the regulation, including modifications to the compliance dates for performance standards and establishing requirements for compliance with verified diesel emission control strategy technologies that reduce PM and/or NO_X emissions.

Heavy-duty Vehicle Inspection Program

The heavy-duty vehicle inspection program requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering and for compliance with engine certification labels. Any heavy-duty vehicle (i.e., a vehicle with a gross vehicle weight rating greater than 6,000 pounds) traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, California Highway Patrol weigh stations, fleet facilities, and randomly selected roadside locations. Owners of trucks and buses found to be in violation are subject to penalties starting at $300 per violation. Heavy-duty trucks used during construction of Proposed Program components would be subject to the inspection program.

Heavy-duty On-board Diagnostic System Regulations

In 2004, CARB adopted regulations requiring on-board diagnostic (OBD) systems on all 2007 and later model year heavy-duty engines and vehicles (i.e., vehicles with a gross vehicle weight rating greater than 14,000 pounds) in California. CARB subsequently adopted a comprehensive OBD regulation for heavy-duty vehicles model years 2010 and beyond. The heavy-duty OBD regulations were updated in 2010, 2013, and 2016 with revisions to enforcement requirements, testing requirements, and implementation schedules. Heavy-duty trucks used during construction of proposed components would be required to comply with the heavy-duty OBD regulatory requirements.

California Standards for Diesel Fuel Regulations

State regulations require diesel fuel with sulfur content of 15 parts per million (ppm) or less (by weight) to be used for all diesel-fueled vehicles that are operated in California. The standard also applies to non-vehicular diesel fuels. The regulations also contain standards for the aromatic hydrocarbon content and lubricity of diesel fuels.

Airborne Toxic Control Measures

CARB regulates TACs by requiring implementation of various airborne toxic control measures (ATCMs), which are intended to reduce emissions associated with toxic substances. Relevant ATCMs to the Proposed Program are as follows:

- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines Standards for Nonvehicular Diesel Fuel
- ATCM for Stationary Compression Ignition Engines
- Asbestos ATCM for Construction, Grading, Quarrying and Surface Mining Operations

In addition to ATCMs, TACs are controlled under several regulations in California, including the Tanner Air Toxics Act, Air Toxics Hot Spots Information Act, and Assembly Bill (AB) 2588: Air Toxics "Hot Spots" Information and Assessment Act. In addition, Proposition 65 (the Safe Water and Toxic Enforcement Act of 1996) requires that the state publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. Proposition 65 requires businesses to notify Californians about substantial amounts of chemicals in the products they purchase or that are released into the environment.

6.2.3 Local Laws, Regulations, and Policies

At the local level, responsibilities of air quality districts include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality monitoring stations, overseeing agricultural burning permits, and reviewing air quality–related sections of environmental documents under CEQA. The air quality districts are also responsible

for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws, as well as for ensuring that the NAAQS and California Ambient Air Quality Standards (CAAQS) are met.

Local governments are essential partners in the effort to reduce air pollutant emissions. The local governments have influence through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations.

San Joaquin Valley Air Pollution Control District

SJVAPCD has local air quality jurisdiction over the Proposed Program and in other counties under its jurisdiction. SJVAPCD's recommended CEQA thresholds are outlined in its *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015a). SJVAPCD has adopted attainment plans to address ozone and PM.

1-Hour Ozone

Although USEPA revoked its 1979 1-hour ozone standard in June 2005, many planning requirements remain in place, and the SJVAB must still attain this standard before CAA Section 185 fees (which are required when attainment is not reached) can be rescinded. SJVAPCD's most recent 1-hour ozone plan, the 2013 Plan for the Revoked 1-hour Ozone Standard (SJVAPCD 2013), demonstrated attainment of the 1-hour ozone standard by 2017. In July 2016, USEPA made a final determination that the SJVAB has attained the 1-hour ozone NAAQS based on the most recent 3-year data period (2012–2014) of sufficient, quality-assured, and certified data (SJVAPCD 2017b). For the SJVAB to be officially designated as an attainment area, SJVAPCD must verify that attainment is due to permanent and enforceable emission reductions and prepare a maintenance plan.

8-Hour Ozone

SJVAPCD's far-reaching 2007 Ozone Plan demonstrates attainment of USEPA's 1997 8-hour ozone standard by 2023. USEPA approved the 2007 Ozone Plan effective April 30, 2012. The district has prepared a 2016 Ozone Plan to address USEPA's 2008 8-hour ozone standard, which the SJVAB must attain by 2032 (SJVAPCD 2016). This extremely stringent standard is nearing the SJVAB's naturally occurring background concentrations of ozone. The 2016 plan identifies that, without mobile sources transitioning to near-zero emission levels through the implementation of transformative measures such as ultra-low tailpipe emissions standards (which SJVAPCD does not have the authority to implement), attainment of the federal standards is not possible (SJVAPCD 2016).

PM10

PM is a complex mixture of extremely small particles and liquid droplets, made up of multiple components, including acids, organic chemicals, metals, and soil or dust particles. PM10 is typically found near roadways and around dusty industrial sites. Based on PM10 measurements from 2003-2006, USEPA found that the SJVAB has reached attainment of federal PM10 standards. On September 21, 2007, the SJVAPCD Governing Board adopted the 2007 PM10 *Maintenance Plan and Request for Redesignation*, which demonstrates that the SJVAB will continue to meet the PM10 standard. USEPA approved the document and, on September 25, 2008, the SJVAB was redesignated to attainment/maintenance (SJVAPCD 2017c). The District is in the process of

developing the 2017 PM10 Maintenance Plan to demonstrate the maintenance of the standard for an additional ten-year period of 2020 through 2029 (SJVAPCD 2017c, 2017e).

PM2.5

PM2.5 are found in smoke and haze. Changes in the federal PM2.5 air quality standard (in 1997, 2006, and 2012) and recent drought conditions in California have resulted in the development of multiple PM2.5 air quality plans by SJVAPCD. The 2008 and 2015 PM2.5 Plans have been prepared to achieve attainment of USEPA's first PM2.5 standard, set in 1997. The attainment deadline for the 1997 standard has been delayed to 2020 (SJVAPCD 2015b).

USEPA lowered the PM2.5 standard in 2006. Although SJVAPCD's 2012 PM2.5 Plan showed attainment of this standard by 2019, USEPA reclassified SJVAPCD to serious nonattainment for the 2006 PM2.5 standard in January 2015, and SJVAPCD must prepare a revised plan to address this nonattainment.

On September 15, 2016, SJVAPCD adopted the "2016 Moderate Area Plan for the 2012 PM2.5 standard" to address another PM2.5 standard issued by USEPA in 2012 and USEPA's determination that the SJVAB is a moderate nonattainment area for the 2012 federal PM2.5 standard. SJVAPCD continues to work with USEPA on issues surrounding these plans, including USEPA implementation updates and is in the process of developing an attainment strategy to address the multiple PM2.5 standards (1997, 2006, and 2012) (SJVAPCD 2017c, 2017e).

SJVAPCD Rules

The Proposed Program may be subject to the following district rules. These rules have been adopted by SJVAPCD to reduce emissions throughout the SJVAB:

- **Rule 2010 – Permits Required**. This rule requires an applicant to obtain an Authority to Construct and Permit to Operate for certain types of stationary air pollution sources.

- **Rule 2201 – New and Modified Stationary-Source Review Rule** applies to all new stationary sources and all modifications to existing stationary sources subject to SJVAPCD permit requirements that, after construction, emit or may emit one or more pollutants regulated by the rule.

- **Rule 2280 – Portable Equipment Registration** applies to portable emissions units that may operate in participating districts throughout California. The rule requires applicable portable equipment to be registered.

- **Rule 3135 – Dust Control Plan Fees** requires the applicant to submit a fee in addition to a dust control plan. The purpose of this rule is to recover SJVAPCD's cost for reviewing these plans and conducting compliance inspections.

- **Rule 4001 – New Source Performance Standards** applies to new or modified sources of air pollution that must comply with standards, criteria and requirements for the applicable sources. This incorporates by reference the federal NSPS.

- **Rule 4002 – National Emission Standards for Hazardous Air Pollutants** applies to sources of air pollution that must comply with standards, criteria and requirements for the applicable sources of TACs. This incorporates by reference the federal NESHAPs.

- **Rule 4101 – Visible Emissions** prohibits emissions of visible air contaminants into the atmosphere and applies to any source operation that emits or may emit air contaminants.

- **Rule 4102 – Nuisance** applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation of this rule and subject to SJVAPCD enforcement action.

- **Rule 4201 – Particulate Matter Concentration** applies to any source operation which emits or may emit dust, fumes, or total suspended particulate matter.

- **Rule 4202 – Particulate Matter - Emissions Rate** limits particulate matter emissions by establishing allowable emission rates.

- **Rule 4301 – Fuel Burning Equipment** limits the concentration of combustion contaminants and specifies maximum emission rates for sulfur dioxide, nitrogen oxide and combustion contaminant emissions.

- **Rule 4601 – Architectural Coatings.** The purpose of this rule is to limit volatile organic compound (VOC) emissions from architectural coatings.

- **Rule 4701 – Internal Combustion Engines—Phase 1** limits the emissions of NO_X, CO, and VOCs from internal combustion engines. These limits are not applicable to standby engines as long as they are used fewer than 200 hours per year (e.g., for testing during non-emergencies).

- **Rule 4702 – Internal Combustion Engines—Phase 2** limits the emissions of NO_X, CO, and VOCs from spark-ignited internal combustion engines.

- **Regulation VIII – Fugitive PM10 Prohibitions** is a series of rules (Rules 8011–8081) designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction, road construction, bulk materials storage, landfill operations, and other activities. This regulation is discussed in more detail below.

- **Rule 9410 – Employer-Based Trip Reduction** requires large employers to establish an Employer Trip Reduction Implementation Plan, which is a set of measures that encourages employees to use alternative transportation and ridesharing for their commutes.

- **Rule 9510 – Indirect Source Review** is intended to reduce a project's impact from indirect sources such as on-road and off-road vehicles on air quality through project design elements or mitigation by payments of applicable off-site mitigation fees. Compliance with Rule 9510 is designed to reduce construction exhaust NO_X and PM10 emissions by 20 percent and 45 percent, respectively. Compliance with Rule 9510 is designed to reduce operational emissions of NO_X and PM10 emissions by 33.3 percent and 50 percent,

respectively. This rule is only applicable to certain development projects that exceed size requirements at buildout (e.g., 25,000 square feet of light industrial space).

Fugitive Dust Measures (Regulation VIII)

The Proposed Program would also be required to implement the mandatory control measures listed in Table 2 of the SJVAPCD's Mitigation Measures guidance document (SJVAPCD 2017d) to reduce fugitive dust emissions. These measures are not considered mitigation measures under CEQA because they are required by law.

The Regulation VIII requirements (some of which are not applicable to the Proposed Program) are listed below:

- All disturbed areas, including storage piles, which are not being actively used for construction purposes, will be effectively stabilized for dust emissions using water or a chemical stabilizer/suppressant, or covered with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized for dust emissions using water or a chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities will be effectively controlled of fugitive dust emissions by utilizing an application of water or by presoaking.

- With the demolition of buildings up to six stories in height, all exterior surfaces of the building will be wetted during demolition.

- All materials transported off site will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.

- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, piles will be effectively stabilized to prevent fugitive dust emissions utilizing sufficient water or a chemical stabilizer/suppressant.

- Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

- Any site with 150 or more vehicle trips per day will prevent carryout and trackout.

Stanislaus County General Plan 2015

The *Stanislaus County General Plan 2015* Conservation/Open Space Element (Stanislaus County 2016a) identifies air quality–related goals and policies. These are aimed at reducing criteria

pollutant emissions and improving regional air quality by requiring all development projects to include reasonable air quality mitigation measures, reducing motor vehicle emissions, and increasing public awareness of air quality problems and solutions.

City of Modesto Urban Area General Plan

Chapter VII of the *City of Modesto Urban Area General Plan* (City of Modesto 2019) includes policies pertaining to air quality. The following are relevant to the Proposed Program:

> **Policy VII-H.2[h].** Consult with the SJVAPCD during CEQA review for discretionary projects with the potential for causing adverse air quality impacts.
>
> **Policy VII-H.2[m].** Implement measures to reduce the temporary, yet potentially significant, local air quality impacts from construction activities. Potential measures to be implemented may include those measures shown in Section V-2 in the Final Master Environmental Impact Report.

Del Rio Community and Salida Community Plans

The *Del Rio Community Plan* (Stanislaus County 1992), which was incorporated in the *Stanislaus County General Plan*, identifies in Goal 3 that future development in the Del Rio Area should be planned to ensure that adverse impacts on air quality are appropriately mitigated. The *Salida Community Plan* (Stanislaus County 2007), which was incorporated in the *Stanislaus County Plan,* does not identify policies or regulations related to air quality.

Ceres General Plan 2035

The *Ceres General Plan 2035* (2018) contains the following goal and policies related to air quality:

Goal 4.G. Protect and improve air quality in the Ceres area, and protect residents from harmful effects of air pollution.

> **4.G.1. Air Quality Goals.** Cooperate with the San Joaquin Valley Air Pollution District and other agencies in the San Joaquin Valley Air Basin to meet regional air quality goals and achieve a consistent and effective approach to regional air quality planning and management. Coordinate with other jurisdictions and other regional agencies in the San Joaquin Valley to establish parallel air quality programs and implementation measures.
>
> **4.G.3. Air Quality Analysis.** Require major new development projects (those exceeding the San Joaquin Valley Air Pollution District's small project analysis level) to submit an air quality analysis for review and approval, with mitigation measures to be required as determined by the City.
>
> **4.G.5. Reduce VMT.** Emphasize transit-oriented, walkable, compact development patterns to reduce total vehicle miles traveled.

City of Turlock

The *Turlock General Plan* (2012) has the following policies related to air quality:

Policy 8.1-a. Prioritize Air Quality in Local Planning. Continue efforts to improve air quality in Turlock by integrating air quality analysis and mitigation in land use and transportation planning, environmental review, public facilities and operations, and special programs.

Policy 8.1-n. Construction-related Air Emissions Impacts. Continue to require mitigation measures as a condition of obtaining permits to minimize dust and air emissions impacts from construction. Require contractors to implement dust suppression measures during excavation, grading, and site preparation activities. Techniques may include, but are not limited to:

- Site watering or application of dust suppressants;
- Phasing or extension of grading operations;
- Covering of stockpiles;
- Suspension of grading activities during high wind periods (typically winds greater than 25 miles per hour); and
- Revegetation of graded areas.

6.3 Environmental Setting

This section presents information on the existing physical environmental conditions in the Program vicinity related to air quality. This information will be used to determine impacts that could result from construction and operation of the Proposed Program, as presented in Section 6.4. Modesto is home to roughly 300,000 people and contains multiple busy roads and highways, railroads, and an airport. Food processing plants operate in the study area and agricultural land uses are located around the edge of the City proper. The outlying service areas of Grayson, Turlock, and Del Rio are primarily residential. Grayson and Turlock are considered mostly or fully developed, respectively, while Del Rio is approximately 57 percent developed.

6.3.1 Regional Setting

San Joaquin Valley Air Basin

Modesto is located in the SJVAB, which forms the southern half of California's Central Valley and is approximately 250 miles long and averages 35 miles wide. The SJVAB is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, and the Tehachapi Mountains to the south. The SJVAB contains all of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties, as well as a portion of Kern County.

Climate and Topography

The Modesto area has an inland Mediterranean climate that is characterized by hot, dry summers and cool winters. Summer high temperatures average in the 90s and often exceed 100 degrees Fahrenheit (°F).

Although marine air generally flows into the basin from the Bay-Delta region, the surrounding mountain ranges restrict air movement through and out of the valley. Wind speed and direction

influence the dispersion and transportation of pollutants; the greater the wind flow, the lower the accumulation. The vertical dispersion of air pollutants in the SJVAB is limited by the presence of persistent temperature inversion, leading to higher concentrations of emitted pollutants (SJVAPCD 2015a).

Precipitation and fog tend to reduce pollutant concentrations. Ozone is formed when chemical compounds such as VOCs and NO_X (collectively known as ozone precursors) react with sunlight. Clouds and fog block the solar radiation for the ozone-forming reaction. Annual precipitation in the San Joaquin Valley decreases from north to south, averaging approximately 20 inches in the north, 10 inches in the central portion, and less than 6 inches in the south (SJVAPCD 2002). In the Modesto area of the SJVAB, the average annual precipitation is approximately 12 inches (Western Regional Climate Center 2017).

6.3.2 Existing Air Quality Conditions

Air Monitoring Data

USEPA, CARB, and local air districts operate an extensive air monitoring network to measure maintenance of or progress toward attainment of NAAQS and CAAQS. **Table 6-2** shows the most recent three years of available data.

Table 6-2. Air Monitoring Data for 2013–2015

Monitoring Station	Pollutant Standard		2015		2014		2013	
			No. Exceed[1]	Maximum Concentration[1]	No. Exceed[1]	Maximum Concentration[1]	No. Exceed[1]	Maximum Concentration[1]
Stanislaus County Modesto-14th Street	PM10	24-hour	31.1/0	85.6 µg/m^3	37.6/0	122.5 µg/m^3	57.7/0	73 µg/m^3
	PM2.5	24-hour	*	44.0 µg/m^3	17.0	58.2 µg/m^3	37.6	83.2 µg/m^3
	Ozone	8-hour	24/16	0.093 ppm	24/12	0.090 ppm	13/2	0.082 ppm
	Ozone	1-hour	5/0	0.111 ppm	1/0	0.103 ppm	0/0	0.088 ppm

Notes:

CO = carbon monoxide; NO_2 = nitrogen dioxide; PM2.5 = particulate matter of 2.5 micrometers or less; PM10 = particulate matter of 10 micrometers or less; SO_2 = sulfur dioxide; ppm = parts per million; µg/m^3 = micrograms per cubic meter; * = There was insufficient (or no) data available to determine the value.

1. Indicates the number of exceedance days recorded annually at this monitoring station for a particular constituent compared to that constituent's NAAQS and CAAQS. The first number is the state value and the second number is the federal value if they are different. Used National Maximum

Source: CARB 2017b

Existing Sources of Air Pollution and Odors

Existing sources of air pollution and odor in the Modesto area include: heavy duty trucks, passenger vehicles, farm equipment, off-road equipment, food processing plants, industrial facilities, waste management facilities, the county airport, and agricultural operations. Air pollution transported from the San Francisco Bay and Sacramento areas may account for roughly a quarter of the pollution in the Modesto area (SJVAPCD 2017e).

Existing Emissions from City's Water Treatment Facilities and Distribution System

Monitoring data or comprehensive estimates of existing emissions of criteria pollutants or TACs from the City's water distribution system facilities is not available. The types of emissions associated with the water distribution facilities include criteria pollutant and TAC emissions from burning diesel fuel to run emergency generators at wells and booster pump stations.

The water distribution facilities are typically not a potential source of odors. SJVAPCD was contacted to obtain a list of all odor complaints received in the past 3 years associated with the drinking water system and no complaints were found.

6.3.3 Air Pollutants

Carbon Monoxide

CO is an odorless, colorless gas that is highly toxic. CO is formed by the incomplete combustion of fuels and is emitted directly into the air. Ambient CO concentrations normally are considered a localized effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic, forming pollutant hot spots. CO concentrations are also influenced by wind speed and atmospheric mixing. Under inversion conditions, CO concentrations can be distributed more uniformly over an area to some distance from vehicular sources. CO binds with hemoglobin, the oxygen-carrying protein in blood, and reduces the blood's capacity for carrying oxygen (O_2) to the heart, brain, and other parts of the body. At high concentrations, CO can cause heart difficulties in people with chronic diseases, impair mental abilities, and cause death.

Nitrogen Oxides

NO_X is a family of gaseous nitrogen (N) compounds and are precursors to the formation of ozone (O_3) and PM. Nitrogen dioxide (NO_2), the major component of NO_X, is a reddish-brown gas that is toxic at high concentrations. NO_X result primarily from the combustion of fossil fuels under high temperature and pressure. Fuel combustion, primarily from on-road and off-road motor vehicles, and industrial sources are the major sources of this air pollutant. (SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) (SJVAPCD 2015a).

Volatile Organic Compounds

VOCs are hydrocarbon compounds that exist in the ambient air. VOCs contribute to the formation of smog and/or might themselves be toxic. VOC emissions are a major precursor to the formation of O_3. VOCs are also commonly referred to as reactive organic gases (ROG). (SJVAPCD 2015a).

Ozone

O_3 is a reactive gas consisting of three oxygen atoms. In the stratosphere, O_3 exists naturally and shields the earth from harmful incoming ultraviolet radiation. In the troposphere (the lowest region of the atmosphere); however, it is a secondary pollutant that is formed when NO_X and VOCs react in the presence of sunlight. O_3 at the earth's surface causes numerous adverse health effects and is a pollutant regulated by state and federal air quality agencies. It is a major component of smog. High concentrations of ground-level O_3 can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments. O_3 also

damages natural ecosystems, such as forests, foothill communities, and agricultural crops, as well as some human-made materials, such as rubber and plastics. (SJVAPCD 2015a).

Particulate Matter

PM is a complex mixture of extremely small particles and liquid droplets. PM is made up of multiple components, including acids, organic chemicals, metals, and soil or dust particles. Particle size is directly linked to the potential for causing health problems. PM10 is of concern because these particles pass through the throat and nose and are deposited in the thoracic region of the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. PM10 is typically found near roadways and around dusty industrial sites. PM2.5, which are found in smoke and haze, penetrate even more deeply into the thoracic and alveolar regions of the lungs. (SJVAPCD 2015a).

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a "rotten egg" smell formed primarily by the combustion of sulfur-containing fossil fuels. Suspended SO_2 particles contribute to poor visibility and are a component of PM10. (SJVAPCD 2015a).

Lead

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Historically, the major sources of Pb emissions have been mobile and industrial activities. The health effects of Pb poisoning include loss of appetite, weakness, apathy, and miscarriage. Pb poisoning can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract. (SJVAPCD 2015a).

In the past, gasoline-powered automobile engines were a major source of airborne Pb through the use of leaded fuels. Because the use of leaded fuel has been mostly phased out, ambient concentrations of Pb have dramatically decreased.

Hydrogen Sulfide

H_2S is associated with refining, geothermal activity, sewage treatment plants, oil and gas production, and confined animal feeding operations. H_2S is extremely hazardous in high concentrations and can cause death. (SJVAPCD 2015a).

Sulfates

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds result primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates is comparatively rapid and complete in urban areas of California because of their regional meteorological features. (SJVAPCD 2015a).

CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels that exceed the standard include decreased ventilatory function, aggravation of asthmatic symptoms, and increased risk of cardiopulmonary disease. Sulfates are

particularly effective in degrading visibility and, because they are usually acidic, can harm ecosystems and damage materials and property. (SJVAPCD 2015a).

Vinyl Chloride

Vinyl chloride is a colorless gas that does not occur naturally; it is formed when substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make PVC, which is used in plastic products, such as pipes, wire and cable coatings, and packaging materials. (SJVAPCD 2015a).

Toxic Air Contaminants

TACs are air pollutants that can lead to serious illness or increased mortality, even when present in relatively low concentrations. Hundreds of different types of TACs exist, with varying degrees of toxicity. Many TACs are confirmed or suspected carcinogens or are known or suspected to cause birth defects or neurological damage. For some chemicals, such as carcinogens, no threshold exists below which exposure can be considered risk free. Examples of TAC sources associated with the Proposed Program are fossil fuel combustion and chemicals used in the water storage and well treatment areas.

Sources of TACs include stationary sources, area-wide sources, and mobile sources. USEPA maintains a list of 187 TACs, identified federally as HAPs. These HAPs are included on CARB's list of TACs along with additional chemicals identified as TACs in California (CARB 2017c). According to the *California Almanac of Emissions and Air Quality* (CARB 2013), many researchers consider DPM to be a primary contributor to health risk from TACs because particles in the exhaust carry many harmful organics and metals, rather than being a single substance like other TACs. Unlike many TACs, outdoor DPM is not monitored by CARB because no routine measurement method exists; however, using the CARB emission inventory's PM10 database, ambient PM10 monitoring data, and results from several studies, CARB has made preliminary estimates of DPM concentrations throughout the state (California Office of Environmental Health Hazard Assessment [OEHHA] 2001).

Existing buildings might contain asbestos, which can become airborne during demolition activities. People exposed to low levels of airborne asbestos could be at an elevated risk (e.g., above background rates) for lung cancer and mesothelioma. The risk is proportional to the cumulative inhaled dose (quantity of fibers); the risk increases with the time since first exposure. Although various factors influence the disease-causing potency of the different forms of asbestos (such as fiber length and width, fiber type, and fiber chemistry), all forms are carcinogens. Existing regulations regarding demolition of asbestos-containing materials (described in Chapter 11, *Hazards and Hazardous Materials*) require prescriptive measures to ensure that public health is protected and exposure to asbestos is minimized.

6.3.4 Sensitive Receptors

Sensitive receptors are those segments of the population most susceptible to the effects of poor air quality—children, the elderly, and individuals with preexisting serious health problems affected by air quality (e.g., asthma) (CARB 2005). Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences include houses, apartments, and senior living

complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds include play areas associated with parks or community centers.

Many, if not all, of these sensitive land uses can be found in the immediate vicinity of elements of the Proposed Program. Specific sensitive receptors may change or move over the life of the Program, and a comprehensive map of sensitive receptors is not available. Figure 11-3 in Chapter 11, *Hazards and Hazardous Materials,* show the locations of existing schools, which are one category of sensitive receptors in the study area.

6.4 Impact Analysis

6.4.1 Methodology

Construction and operation-related air quality impacts of WMP components were evaluated qualitatively by considering the Proposed Program's sources and duration of criteria pollutant, TACs, or odor emissions; proximity to sensitive receptors; and frequency and duration of emissions. In addition, the existing SJVAB's air quality attainment status and applicable air quality plans were reviewed and considered in the impact analysis. Construction and operational impact significance were determined qualitatively by considering the project emission sources and duration since specific details of construction or operation for those program components have not yet been defined. Where specific construction or operation-related details were lacking, impacts were conservatively judged to be significant, and prescriptive mitigation measures were developed to ensure significant impacts would be minimized.

The SJVAPCD has established thresholds of significance for criteria pollutant emissions, which are based on SJVAPCD New Source Review offset requirements for stationary sources. As such, the impact analysis qualitatively considered these thresholds of significance, which are identified in the section below.

For TACs and odors associated with all of the Proposed Program components, impacts were evaluated qualitatively using SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) (SJVAPCD 2015a). The odor impact evaluation for WMP construction and operation was conducted qualitatively based primarily on whether the existing operations had elicited any odor or nuisance complaints from SJVAPCD in the past 3 years. In addition, other pertinent information regarding TAC and odor sources (i.e., frequency of emissions, type of sources) and the proximity to sensitive receptors was considered.

6.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality

standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

GAMAQI Thresholds

The SJVAPCD's recommended CEQA thresholds are outlined in its GAMAQI (SJVAPCD 2015a) and summarized in **Table 6-3** below. SJVAPCD's thresholds for ROG and NO_X, which are ozone precursors, are 10 tons/year for each pollutant. Ozone precursor emissions are generated from both heavy- and light-duty vehicle use. The SJVAPCD has determined that projects with emissions below the thresholds of significance for criteria pollutants would be determined to be in compliance with the applicable SJVAPCD air quality plans (SJVAPCD 2015a).

According to SJVAPCD's guidance, impacts of operational and construction emissions are considered to be less than significant if fugitive dust (PM10 and PM2.5) emissions are below the significance levels listed in **Table 6-3**. In addition, SJVAPCD Regulation VIII requires all projects that involve earthmoving or travel on unpaved roads to implement fugitive dust control measures. Implementation of these control measures would be sufficient to reduce PM10 and PM2.5 impacts to a level considered less than significant.

These threshold limits apply to the annual emissions, and apply separately to construction, operational permitted sources and activities, and operational non-permitted activities. In other words, a project can emit up to 10 tons of NO_X during construction, 10 tons of NO_X from permitted activities, and an additional 10 tons of NO_X from non-permitted activities for a total of 30 tons of NO_X emissions and still be under the CEQA significance threshold and would be considered less than significant.

Table 6-3. Applicable SJVAPCD Construction and Operational Project-Level Significance Thresholds under CEQA

Pollutant	Construction Emissions Threshold (tons/year)	Operational Permitted Activities (tons/year)	Operational Non-permitted activities (tons/year)
Carbon monoxide (CO)	100	100	100
Oxides of nitrogen (NO_X; ozone precursor)	10	10	10
Reactive organic gases (ROG; ozone precursor)	10	10	10
Sulfur oxides (SO_X)	27	27	27
Particulate matter (PM10)	15	15	15
Fine particulate matter (PM2.5)	15	15	15

Source: SJVAPCD 2015a

The following quantitative TAC thresholds of significance are identified in the *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015a), with implementation of the latest revisions to SJVAPCD's risk management policy (SJVAPCD 2015c, 2015d) also serving as revisions to the CEQA thresholds:

- Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 20 in 1 million, or
- Ground-level concentrations of non-carcinogenic TACs result in a Hazard Index greater than 1 for the MEI.

Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or studies of workers with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (OEHHA 2017). Given that the construction period for each component under the Proposed Program would vary and has not yet been defined, a qualitative analysis was determined to be the appropriate level of detail required to determine the impact of TAC emissions.

For operational TAC emissions, the Proposed Program's facilities are required to be below the health effects quantitative thresholds in order to obtain the required operating permits consistent with SJVAPCD regulations regarding permitted sources. For construction and operation, health risks from TACs were evaluated by identifying the Proposed Program's potential to generate TAC emissions and determining whether sensitive receptors could be affected by those emissions.

6.4.3 Environmental Impacts

Impact AQ-1: Conflict with or Obstruct Implementation of an Applicable Air Quality Plan (*Significant and Unavoidable*)

Stanislaus County and the cities of Modesto, Turlock, and Ceres have planned for growth and adopted general plans for future development (City of Modesto 2019, Stanislaus County 2016b, City of Ceres 2018, City of Turlock 2012). The SJVAPCD develops its air quality plans to attain NAAQS and CAAQS which are in part based on the population and growth estimates provided by the local planning agencies, including the cities and County. The SJVAPCD established mass emission thresholds of significance for criteria pollutant emissions to be consistent with levels required to be consistent with the SJVAPCD air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the applicable air quality plans provided there are no individual measures listed in the air quality plans that the project would conflict or obstruct.

The Proposed Program's purpose is to repair, replace, and install new water distribution and conveyance infrastructure to support and accommodate new and existing development in the

City's service areas, General Plan, and SOI. The Proposed Program components would not directly add new housing or substantial sources of employment to the region.

The Proposed Program would follow all federal, state, and local regulations and policies related to sources of air pollutants, including applicable general plan policies. In addition, construction of the Proposed Program would follow local air district regulations for fugitive dust, VOCs, and NO_X emissions. Construction of various program-level CIPs may result in NO_X emissions that exceed the 10 tons per year emission threshold and could result in other criteria pollutant emissions that exceed SJVAPCD's thresholds; therefore, such components could obstruct implementation of applicable air quality plans, which would be a significant impact. It is also unknown at this time if the amount of operational emissions would exceed any significance threshold. Mitigation measures that would address construction emissions and unpermitted operational emissions are discussed under Impact AQ-2. It is assumed that emissions from permitted sources would be addressed under the applicable permit process and any excess emissions would purchase offsets as required to obtain permits; however, this would not address construction or unpermitted operational emissions.

For these reasons, the Proposed Program could generate emissions greater than that accounted for in the applicable air quality plans. Therefore, the Proposed Program could obstruct or conflict with applicable air quality plans and would have a **significant and unavoidable** impact.

Impact AQ-2: Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation (*Less than Significant with Mitigation*)

As described above, the Proposed Program would be located in an area that is in non-attainment for federal and state ozone and PM2.5 standards and state PM10 standards. In order to determine if the Proposed Program would violate or contribute substantially to an existing or projected air quality violation, an evaluation of the projected mass emissions for construction and operation compared to the applicable mass criteria emission thresholds is required.

The SJVAPCD considers PM10 emissions to be the greatest pollutant of concern when assessing construction-related air quality impacts. The SJVAPCD has determined that compliance with its Regulation VIII and the implementation of all feasible control measures specified in the GAMAQI (SJVAPCD 2015a), constitute sufficient mitigation to reduce construction-related PM10 emissions to less-than-significant levels and to minimize adverse air quality effects. These mitigation measures are listed below under Mitigation Measures AQ-1 and AQ-2. All construction projects must abide by Regulation VIII. Consequently, this air quality analysis assumes that the City and its contractors will comply with Regulation VIII and that such compliance will be sufficient to eliminate any potentially significant air quality effects generated by construction activities. The implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to a less-than-significant level. In addition, the SJVAPCD recommends the measures listed below to reduce exhaust pollutant emissions from heavy construction equipment to less-than-significant levels:

- Water exposed surfaces three times daily.
- Cover soil stockpiles with a tarp.
- Water unpaved haul roads three times daily.

- Apply soil stabilizers to inactive areas.
- Replace ground cover in disturbed areas quickly.
- Use aqueous diesel fuel in diesel equipment.
- Use diesel particulate filters on diesel equipment.
- Use cooled exhaust gas recirculation on diesel equipment.

Adherence to the mitigation measures and requirements identified above would reduce pollutant emissions below significance thresholds and would ensure that impacts would be less than significant.

The City does not consider cancer risk from diesel-fueled construction equipment to be an issue. The assessment of cancer risk is typically based on a 70-year exposure period. Construction activities are sporadic and short-term, and once construction activities have ceased, the emissions have ceased as well. Because the exposure period to construction diesel exhaust would be well below the 70-year exposure period, construction of the Proposed Program is not anticipated to result in an elevated cancer risk. This impact is considered less than significant after implementation of Mitigation Measures AQ-1 and AQ-2.

Construction Impacts

The Proposed Program components would all be located within the SJVAB. Construction activities for individual components would generate emissions of criteria air pollutants via the use of heavy equipment, worker vehicle trips, and material hauling truck trips. The City would comply with all SJVAPCD rules and regulations, including Regulation VIII, Fugitive Dust Measures. With implementation of Mitigation Measures AQ-1 and AQ-2, construction-related impacts would be less than significant with mitigation.

Operational Impacts

Operation of WMP components would include the operation, inspection, and maintenance of new tanks, emergency generators, well stations, pump stations, lift stations and water treatment facilities. These activities would result in the direct emission of criteria air pollutants through employee vehicle trips and infrequent use of backup generators primarily during emergencies or power outages, and emissions of VOCs and combustion products associated with vehicle trips, maintenance equipment, generator use, and water treatment operation. The operation and maintenance of other WMP facilities would not require a substantial change in employees compared to existing conditions.

Emissions from the operation of emergency generator sources would not be substantial since any new or modified emergency generators would go through the SJVAPCD permit process to ensure that project emissions are below the appropriate significance threshold for permitted sources and offsets provided if required. If the air quality thresholds of significance are expected to be exceeded, Mitigation Measure AQ-3 would be implemented to ensure equipment with best available control technology would be installed to minimize potential emissions. Thus, these operational impacts would be less than significant with mitigation.

Overall Conclusion

In conclusion, with implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the Proposed Program's overall impacts would be **less than significant with mitigation.**

Mitigation Measure AQ-1: Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM10

The following controls are required to be implemented by the City or its contractor at all construction sites.

- All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/ suppressant.
- All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of water during work or by presoaking.
- When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.
- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/ suppressant.
- Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- Any site with 150 or more vehicle trips per day will prevent carryout and trackout.

Mitigation Measure AQ-2: Implement Enhanced Control Measures for Construction Emissions of PM10

The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM_{10} impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements):

1. Limit traffic speeds on unpaved roads to 15 miles per hour (mph).

2. Install sandbags or other erosion-control measures to prevent silt runoff.

The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or warrant additional emissions reductions for any other reason.

1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.

2. Install wind breaks at windward sides of construction areas.

3. Suspend excavation and grading activity when winds exceed 20 mph.

4. Limit the area subject to excavation, grading, and other construction activity at any one time.

5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.

Mitigation Measure AQ-3: Implement Control Measures for Operational Emissions of PM10 and for Ozone Precursors (ROG and NO_X)

In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis, to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified water system sites when required to mitigate significant PM10 and ozone impacts due to exceedance of Air Quality Thresholds of Significance.

Impact AQ-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard (*Significant and Unavoidable*)

As discussed earlier, WMP components would be located in an area that is in non-attainment for federal and state ozone and PM2.5 standards and state standards for PM10. Thus, the combined emissions of past, present, and probable future projects would have a significant cumulative impact on air quality in the project area. No single CIP, however, would be sufficient in size, by itself, to cause nonattainment of the regional air quality standards. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, none of the program-level components would result in mass emissions above the significance threshold. However, because these measures would not completely avoid emissions, the Proposed Program could make a considerable contribution to cumulative impacts related to criteria pollutant emissions for which the region is in non-attainment, a significant impact. This impact would remain **significant and unavoidable**.

Impact AQ-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations (*Less than Significant with Mitigation*)

During construction activities for the proposed improvements, construction emissions have the potential to affect sensitive receptors located at and near the program-level component sites. These sensitive receptors include single-family residential units and schools around proposed improvement sites. Therefore, nuisances associated with fugitive dust and construction activity emissions would affect adjacent residences. During operational activities, stationary emission sources would also emit pollutants. With implementation of Mitigation Measures AQ-1, AQ-2, and AQ-3, the impact on sensitive receptors from fugitive dust and other pollutants would be **less than significant with mitigation**.

Impact AQ-5: Create Objectionable Odors Affecting a Substantial Number of People (*Less than Significant*)

Construction Impacts

Construction activities of program-level components would not generate permanent or long-term objectionable odors. The odors associated with the operation of diesel-powered equipment for construction activities may be detected by nearby sensitive receptors. These odors would be of relatively short duration in any given location and would be unlikely to affect a substantial number of people at a given time, given that construction of the various Proposed Program components would be spread out over time, as well as factors such as the migration of construction equipment along pipeline routes during construction. This impact would be less than significant.

Operational Impacts

The SJVAPCD's GAMAQI identifies common types of facilities that have been known to produce odors in the San Joaquin Valley and water distribution and treatment facilities are not included in the list. As described in Section 6.3.2, SJVAPCD has not received or confirmed odor complaints associated with the City's water facilities in the last three years. Therefore, this impact would be less than significant.

Overall Conclusion

Considering the WMP components as a whole, the construction and operation would not have any substantial long-term sources of odors. There will be some odors associated with diesel fueled equipment during construction and operation which may be detected by nearby sensitive receptors. These odors would be of relatively short duration in any given location and would be unlikely to affect a substantial number of people at a given time. The Program components are not facility types that are known to produce odors and no odor complaints have been received in the past three years. Therefore, the Proposed Program's overall impact would be **less than significant**.

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Chapter 7
BIOLOGICAL RESOURCES

7.1 Overview

This chapter presents the environmental setting and impacts of the Proposed Program related to biological resources. The biological resources include special-status plant and wildlife species; sensitive natural communities, including jurisdictional wetlands and other waters; and wildlife movement corridors.

7.2 Regulatory Setting

7.2.1 Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Government Code [USC] Section 1531 *et seq*.; 50 CFR Parts 17 and 222) provides for the conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species; NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in take of endangered or threatened species, subject to specific conditions.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take or the permanent or temporary possession, of a migratory bird constitute violations of the MBTA. The MBTA also prohibits the destruction of occupied nests. USFWS is responsible for overseeing compliance with MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668; 50 CFR Part 22) prohibits take of bald and golden eagles and their occupied and unoccupied nests. USFWS administers the Bald and Golden Eagle Protection Act.

Clean Water Act

The Clean Water Act (CWA) (33 USC Section 1251) establishes the basic structure for regulating discharges of pollutants (including dredged or fill material) into waters of the United States (U.S.), including wetlands, and for regulating quality standards for surface waters. The CWA provides policies for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

CWA Section 404 prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a permit from the U.S. Army Corps of Engineers (USACE). CWA Section 401 requires that an applicant for a federal license or permit that allows activities with the potential to result in a discharge to waters of the U.S., including wetlands, obtain a state 401 water quality certification.

Wetlands and Other Waters Potentially Exempt from USACE Jurisdiction

A number of exemptions from CWA regulations exist for areas that would otherwise qualify as waters of the U.S. Certain areas, which meet the technical definition of wetlands, generally are not considered waters of the U.S. (33 CFR 328.3(a)). Such potentially non-jurisdictional areas include:

- Non-tidal drainage and irrigation ditches excavated on dry land;
- Artificially irrigated areas, which would revert to upland, if the irrigation ceased;
- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons; and
- Water filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States.

USACE and USEPA reserve the right to determine that a particular water body within the categories is a water of the U.S. on a case-by-case basis. In general, potentially non-jurisdictional waters such as ditches are delineated during a wetland delineation, and submitted for verification by USACE.

7.2.2 State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code (F&G Code) includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977, the California Endangered Species Act (CESA), and requirements for lake or streambed alteration agreements.

The Native Plant Protection Act (F&G Code Sections 1900–1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized under limited circumstances.

CESA (F&G Code Sections 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of F&G Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. The California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

F&G Code Sections 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Sections 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

CDFW regulates activities that will interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the F&G Code requires that CDFW be notified of lake or streambed alteration activities. If CDFW subsequently determines that such an activity might adversely affect an existing fish and wildlife resource, it has the authority to issue a streambed alteration agreement, including requirements to protect biological resources and water quality.

7.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* was adopted in January 2019 (City of Modesto 2019a). The General Plan's natural resource policies in the Open Space and Conservation element are based on the realization that the remaining riparian and riverine corridors are perhaps the most significant providers of wildlife habitat in the County. The General Plan seeks to protect riparian and wetland habitats while allowing compatible uses where appropriate.

The General Plan identifies two areas within the study area to be preserved as natural resources: the Tuolumne River and Dry Creek. It also provides the following guidance regarding wildlife and other natural resources:

> **Policy VII-E.2[a].** For proposed development consistent with the adopted Urban Area General Plan on lands within the Baseline Developed Area and Downtown Area, exclusive of lands within the Dry Creek and Tuolumne River Comprehensive Planning

Districts, no further biological study is warranted unless habitat is present or if specific information concerning the known or potential presence of significant biological resources is identified in future updates of the California Natural Diversity Database (CNDDB), or through formal or informal input received from resource agencies or other qualified sources.

Ceres General Plan 2035

The Ceres General Plan 2035 (City of Ceres 2018) guides land use and development in the City of Ceres. Goals and policies in the General Plan related to biological resources that are potentially relevant to the Proposed Program include the following:

Chapter 6, Agricultural and Natural Resources

Goal 4.C Protect, restore, and enhance habitats and wildlife corridors that support fish and wildlife species to maintain populations at viable levels.

Policies

4.C.2. Pesticide Control. Work with the Stanislaus County Agricultural Commissioner to identify and enforce mechanisms to control residual pesticides and pesticide runoff to prevent potential damage to water quality, vegetation, and wildlife.

4.C.3. Fisheries. Support the management efforts of the California Department of Fish and Wildlife to maintain and enhance the productivity of fisheries in the Tuolumne River.

4.C.4. Riparian Setback. Protect the integrity of habitats, hydrology, and soils along the river by prohibiting development within a distance of at least 50 feet as measured from the limit of riparian vegetation or as measured from the top of the channel bank, whichever is greater. Smaller buffers may be allowed only where it can be demonstrated that a 50-foot buffer is not possible due to site-specific constraints or if the development is for public, passive park or recreational uses, and the proposed narrower buffer would adequately protect the biological, hydrologic, and geologic integrity of the riparian corridor.

Goal 4.D Protect environmentally sensitive lands and rare, threatened, or endangered plant and animal communities.

Policies

4.D.1. Special-Status Species. Support the preservation of habitats of rare, threatened, endangered, and other special-status species. Require development in areas known to have value for wildlife to be carefully planned and, where possible, sited to maintain reasonable wildlife value of the habitat.

4.D.2 Biotic Resource Evaluation. Require, as part of the environmental review process prior to approval of discretionary development permits involving parcels within a significant ecological resource area, a biotic resources evaluation of the site by a qualified biologist. Significant ecological resource areas include, at a minimum, the following:

- Any habitat that supports rare, threatened, or endangered animals or plants; and
- Riparian and wetland habitats associated with the Tuolumne River.
- Such evaluation should consider the potential for significant impact on biological resources, and identify measures to feasibly mitigate any impacts or otherwise indicate why mitigation would not be feasible. In approving any such permit, the City shall determine the feasibility of the identified mitigation measures.

4.D.3. Significant Biological Resources. Support and cooperate with the efforts of other local, State, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development, including efforts involving a Habitat Conservation Plan or other plan for habitat management or restoration. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland habitats, wildlife migration corridors, and locally-important species/communities.

City of Turlock General Plan

The City of Turlock General Plan (City of Turlock 2012) guides land use and development in the City of Turlock. Policies in the General Plan related to biological resources that are potentially relevant to the Proposed Program include the following:

Guiding Policies

7.4-a Increase Biological Diversity. Make efforts to enhance the diversity of Turlock's flora and fauna, including street trees.

Implementing Policies

7.4-b Sensitive Site Planning. Protect mature trees and natural vegetation and features wherever feasible in new development areas.

7.4-c Urban Trees. Protect and expand Turlock's urban forest through public education, sensitive maintenance practices, and a long-term financial commitment adequate to protect these resources. Continue to require the planting of appropriately-spaced street trees in new development areas.

7.4-d Special Review if New Information Becomes Available. Establish environmental review procedures, such as site reconnaissance and

certification by a biologist, as part of the project development application process if new information to support existence of a Special Status species becomes available.

7.4-e Identify and protect nesting habitat. Projects on greenfield sites proposing to commence construction or other ground-disturbing activities during the typical nesting season (February through mid-September) shall be required to conduct a survey by a qualified biologist no more than 10 days prior to the start of disturbance activities. If nests are found, no-disturbance buffers around active nests shall be established as follows until the breeding season has ended or until a qualified biologist determines that the birds have fledged and are no longer dependent on the nest for survival:

- 250 feet for non-listed bird species;
- 500 feet for migratory bird species; and
- One-half mile for listed species and fully protected species.

7.4-f Swainson's Hawk protection. If Swainson's Hawks are found foraging in an agricultural area prior to or during construction, project proponents shall consult a qualified biologist for recommended proper action, and incorporate appropriate mitigation measures. If specific project activities on sites where suitable nesting habitat may exist are to take place during the normal breeding season (February through mid-September), project proponents shall be required to conduct a survey by a qualified biologist for nesting raptors in all potentially suitable trees no more than 10 days prior to the start of disturbance activities. If an active Swainson's Hawk nest is found, appropriate mitigation measures may include, but are not limited to:

- Establishing a one-half mile buffer around the nest until the breeding season has ended or until a qualified biologist determines that the birds have fledged and are no longer dependent on the nest for survival;
- Mitigating habitat loss within a 10-mile radius of known nest sites as follows:
  - Providing a minimum of one acre of habitat management land for each acre of development for projects within one mile of an active nest tree;
  - Providing a minimum of 0.75 acres of habitat management land for each acre of development for projects within between one and five miles of an active nest tree; or
  - Providing a minimum of 0.5 acres of habitat management land for each acre of development for projects within between five and 10 miles of an active nest tree.

Stanislaus County General Plan 2015

The following goals and policies in the Conservation/Open Space Element of the Stanislaus County General Plan 2015 (2016) are relevant to the Proposed Program:

Conservation and Open Space Element

Goal One: Encourage the protection and preservation of natural and scenic areas throughout the County.

Policy Three: Areas of sensitive wildlife and plant life (e.g., vernal pools, riparian habitats, flyways and other waterfowl habitats, etc.) including habitats and plant species listed in the General Plan Support Document or by state or federal agencies shall be protected from development and/or disturbance.

Policy Four: Protect and enhance oak woodlands and other native hardwood habitat.

Goal Ten: Protect fish and wildlife species of the County.

Policy Twenty-nine: Habitats of rare and endangered fish and wildlife species, including special status wildlife and plants, shall be protected.

Stanislaus County does not have a tree protection ordinance.

Del Rio Community Plan

The Del Rio Community Plan guides development in the community of Del Rio (Stanislaus County 1992). One goal within the Community Plan is relevant to the Proposed Program.

Goal 6: Significant natural resources in the community shall be preserved.

7.3 Environmental Setting

The Proposed Program is situated in the central San Joaquin Valley. The study area generally has gently sloping terrain. The Tuolumne River flows westerly through the southern portion of Modesto. Dry Creek, a tributary to the Tuolumne River, runs through the central portion of Modesto before joining the Tuolumne River near South 9th Street and River Road. The San Joaquin River travels westerly north of Modesto. Elevations range from approximately 55 feet above mean sea level (msl) in Grayson to approximately 120 feet above msl in the eastern portion of the study area.

The landscape in the study area is dominated by the urban development and agriculture. Other land uses in the study area include, transportation, and open space. Natural habitats are mostly found along the Tuolumne River and Dry Creek.

7.3.1 Methods

Reconnaissance surveys were not conducted as the Proposed Program is analyzed in this EIR at a program level, locations of some project components are conceptual, project designs have not been finalized for the proposed CIPs, and some components would not be constructed for a

decade or more. For these reasons, reconnaissance surveys would potentially be out of date and no longer accurate by the time components would be constructed. Instead, several documents covering biological resources in the vicinity of the Program were reviewed for relevant habitat and setting information. This existing information is sufficient to identify sensitive resources and evaluate impacts at a program level. These resources include:

- City of Modesto Urban Area General Plan (City of Modesto 2019a);
- 2010 WSER Draft Program EIR (ICF Jones & Stokes and Horizon 2009);
- Ceres General Plan 2035 (City of Ceres 2018);
- City of Turlock General Plan (City of Turlock 2012);
- Stanislaus County General Plan 2015 (2016);
- Del Rio Community Plan (Stanislaus County 1992);
- City's Modesto Wastewater Master Plan Update Draft Master Environmental Impact Report (Turnstone 2006); and
- North Valley Regional Recycled Water Program Final Environmental Impact Report/Statement (Bureau of Reclamation and City of Modesto 2015a).

Special-status plant and animal species with the potential to occur within the Program were identified through a review of the following resources:

- USFWS IPaC Resource List for the Modesto Water Master Plan study area (USFWS 2017a);
- CDFW's CNDDB queries for the following U.S. Geological Survey (USGS) 7.5-minute quadrangles: Manteca, Avena, Escalon, Ripon, Salida, Riverbank, Westley, Brush Lake, Ceres, Oakdale, Waterford, Denair, and Turlock (CDFW 2017);
- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California queries for the following USGS 7.5-minute quadrangles: Manteca, Avena, Escalon, Ripon, Salida, Riverbank, Westley, Brush Lake, Ceres, Oakdale, Waterford, Denair, and Turlock (CNPS 2017);
- eBird records for the study area (eBird 2017a).

Results from these database queries are provided in Appendix B, *Biological Resources Analysis Supporting Information*.

7.3.2 Vegetation and Land Cover

Descriptions of vegetation and land cover occurring in the study area are adapted from previous documents related to the study area, including the 2010 WSER Draft Program EIR (ICF Jones & Stokes and Horizon 2009), 2019 Master EIR for the City's general plan (City of Modesto 2019b), the City of Modesto Wastewater Master Plan Update EIR (Turnstone Consulting 2006), and the North Valley Regional Recycled Water Program DEIR/Statement (Bureau of Reclamation and City

of Modesto 2015b). Wildlife typically associated with these biological communities is also described below.

Urban

The majority of the study area consists of urban land cover. This includes roads, parking lots, housing, landscaping, golf courses and commercial and industrial facilities. This habitat consists of a wide range of ornamental/landscaped vegetation and some native plants. This habitat supports a variety of urban-adapted wildlife.

Birds typical of urban habitats include American crow (*Corvus brachyrhynchos*), scrub jay (*Aphelocoma californica*), mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), wrentit (*Chamaea fasciata*), bushtit (*Psaltriparus minimus*), and oak titmouse (*Baeolophus inornatus*). Common mammals include raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*).

Agricultural Lands

Agricultural lands within the study area include pastures, orchards, and row crops. Pastures are typically cultivated in grasses and/or legumes such as alfalfa (*Medicago sativa*), rescue grass (*Bromus catharticus*), Johnson's grass (*Sorghum halepense*), tall fescue (*Festuca arundinaceae*), and Italian ryegrass (*Festuca perennis*). The primary orchard crops in the vicinity of the Program components are almond (*Prunus dulcis*) and English walnut (*Juglans regia*) cultivars.

Pastures provide food, cover, and nesting habitat for wildlife species; the value of the habitat varies with crop type and agricultural practices. Bird diversity can be high in irrigated pastures (Hartman and Kyle 2010). Species commonly utilizing pasture lands include red-winged blackbird, Brewer's blackbird (*Euphagus cyanocephalus*), European starling (*Sturnus vulgaris*), house finch (*Carpodacus mexicanus*), killdeer (*Charadrius vociferous*), American crow, and American kestrel. Some pasture lands and crop fields provide suitable breeding habitat for northern harrier (*Circus cyaneus*). Redwing blackbird and potentially tricolored blackbird (*Agelaius tricolor*) may use grain crops for breeding habitat. Burrowing owl (*Athene cunicularia*) may use plowed fields for breeding habitat. Small mammals such as gophers (*Thomomys* spp.) and voles (*Microtus* spp.) present in pastures and row crops provide important prey resources for raptors such as red-tailed hawk and Swainson's hawk.

In orchards, understory vegetation is generally removed, which limits the abundance and diversity of wildlife species in this habitat, but some wildlife adapted to agriculture may use these habitats. Species such as the side-blotched lizard (*Uta stansburiana*) can occur in this habitat type. American crow and yellow-billed magpies (*Pica nuttalli*), which forage on nut crops, are often present (City of Patterson 2010). Other bird species may potentially nest in orchards.

Riverine

The Tuolumne River and Dry Creek support multiple species of freshwater and anadromous fish. Introduced freshwater species greatly outnumber native species in the Tuolumne River and associated waterways. Largemouth and smallmouth bass (*Micropterus salmoides* and *M. dolomieu*), and sunfishes (*Lepomis* spp.) are abundant and occur in many aquatic habitats. Anadromous fish rear and spawn in freshwater habitats and spend the remainder of their life in marine habitats. The amount of time individuals spent as adults in the ocean or as juveniles in

freshwater various from species to species. Special-status fish in the Tuolumne River include Chinook salmon (Central Valley fall- late fall-run Evolutionarily Significant Unit [ESU]) (*Oncorhynchus tshawytscha*), Central Valley steelhead (*Oncorhynchus mykiss*), Sacramento splittail (*Pogonichthys macrolepidotus*), and hardhead (*Mylopharodon conocephalus*).

Some irrigation ditches also provide riverine-type habitat, but these areas provide only marginal habitat for aquatic species.

Valley Foothill Riparian

Riparian habitat in the study area is limited to the Tuolumne River, San Joaquin River, and Dry Creek. Common species in this habitat include willows (*Salix* spp.), valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), wild grape (*Vitis californicus*), and California blackberry (*Rubus ursinus*). Invasive species in riparian areas include Himalayan blackberry (*Rubus armeniacus*) and arundo (*Arundo donax*). Blue elderberry (*Sambucus nigra* ssp. *caerulea*) shrubs are common in this habitat, and are the host plant for the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

Riparian areas provide food, water, shelter, and migration corridors for a wide variety of wildlife. Mammals such as raccoon, desert cottontail (*Sylvilagus audubonii*), deer mouse (*Peromyscus maniculatus*), striped skunk, American beaver (*Castor canadensis),* and coyote (*Canis latrans*) are common in riparian woodlands. Raptor species such as great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and American kestrel (*Falco sparverius*) may nest and forage in riparian habitats. A wide variety of passerine species use this habitat for breeding and foraging, including belted kingfisher (*Megaceryle alcyon*), downy woodpecker (*Picoides pubescens*), northern flicker (*Colaptes auratus*), black phoebe (*Sayornis nigricans*), bushtit, and Bewick's wren (*Thryomanes bewickii*).

Wetlands and Vernal Pools

Wetlands within the study area are located in transitions between aquatic and terrestrial habitats, such as along the fringes of riverine habitat or in seasonally flooded grasslands.

Vernal pools are shallow, ephemeral waterbodies that form in depressions in grasslands, pastures, and woodlands. Vernal pools support specialized species adapted to their conditions. Conversion of natural habitats to agricultural and developed uses has eliminated much of the vernal pool habitat in the Central Valley. While vernal pools are unlikely in areas where Program activities would take place, they could not be ruled out as a possibility. This habitat type was also included in the Modesto General Plan Update Final Master EIR (City of Modesto 2019b) and other documents related to the study area.

In the study area, wetlands could occur adjacent to or within the Tuolumne River, Dry Creek, or the San Joaquin River. Vernal pools could potentially occur in pastures and grasslands. Wetlands in the study area are dominated by bulrushes (*Schoenoplectus* spp. and *Scirpus* spp.,), cattails (*Typha* spp.), sedges (*Carex* spp.), and rushes (*Juncus* spp.). Vernal pools support a number of special-status species, such as vernal pool fairy shrimp (*Branchinecta lynchi*) and San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*).

Wetlands provide important habitat for birds and amphibians. Common wildlife species in wetlands include bullfrog (*Lithobates catesbeianus*), egrets (*Ardea* and *Egretta* spp.), sora (*Porzana carolina*), American coot (*Fulica americana*), and red-winged blackbird (*Agelaius phoeniceus*).

Grassland

Grassland habitat consists of a mixture of annual and perennial grasses, and forbs. In the Central Valley, grasslands are dominated by a variety of non-native annual grasses such as wild oats (*Avena* spp.), ripgut brome (*Bromus diandrus*) or foxtail barley (*Hordeum murinum*), with native grass species only infrequently present. Grasslands are relatively uncommon in the study area and are generally somewhat disturbed. Grasslands provide food and cover for birds, reptiles, and small mammals. Many raptors may forage in this habitat.

7.3.3 Special-Status Species

For the purposes of this EIR, special-status plant and wildlife species refers to those species that meet one or more of the following criteria:

- Species that are listed as threatened or endangered under the ESA (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals);
- Species that are candidates for possible future listing as threatened or endangered under ESA (76 Federal Register [FR] 66370);
- Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (14 CCR 670.5);
- Plants listed as rare under the California Native Plant Protection Act of 1977 (F&G Code Section 1900 et seq.);
- Plants listed as California Rare Plant Rank (CRPR) 1, 2, 3, or 4;
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines, Section 15380);
- Animals fully protected in California (F&G Code Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and
- Nesting raptors protected in California (F&G Code Section 3503.5).

Special-status species known to occur within the general Program vicinity were identified from the queries described in Section 7.3.1. A list of these species is provided in **Table 7-1; Figure 7-1**, **Figure 7-2,** and **Figure 7-3** show the CNDDB occurrences of special-status plants, special-status animals, and critical habitat,[1] respectively, within a five-mile radius of the Proposed Program. The

[1] Critical habitats are specific geographic areas identified by USFWS or NMFS that contain features essential to the conservation of a federally-listed species and that may require special management and protection.

potential for special-status species to occur in areas affected by the Proposed Program was evaluated according to the following criteria:

- **None:** the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
- **Not Expected:** suitable habitat or key habitat elements might be present but might be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
- **Possible:** the presence of suitable habitat or key habitat elements that potentially support the species.
- **Present:** either the target species was observed directly or its presence was confirmed in previous studies in the area.

7.3.4 Sensitive Natural Communities

Sensitive natural communities include those that are of special concern to resource agencies, such as those that are protected under CEQA, Section 1600 of the F&G Code, or Sections 401 and 404 of the CWA. These include sensitive communities documented in the *List of Vegetation Alliances and Associations* (California Department of Fish and Game [CDFG] 2010) or that are tracked in the CNDDB (CDFW 2017), riparian communities, and waters of the U.S. and state, including wetlands. Sensitive natural communities within the study area include wetland and riparian communities. Riparian communities are located along the Tuolumne River, Dry Creek, Stanislaus River, and San Joaquin River. Wetlands are also associated with these watercourses, and may also be found in non-riparian areas in the study area, such as depressions or other low places in the landscape. These communities could be affected by Program components that are constructed within or adjacent to riparian or wetland areas. Vernal pools are a subset of wetlands that are unlikely in areas where Program activities would take place, but could potentially occur in pastures and grassland in the study area.

7.3.5 Wildlife Movement Corridors

Wildlife movement corridors are established migration routes between multiple locations used by resident and migratory species. CEQA requires the analysis of a project's potential to substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see Section 7.4.2, below). Hence, resource agencies consider wildlife corridors to be a sensitive resource in the evaluation of projects.

The Tuolumne River, Dry Creek, Stanislaus River, and San Joaquin River are wildlife movement corridors. The rivers themselves are a movement corridor for anadromous fish such as steelhead, and the adjacent riparian areas allow for terrestrial wildlife movement.

Table 7-1. Special-Status Plant and Animal Species Known to Occur Within the Vicinity of the Project Sites

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
PLANTS						
Atriplex cordulata var. *cordulata*	Heartscale	-	-	1B.2	Chenopod scrub, valley and foothill grassland, meadows and seeps. Alkaline flats and scalds in the Central Valley, sandy soils. 3-275 meters. Blooms April through October.	**Possible.** Potentially suitable habitat exists in alkaline grassland in the study area.
Atriplex coronata var. *coronata*	crownscale	-	-	4.2	Chenopod scrub, valley and foothill grassland, vernal pools. Valley and foothill grasslands, vernal pools. 1-590 meters. Blooms March through October.	**Possible.** Potentially suitable habitat exists in grassland and vernal pools in the study area.
Atriplex minuscula	lesser saltscale	-	-	1B.1	Chenopod scrub, playas, valley and foothill grassland. In alkali sink and grassland in sandy, alkaline soils. 0-225 meters. Blooms May through October.	**Possible.** Potentially suitable habitat exists in alkaline grassland in the study area.
Atriplex subtilis	subtle orache	-	-	1B.2	Valley and foothill grassland. Alkaline soils. 20-100 meters. Blooms June through September.	**Possible.** Potentially suitable habitat exists in alkaline grassland in the study area.
Blepharizonia plumosa	big tarplant	-	-	1B.1	Valley and foothill grassland. Dry hills and plains in annual grassland. Clay to clay-loam soils; usually on slopes and often in burned areas. 30-505 meters. Blooms July through October.	**Possible.** Potentially suitable habitat exists grassland in the study area.
California macrophylla	round-leaved filaree	-	-	1B.2	Cismontane woodland, valley and foothill grassland. Clay soils. 15-1200 meters. Blooms March through May.	**Possible.** Potentially suitable habitat exists in grassland in the study area.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Caulanthus lemmonii	Lemmon's jewelflower	-	-	1B.2	Pinyon and juniper woodland, valley and foothill grassland. 75-1585 meters. Blooms February through May.	**None.** The study area is not within the elevation range of this species.
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	-	-	4.2	Valley and foothill grasslands, vernal pools. Chaparral, cismontane woodland, coastal scrub. 0-100 meters. Blooms May through October.	**Possible.** Potentially suitable habitat exists in grassland and vernal pools in the study area.
Clarkia rostrata	beaked clarkia	-	-	1B.3	Cismontane woodland, valley and foothill grassland. North-facing slopes; sometimes on sandstone. 60-915 meters. Blooms April through May.	**None.** The study area is not within the elevation range of this species.
Eryngium racemosum	Delta button-celery	-	SE	1B.1	Riparian scrub. Seasonally inundated floodplain on clay. 1-335 meters. Blooms June through October.	**Possible.** Potentially suitable habitat exists along Dry Creek and the Tuolumne River.
Eschscholzia rhombipetala	diamond-petaled California poppy	-	-	1B.1	Valley and foothill grassland. Alkaline, clay slopes and flats. 30-625 meters. Blooms March through April.	**Possible.** Potentially suitable habitat exists in grassland in the study area.
Legenere limosa	legenere	-	-	1B.1	Vernal pools. In beds of vernal pools. 1-880 meters. Blooms April through June.	**Possible.** Potentially suitable habitat exists in vernal pools in the study area.
Monardella leucocephala	Merced monardella	-	-	1A	Valley and foothill grassland. Known from riverbeds, moist sandy depressions; requires moist subalkaline sands associated with low elevation grassland. 35-100 meters. Blooms May through August.	**Not expected.** This species is presumed extirpated and was last seen in 1941.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Neostapfia colusana	Colusa grass	FT	SE	1B.1	Vernal pools. Usually in the bottoms of large, or deep vernal pools; adobe soils. 5-125 meters. Blooms May through August.	**None.** Not within the current range for this species (USFWS 2017b).
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	FT	SE	1B.1	Vernal pools. 10-755 meters. Blooms April through September.	**Not expected.** Only the Turlock outlying service areas are within the current range for this species (USFWS 2017c).
Puccinellia simplex	California alkali grass	-	-	1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. 1-915 meters. Blooms March through May.	**Possible.** Potentially suitable habitat exists in alkaline grassland and vernal pools in the study area.
Sphenopholis obtusata	prairie wedge grass	-	-	2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 300-2000 meters. Blooms April through July.	**None.** The study area is not within the elevation range of this species.
Tuctoria greenei	Greene's tuctoria	FE	SR	1B.1	Vernal pools. Vernal pools in open grasslands. 25-1325 meters. Blooms May through July.	**Not expected.** This species is considered extirpated from Stanislaus County (USFWS 2007b).
FISH						
Hypomesus transpacificus	Delta smelt	FT	SE	-	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	**None.** The study area is outside the range of this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Mylopharodon conocephalus	hardhead	-	SSC	-	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	**Present.** A recent CNDDB occurrence is located within the study area within the Tuolumne River.
Oncorhynchus mykiss irideus	steelhead Central Valley DPS	FT	-	-	Populations in the Sacramento and San Joaquin rivers and their tributaries.	**Present.** A recent CNDDB occurrence is located within the study area within the Tuolumne River. This species may also stray into Dry Creek.
Oncorhynchus tshawytscha	Chinook salmon (Central Valley fall- late fall-run ESU)	-	SSC	-	Populations spawn in the Sacramento and San Joaquin rivers and tributaries. Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and high dissolved oxygen.	**Present.** This species occurs in the Tuolumne River and my stray into Dry Creek.
Oncorhynchus tshawytscha	Chinook salmon (Central Valley spring-run ESU)	Non-essential experi-mental pop-ulation	See FGC 2080.2 to 2080.4.		All spring-run Chinook salmon, including those that have been released or propagated, naturally or artificially, within the experimental population area, which is defined as the San Joaquin River from Friant Dam downstream to its confluence with the Merced River (exclusive)]. Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.	**Possible.** A nonessential experimental population has recently been reintroduced to the San Joaquin River (NMFS 2013). Individuals may potentially stray into the Tuolumne River or Dry Creek.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Pogonichthys macrolepidotus	Sacramento splittail	-	SSC	-	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	**Possible.** Within the extant range for this species (UC Davis 2017).
INVERTEBRATES						
Branchinecta conservation	Conservancy fairy shrimp	FE	-	-	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	**Not expected.** No known populations of this species are located within the study area (USFWS 2012a). Marginally suitable habitat exists in the study area.
Branchinecta lynchi	vernal pool fairy shrimp	FT	-	-	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Possible.** Potentially suitable habitat exists in the study area.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	-	-	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for “stressed” elderberries.	**Possible.** Potentially suitable habitat exists in the study area where elderberry bushes are present.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Lepidurus packardi	vernal pool tadpole shrimp	FE	-	-	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	**Possible.** Potentially suitable habitat exists in the study area.
AMPHIBIANS AND REPTILES						
Ambystoma californiense	California tiger salamander	FT	ST	-	Central Valley Distinct Population Segment federally listed as threatened. Santa Barbara and Sonoma counties Distinct Population Segment federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**Not expected.** No known extant populations of this species in the study area (USFWS 2017d).
Anniella pulchra	northern California legless lizard	-	SSC	-	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Not expected.** Marginally suitable habitat exists in riparian areas in the study area.
Emys marmorata	western pond turtle	-	SSC	-	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Possible.** Potentially suitable habitat exists in the study area.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Gambelia sila	blunt-nosed leopard lizard	FE	SE	-	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	**None.** The study area is outside the current range for this species.
Rana draytonii	California red-legged frog	FT	SSC	-	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**None.** This species is considered extirpated from the Central Valley (USFWS 2002).
Spea hammondii	western spadefoot	-	SSC	-	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Possible.** Potentially suitable habitat exists in the study area.
Thamnophis gigas	giant gartersnake	FT	ST	-	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the gartersnakes in California.	**Not expected.** Potentially suitable habitat exists in the study area, but there have been no CNDDB occurrences within Stanislaus County.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
BIRDS						
Aquila chrysaetos	golden eagle	-	FP	-	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Possible.** Flyover and foraging possible; no suitable nesting habitat.
Agelaius tricolor	tricolored blackbird	-	SC, SSC	-	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Possible.** Potentially suitable habitat exists in the study area.
Athene cunicularia	burrowing owl	-	SSC	-	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Possible.** Potentially suitable habitat exists in the study area.
Buteo swainsoni	Swainson's hawk	-	ST	-	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Present.** CNDDB occurrences within the study area.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Circus cyaneus	northern harrier	-	SSC	-	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	**Possible.** Species has been observed in the study area (ebird.org 2017a). Flood irrigated pastures provide potential nesting habitat.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT	SE	-	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**None.** The study area is not within the current range of this species (USFWS 2017e).
Dendroica petechia	yellow warbler	-	SSC	-	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging. Also nests in montane shrubbery in open conifer forests.	**Present.** Species has been observed along the Tuolumne River in the study area (eBird 2017b).
Elanus leucurus	white-tailed kite	-	FP	-	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Possible.** Riparian areas and isolated mature trees in agricultural areas provide potential nesting habitat.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Haliaeetus leucocephalus	bald eagle	FD	SE, FP	-	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**Possible.** Flyover and foraging possible; no suitable nesting habitat.
Icteria virens	yellow-breasted chat	-	SSC	-	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	**Possible.** Potentially suitable habitat exists in the study area.
Lanius ludovicianus	loggerhead shrike	-	SSC	-	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Present.** Species may nest in riparian areas.
Melospiza melodia	song sparrow ("Modesto" population)	-	SSC	-	Emergent freshwater marshes, riparian willow thickets. Riparian forests, vegetated irrigation canals and levees. Inhabits cattails, tules and other sedges; also known to frequent tangles bordering sloughs.	**Possible.** Potentially suitable habitat exists in the study area.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Vireo bellii pusillus	least Bell's vireo	FE	SE	-	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite.	**Not expected.** Species has recently been observed in restored riparian habitat at the San Joaquin River National Wildlife Refuge approximately 2.6 miles north of the Grayson portion of the study area (Howell et al. 2010). Some riparian areas in the study Area provide marginal breeding habitat. Due to the species rarity in the Central Valley and habitat quality, it is not expected to breed in the study area**.**
MAMMALS						
Corynorhinus townsendii	Townsend's big-eared bat	-	SSC	-	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Not expected.** Marginally suitable roosting habitat in existing buildings due to human presence.
Dipodomys nitratoides exilis	Fresno Kangaroo Rat	FE	SE	-	Alkali sink-open grassland habitats in western Fresno County. Bare alkaline clay-based soils subject to seasonal inundation, with more friable soil mounds around shrubs and grasses.	**None.** The study area is not within the range of this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Eumops perotis californicus	western mastiff bat	-	SSC	-	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Not expected.** Marginally suitable roosting habitat exists in the study area.
Lasiurus blossevillii	western red bat	-	SSC	-	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	**Possible.** Roosting habitat is present in riparian habitats. In the Central Valley, this species is strongly associated with riparian areas, especially with mature cottonwoods (*Populus* spp.) and sycamores (*Platanus racemosa*) (Pierson et al. 2006).

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Neotoma fuscipes riparia	riparian (=San Joaquin Valley) woodrat	FE	SSC	-	Riparian areas along the San Joaquin, Stanislaus, and Tuolumne rivers. Need areas with mix of brush and trees. Need suitable nesting sites in trees, snags or logs.	**Not expected.** Known populations are limited to San Joaquin River National Wildlife Refuge and Caswell Memorial State Park (USFWS 2012), which are approximately 0.7 and 4.1 miles north and west of the study area, respectively. Grayson is the closest portion of the study are to these populations, and no Program activities in Grayson would occur in riparian habitat.
Sylvilagus bachmani riparius	riparian brush rabbit	FE	SE	-	Riparian areas on the San Joaquin River in northern Stanislaus County. Dense thickets of wild rose, willows, and blackberries.	**Not expected.** The study area is not within the known range of this species (USFWS 2017f). Existing populations are limited to Caswell Memorial State Park and a region in the south Delta near Lathrop (Kelly et al. 2011).
Taxidea taxus	American badger	-	SSC	-	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Possible.** Potentially suitable habitat exists in riparian areas in the study area, and marginally suitable habitat exists in grasslands.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	Rare Plant Rank	Habitat	Potential to Occur in the Study Area
Vulpes macrotis mutica	San Joaquin kit fox	FE	ST	-	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	**Not expected.** The study area provides marginally suitable habitat.

*** List of Abbreviations for Federal and State Species-Status:**

FE = Federally endangered
FT = Federally threatened
FD = Federally delisted

SE = State endangered
ST = State threatened
SC (Endangered) = State candidate for listing as endangered
SSC = State species of special concern

1A = plants presumed extirpated in California and either rare or extinct elsewhere.
1B = plants are considered rare, threatened, or endangered in California and elsewhere.
2B = plants are rare, threatened, or endangered in California, but more common elsewhere.
4 = plants of limited distribution a watch list

Threat Ranks:

0.1-Seriously threatened in California (more than 80 percent of occurrences threatened/high degree and immediacy of threat)
0.2-Moderately threatened in California (20–80 percent of occurrences threatened/moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

CDFW (2017) used as the source for habitat descriptions and species status. Based on this information, qualified Horizon biologists determined the potential to occur.

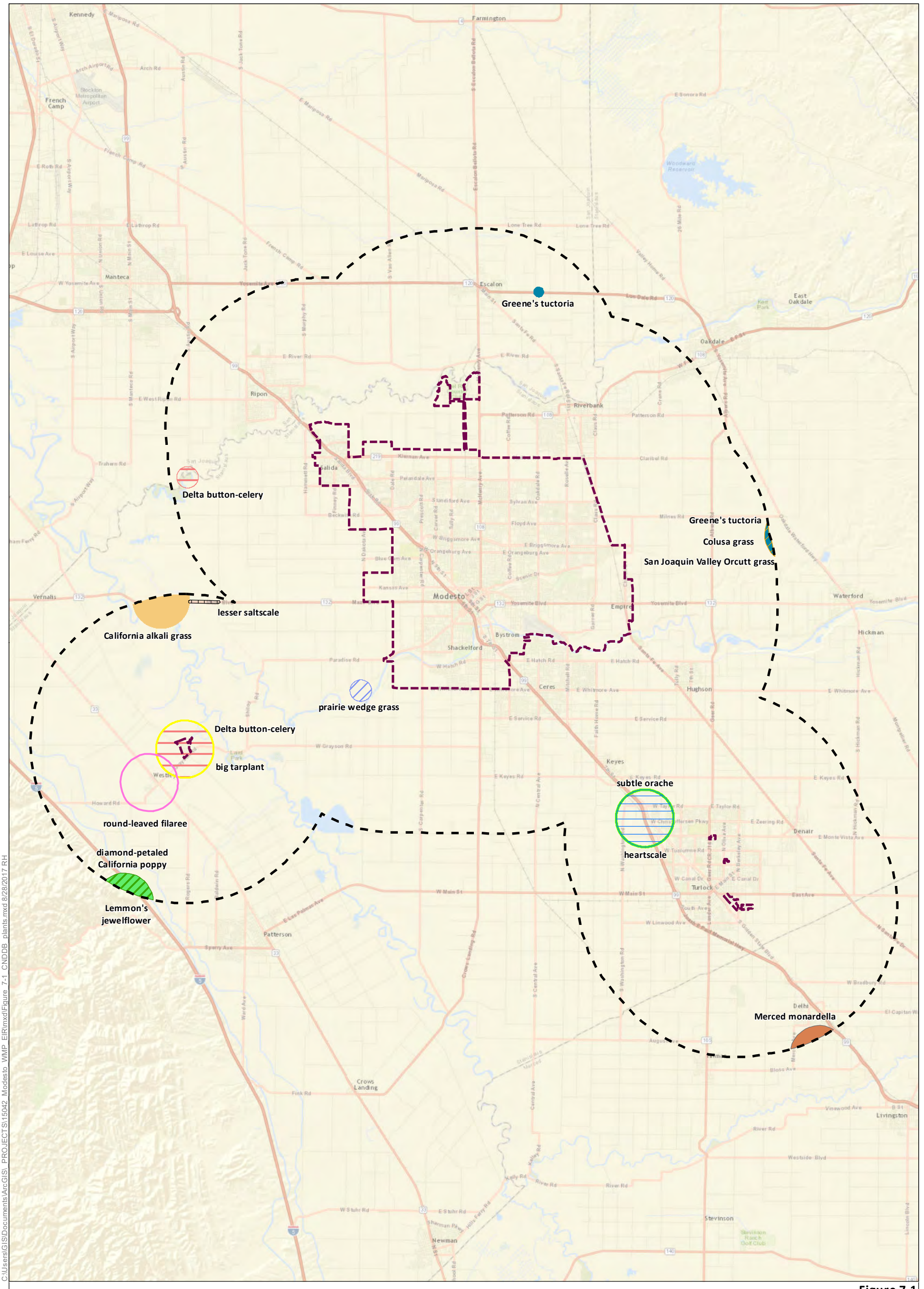

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Figure 7-1
Special-Status Plant Species within 5 miles of the Proposed Program

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Water Master Plan EIR

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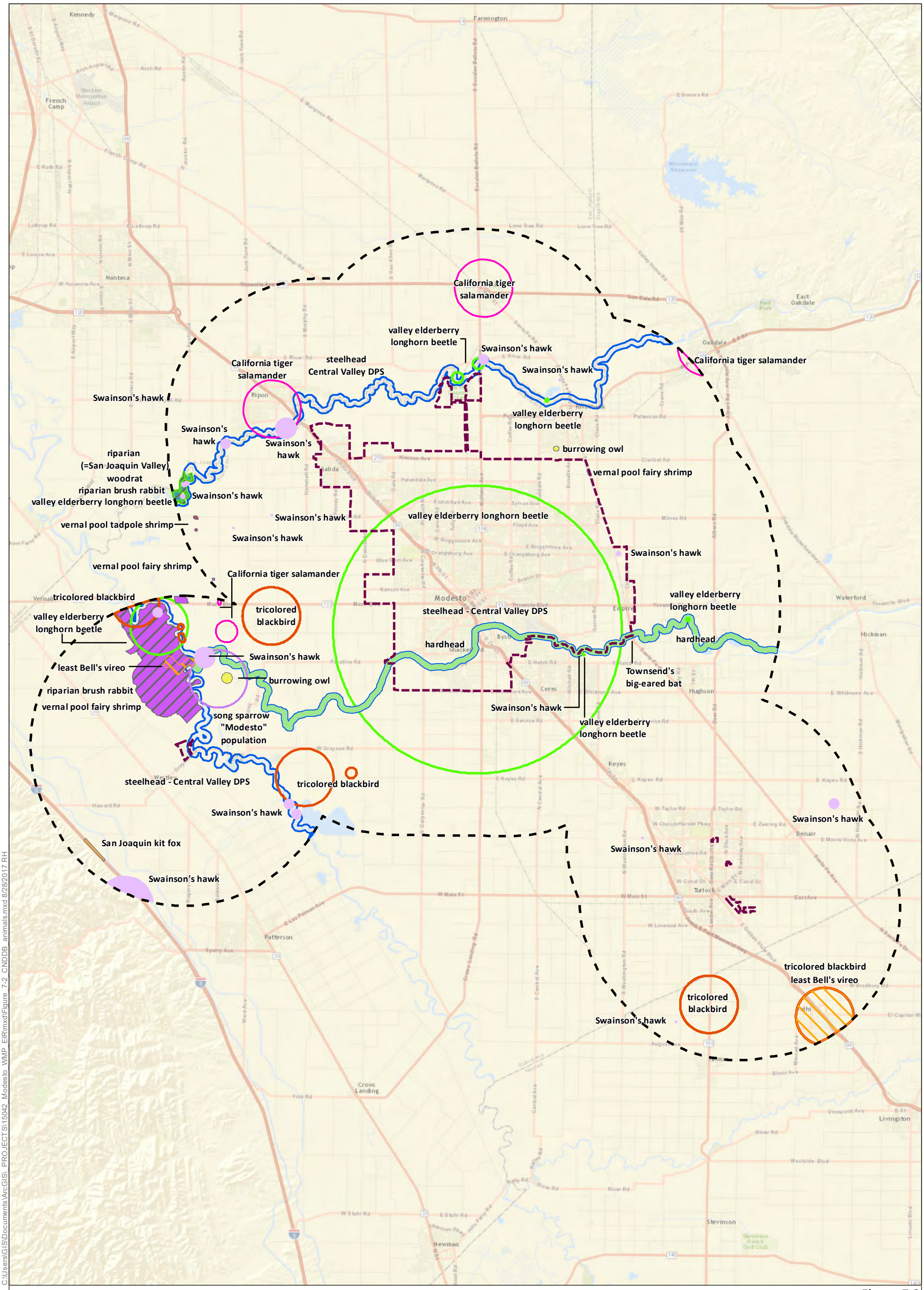

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Source: CDFW, CNDDB, August 2017 update

Figure 7-2
Special-Status Animal Species within 5 miles of the Proposed Program

City of Modesto
Water Master Plan EIR

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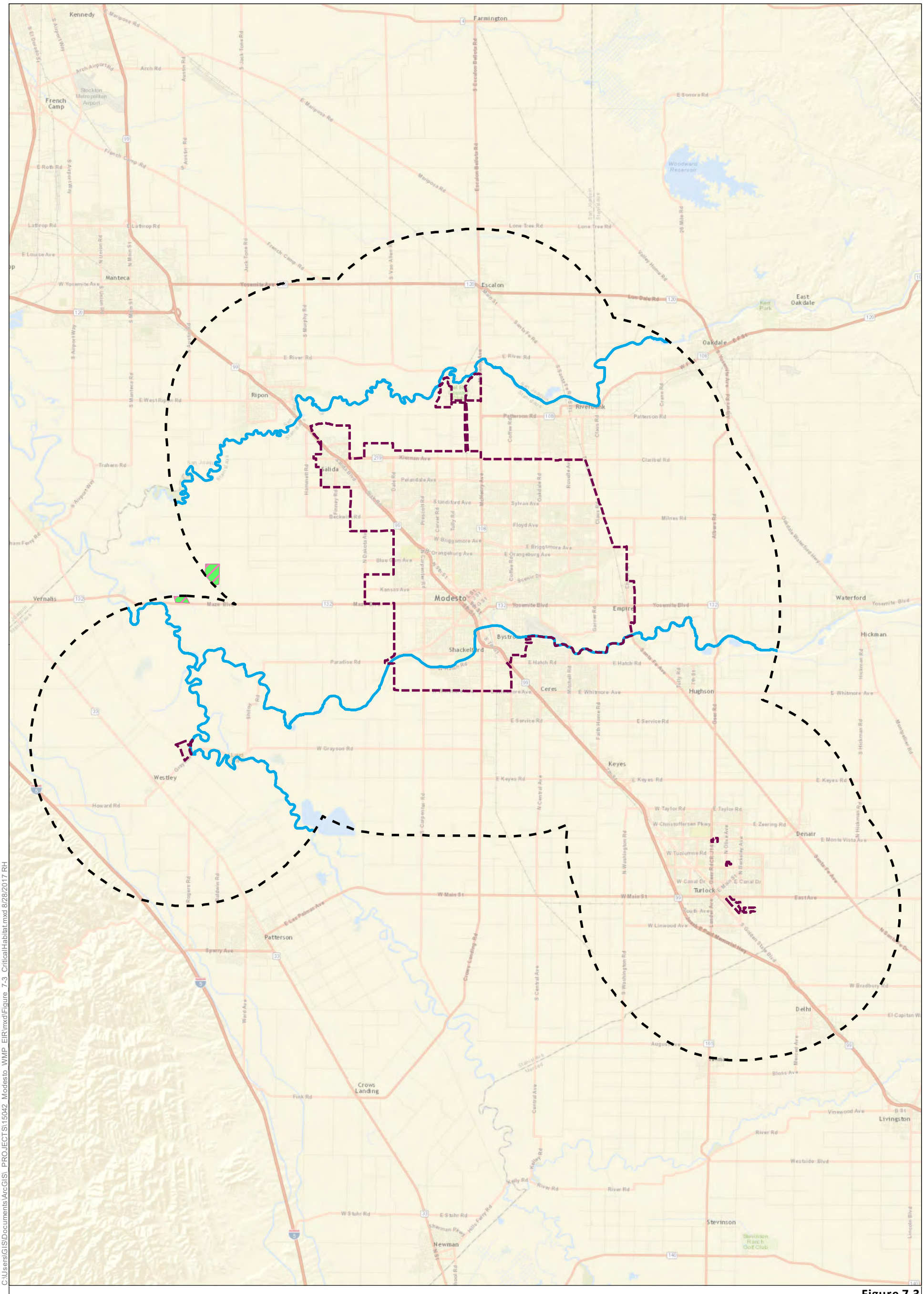

Figure 7-3
Critical Habitat within 5 miles of the Proposed Program

City of Modesto
Water Master Plan EIR

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7.3.6 Habitat Conservation Plan

The Pacific Gas and Electric Company (PG&E) San Joaquin Valley Operation & Maintenance Habitat Conservation Plan (PG&E O&M HCP) (PG&E 2006) covers specific PG&E activities throughout nine counties in the San Joaquin Valley, including Stanislaus County. The PG&E O&M HCP complies with the federal and state ESA and addresses multiple species and critical habitats. The PG&E O&M HCP outlines steps on minimizing, avoiding, and compensating for possible direct, indirect, and cumulative adverse effects on threatened and endangered species that could result from PG&E operation and maintenance activities in the San Joaquin Valley. The Proposed Program lies within the PG&E O&M HCP boundaries. The Proposed Program is not a covered activity under the PG&E O&M HCP and the Proposed Program would not conflict with the HCP's conservation strategy for covered species.

7.4 Impact Analysis

7.4.1 Methodology

The Proposed Program includes four primary types of improvements, as identified in the WMP and WSER: storage tanks, groundwater wells, pumps and pump stations, and pipelines. The Proposed Program may affect biological resources through direct or indirect disturbance, modification, or destruction of habitat that results in death, injury, or harassment of individuals or populations of plant or animal species, or that impedes or prevents the dispersal of individuals or populations of special-status species. Impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats present in the study area under baseline conditions to anticipated conditions after construction of proposed components. Direct and indirect impacts on special-status species were assessed based on the potential for the species or their habitat to be disturbed or enhanced by construction of the Proposed Program.

Improvements included in the Proposed Program include replacement or upgrade of existing facilities. Existing facilities are considered developed, and are not expected to have biological impacts, impact habitat or riparian areas. New facilities in the Proposed Program may be in developed areas, or within the public right-of-way, which again are not expected to have biological resource impacts, however new facilities proposed adjacent to the Tuolumne River and Dry Creek or in non-developed areas will require the analysis outlined in the following sections,

In general, once construction is complete, operation and maintenance of the Proposed Program, as described in Chapter 2, would continue similar to existing conditions. The level of ongoing operation and maintenance activities would be anticipated to increase from adding capacity to serve growth, but this increased operation and maintenance is not anticipated to cause disturbance to biological resources. Unless otherwise stated below, impacts associated with operation and maintenance are considered unlikely or less than significant, and are not discussed further.

7.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

7.4.3 Environmental Impacts

Impact BIO-1: Impacts on Special-status Plants (*Less than Significant with Mitigation*)

Special-status plants may occur in the vicinity of Program components in habitats such as grassland, wetlands, vernal pools, and valley and foothill riparian (Table 7-1). Valley and foothill riparian habitat occurs along Dry Creek and the Tuolumne River. Several buildout pipelines, such as those in North Modesto near Cottonwood Drive or South Modesto near Ironside Drive, and a fire flow improvement pipeline in South Modesto near Crows Landing Road and El Paso Avenue, occur in ruderal grasslands. Wetlands may occur in riparian habitat associated with Dry Creek and the Tuolumne River, as well as potentially in some agricultural lands. Impacts to special-status plants could include removal of individuals, and indirect effects from sedimentation or changes to hydrology. Impacts to special-status plants during construction of certain Program components would be minimized by using trenchless or other non-open cut construction method pipeline construction for crossings of the Tuolumne River and Dry Creek, where wetland and riparian habitat is located. The only Program components that would cross the Tuolumne River and Dry Creek are components FTGRID-01 and FTGRID-04, which are both new 16-inch diameter pipelines for future grid improvements. A frac-out (described in Chapter 12, *Hydrology and Water Quality*) during trenchless pipeline construction could result in impacts to special-status plants such as removal of individuals or reduction in special-status plant habitat quality. These impacts would be significant.

Several mitigation measures are proposed to avoid, reduce, or compensate for impacts to special-status plants. Mitigation Measure BIO-1 would minimize the area of disturbance to habitat for special-status plants. Where disturbance within special-status plant habitat cannot be avoided, implementation of Mitigation Measure BIO-2 would identify the extent to which special-status

plants are present and could be adversely affected by the project. Where special-status plants are found to be present, Mitigation Measure BIO-3 would require monitoring to confirm avoidance of identified special-status plant populations, and compensatory mitigation should special-status plants be adversely affected. Implementation of these measures would reduce this impact to **less than significant with mitigation.**

Mitigation Measure BIO-1: Perform Focused Surveys for Special-status Plant Species.

Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species. Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site, as determined by the botanist. If special-status plants may be directly or indirectly affected, then Mitigation Measure BIO-2 shall be implemented.

Mitigation Measure BIO-2: Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species.

If special-status plants are detected, the City shall implement the following measures to avoid or minimize impacts on special-status plant species:

- The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area.

- If avoidance is not feasible, the City will consult with either CDFW or USFWS, or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival.

- The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the Rare Plant Plan. If success criteria are not met at that time, then mitigation activities and monitoring will continue until success criteria are met.

- As part of the Rare Plant Plan, the City, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation, maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.

Impact BIO-2: Impacts on Vernal Pool Branchiopods and Western Spadefoot (*Less than Significant with Mitigation*)

Vernal pool branchiopods with the potential to occur in the study area include vernal pool fairy shrimp and vernal pool tadpole shrimp (*Lepidurus packardi*). These species could potentially occur within vernal pools located in the study area. Western spadefoot (*Spea hammondii*) also has the potential to occur in the study area and uses vernal pools as breeding habitat.

Grasslands and pastures within the study area have the potential to support vernal pool habitats. Proposed Program improvements that are not located in grasslands and pastures are not anticipated to have impacts on vernal pool habitat or inhabitants. If construction of WMP components occurs in the microwatershed of vernal pools, such activity could result in sedimentation and alteration of hydrology and drainage patterns, which could impact habitat for vernal pool branchiopods and breeding habitat for western spadefoot. As described in Chapter 11, *Hazards and Hazardous Materials*, many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the National Pollution Discharge Elimination System (NPDES) General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a stormwater pollution prevention plan (SWPPP). As described in Section 12.2 in Chapter 12, *Hydrology and Water Quality*, the SWPPP must, among other things, present a list of best management practices (BMPs) that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related

pollutants to surface waters. Compliance with this permit and implementation of a SWPPP would reduce the potential for sediments and contaminants to enter pools or depressions where vernal pool branchiopods may occur and western spadefoot may breed, but construction impacts of individual program components could nevertheless be significant. Implementation of Mitigation Measures BIO-3 and BIO-4 would reduce these impacts to **less than significant with mitigation**.

Mitigation Measure BIO-3: Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.

Prior to implementation of proposed projects in areas that could contain habitat for vernal pool branchiopods, a qualified biologist will conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City will avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.

Mitigation Measure BIO-4: Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat.

If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures:

- After construction, restore surface topography and drainage to pre-construction conditions; and
- Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.

Impact BIO-3: Impacts on Valley Elderberry Longhorn Beetle (*Less than Significant with Mitigation*)

Valley elderberry longhorn beetle (VELB) is a federally-threatened species, which is dependent on its host plant, elderberry. Elderberry shrubs may occur in riparian areas and along canals, or occasionally in non-riparian areas. Impacts of Proposed Program components located where elderberry shrubs are growing could include removal of elderberry shrubs, or ground disturbance within the rooting zone of these shrubs. If these shrubs were occupied by VELB, shrub removal or mortality could result in adverse effects on VELB. This would be considered a significant impact. Trimming of elderberry shrubs could result in injury or death of eggs, larva, or adults depending on the timing and extent of the trimming. No adverse impacts to the VELB would occur if trimming does not remove stems/branches that are ≥1 inch in diameter and is conducted between November and February (USFWS 2017g). Implementation of Mitigation Measure Bio-1 would identify the location of elderberry shrubs on a project-specific basis. Implementation of Mitigation Measures BIO-5 through BIO-7 would reduce impacts on VELB to **less than significant with mitigation**.

Mitigation Measure BIO-5: Avoid Impacts on VELB Habitat.

The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to VELB would not be expected to be substantial and therefore would not require mitigation. For proposed improvements that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017g). This shall include the following avoidance measures:

- If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal.

- The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities.

- No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level.

- A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.

- A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and should be discussed with USFWS.

- As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March-July).

- If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter.

- Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method.

- Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry.

- Erosion control shall be implemented and the affected area shall be re-vegetated with appropriate native plants.

If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.

Mitigation Measure BIO-6: Implement VELB Compensatory Mitigation, if Necessary.

The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per Mitigation Measure BIO-7**.**

Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS.

Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre[s] of credits: acre[s] of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used.

Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.

Mitigation Measure BIO-7: Transplant Elderberry Shrubs if Avoidance Is Not Feasible.

The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to Mitigation Measure BIO-6, the shrub shall be transplanted.

Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed:

- A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.

- Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the CNDDB.

- Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves.

- Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (www.tcia.org/).

Impact BIO-4: Impacts on Special-status Fishes (*Less than Significant with Mitigation*)

Habitat in the study area for special-status fish species is limited to the Tuolumne and Stanislaus rivers and Dry Creek. Special-status fish that are known to occur in the Tuolumne River include Chinook salmon (Central Valley fall- and late fall-run ESU), Central Valley steelhead, Sacramento splittail, and hardhead. These species may also be present in Dry Creek.

Adult steelhead and Chinook salmon migrate through the Tuolumne River to reach spawning habitat upstream. Juvenile salmonids pass through the study area on their way out to the Pacific Ocean. Sacramento splittail may be present in this portion of the Tuolumne River in wet years. Hardhead are also known be present.

Program Components (except Future Grid Pipelines FTGRID-01 and FTGRID-04)

Construction of these Proposed Program components would not occur in suitable habitat for special-status fishes. However, impacts to water quality in the Tuolumne River, Dry Creek, the Stanislaus River, and the San Joaquin River could adversely affect special-status fishes. As discussed in Chapter 9, *Geology, Soils, and Seismicity,* construction of proposed components would include grading, excavation, trenching, or other construction-related activities that could loosen soils and increase the risk of erosion or sediment transport. Increases in sedimentation and turbidity have been shown to adversely affect fish physiology, behavior, and habitat. The effects of turbidity on fish include gill trauma, avoidance of habitat, changes in forage ability, increased predation risk, and reduced territoriality. The deposition of excessive fine sediment on the stream bottom could eliminate habitat for aquatic insects (a food source for fish); reduce density, biomass, numbers, and diversity of aquatic insects and aquatic vegetation; and reduce the quality of spawning habitat for fish. Impacts to special-status fish from water quality include reduction in habitat quality, injury, or mortality. These impacts would be considered significant.

Construction activities that take place near these creeks and rivers, such as existing grid improvement pipelines EXGRID-02, EXGRID-05, and EXGRID-06, could result in discharges of hazardous materials if adequate precautions are not taken. As described in Chapter 11, *Hazards and Hazardous Materials*, the City would comply with all local, state, and federal regulations concerning hazardous materials handling and containment during construction of Program components. This includes standards for any secondary containment and countermeasures for

hazardous materials used in construction and operation, and spill response procedures in case of an accidental release. Implementation of these requirements would prevent substantial hazardous materials-related water quality impacts from occurring during construction activities.

As discussed in Chapter 12, *Hydrology and Water Quality*, water quality impacts of Program activities would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements. Implementation of Mitigation Measure HYD/WQ-1 would further reduce soil erosion. Implementation of Mitigation Measure HYD/WQ-1 would reduce this impact to a level that is **less than significant with mitigation**.

Future Grid Pipelines FTGRID-01 and FTGRID-04

Construction-related impacts to special-status fish and their habitat would be minimized by using trenchless or other non-open cut construction techniques for these future grid components crossing the Tuolumne River and Dry Creek. Impacts to special-status fish and their habitat may result from a frac-out of drilling fluids during trenchless construction. Drilling fluids typically consist of bentonite, which is non-toxic to aquatic life. However, a frac-out may result in a temporary increase in turbidity or sedimentation that can adversely affect aquatic organisms by covering spawning and feeding areas, and clogging fish gills. These impacts are considered significant. Mitigation Measure HYD/WQ-1 would be implemented to reduce impacts in the event of a frac-out. With implementation of Mitigation Measure HYD/WQ-1, this impact would be **less than significant with mitigation**.

Trenchless construction under the Tuolumne River and/or Dry Creek would not result in any noise or vibration impacts on fish. Vibration from the drilling machinery is minimal and because the tunneling operation occurs below the river, it would be attenuated to an imperceptible level before it reaches the river bottom. No perceptible noise or vibration would translate into the water. Other non-open cut construction methods are also not anticipated to result in noise or vibration impacts on fish. There would be no impacts from noise or vibration from drilling machinery on special-status fishes.

Construction activities of Program components FTGRID-01 and FTGRID-04 could result in water quality impacts which could adversely affect special-status fish. For example, temporary increases in sediment discharges and increased turbidity, and in the event of an accidental spill, hazardous materials could adversely affect water quality. Such impacts would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements. Implementation of Mitigation Measure HYD/WQ-1 would further reduce soil erosion or loss of topsoil and reduce adverse effects on special-status fish. With implementation of Mitigation Measure HYD/WQ-1, impacts would be **less than significant with mitigation**.

Overall Conclusion

WMP components near the Tuolumne River, and Dry Creek, Stanislaus River, and the San Joaquin River have the potential to adversely affect special-status fish species due to construction-related effects on water quality (e.g., increased sedimentation, turbidity, and hazardous materials in the event of an accidental spill). Implementation of Mitigation Measure HYD/WQ-1 would minimize adverse effects on water quality and reduce adverse effects on special-status fish. In conclusion,

implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation**.

Impact BIO-5: Impacts on Western Pond Turtle (*Less than Significant with Mitigation*)

Potentially suitable habitat for western pond turtle in the study area occurs in the Tuolumne River and Dry Creek. Irrigation ditches with emergent vegetation provide marginally suitable habitat because they generally lack basking sites, the banks are very steep, and they are not perennially inundated. Canals do not provide suitable habitat.

Impacts to western pond turtle would be minimized by using trenchless pipeline construction or other non-open cut pipeline construction where this species is most likely to occur, in the Tuolumne River and Dry Creek. The only Program components that would cross the Tuolumne River or Dry Creek are future grid improvement components FTGRID-01 and FTGRID-04. The majority of Program components would occur in urban portions of Modesto or the outlying WMP service areas where habitat for western pond turtle is not present. Western pond turtle may also occur in upland areas. Construction activities that directly impact western pond turtle or their nests could result in significant impacts to this species.

Mitigation Measure BIO-8 would avoid impacts to suitable habitat for this species to the extent feasible. Where disturbance of suitable habitat is unavoidable, the mitigation measure would require that impacts be minimized through pre-construction surveys, establishment of buffers, and monitoring. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Mitigation Measure BIO-8: Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.

Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, and sloughs where suitable habitat exists. If a turtle is located within the construction area, the turtle will be relocated out of this area (with authorization from the DFG), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented.

- The City or its contractors will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating turtles.
- If a turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site.
- The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat.

- If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).

Impact BIO-6: Impacts on Burrowing Owl (*Less than Significant with Mitigation*)

Burrowing owls could occur within grasslands, agricultural habitats and canal and railroad right of ways where burrows are present. Several buildout pipelines such as those in North Modesto near Cottonwood Drive or South Modesto near Ironside Drive, and a fire flow improvement pipeline in South Modesto near Crows Landing Road and El Paso Avenue occur in ruderal grasslands. Other Program components such as buildout pipelines in the northern portion of the contiguous study area, such as in the vicinity of the intersection of Oakdale Road and Mable Avenue and the vicinity of the intersection of Bangs Avenue and American Avenue, occur in agricultural habitats. Implementation of Mitigation Measure BIO-1 would identify burrowing owl habitat on a project-specific basis. If this species is present in the vicinity of proposed components, construction activities could disturb burrowing owls through noise, visual distraction, or direct impacts to occupied habitat. These impacts would be considered significant. Implementation of Mitigation Measure BIO-11 would reduce impacts to this species. Where disturbance is unavoidable, impacts to burrowing owls would be minimized through establishing buffers around active burrows. If active burrows cannot be avoided, passive relocation techniques may be used. If relocation occurs, then compensation would be provided to offset impacts. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Mitigation Measure BIO-9: Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas if Necessary.

Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season (February 1 through August 31), surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented.

If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season. Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW.

If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl

departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.

Impact BIO-7: Impacts on Golden Eagle and Bald Eagle (*Less than Significant*)

Golden eagle and bald eagle are State Fully Protected species. CDFW cannot authorize take of these species. Golden eagles have been observed in the vicinity of the study area (eBird 2017c), and are commonly observed in the canyons/foothills to the west of the study area. In central California, golden eagles nest primarily in large trees and cliffs within open grasslands and oak savanna, and occasionally in oak woodland and open shrublands (Hunt et al. 1999). The study area provides marginal foraging habitat and nesting is unlikely.

Bald eagles have been observed in canyons/foothills to the west of the study area and in the vicinity of the study area (ebird.org 2017c). In California, the majority of bald eagles nest in conifer trees near reservoirs (Jackman and Jenkins 2004). Typically, bald eagles forage near open water (rivers, lakes, reservoirs) where fish or waterfowl are abundant (USFWS 2007a). The Tuolumne, San Joaquin, and Stanislaus rivers provide potential foraging habitat. Large trees along the San Joaquin, Tuolumne, and Stanislaus rivers are potential roost sites. Bald eagles are generally winter visitors in the Central Valley; nesting within the vicinity of the study area is unlikely. There are no published reports of nest sites on the San Joaquin Valley floor.

Impacts to non-breeding golden and bald eagles may include visual distractions, noise, and possibly temporary displacement from suitable foraging areas. Project activities are not likely to reduce fitness, affect breeding, result in "take" of these species, or result in any substantial adverse impacts to eagles. Therefore, impacts to golden and bald eagles would be **less than significant**.

Impact BIO-8: Impacts on Raptors, Including Special-status Species (*Less than Significant with Mitigation*)

Numerous raptors are known to nest and forage in habitats in the study area. Non-listed raptors commonly observed in the vicinity of the study area include red-tailed hawk, American kestrel, red-shouldered hawk, and merlin (*Falco columbarius*), among others. Special-status raptors (excluding burrowing owls, golden eagle, and bald eagle) known to occur in the vicinity of the study area include Swainson's hawk, white-tailed kite, and northern harrier (Table 7-1). These species have been observed in the vicinity of the study area and are known to nest locally. Riparian trees along the Tuolumne River, Stanislaus River, and Dry Creek provide potential nesting habitat for Swainson's hawk and white-tailed kite; isolated mature trees in adjacent fields may also be used for nesting. These raptors commonly forage in agricultural fields. Northern harriers nest on the ground in open areas, and may nest in agricultural fields. Program components near riparian

habitat include future grid pipeline improvements FTGRID-01 and FTGRID-04, and existing grid improvement pipelines EXGRID-02, EXGRID-05, and EXGRID-06. Although the majority of Program pipelines are within existing roadways, many of these roadways are located adjacent to agricultural habitat.

Construction in the vicinity of raptor nest sites could disturb nesting raptors through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., tree removal or ground disturbance). Impacts to Swainson's hawk and white-tailed kite would be minimized by using trenchless construction techniques for future grid pipeline improvement FTGRID-01 and FTGRID-04 for crossing of the Tuolumne River and Dry Creek, where nesting is most likely to occur. However, special-status raptors could nest in relatively close proximity to trenchless construction operations, and in other portions of the study area. Thus, there would be the potential for disturbance of nesting raptors. Impacts that result in nest abandonment, nest failure, or reduced health or vigor of nestlings are considered significant.

Construction of Program components such as such as new tanks (e.g., North and South Modesto storage tanks) and wells in agricultural or grassland habitat could result in the loss of suitable foraging habitat for Swainson's hawk. This impact would be considered significant.

Implementation of **Mitigation Measure BIO-10 (Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species)**, which would require preconstruction surveys for nesting raptors and establishment of no-disturbance buffers, and **Mitigation Measure BIO-11 (Compensate for Loss of Raptor Foraging Habitat)**, which would require mitigation for the loss of suitable foraging habitat, would reduce this impact to **less than significant with mitigation.**

Mitigation Measure BIO-10: Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species.

The City shall implement the following measures.

- If ground and vegetation disturbing activities occur between February 1 and September 15, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests.

- If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.

Mitigation Measure BIO-11: Compensate for Loss of Raptor Foraging Habitat.

The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's

hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's Hawk foraging habitat mitigation bank that covers the Proposed study area, such as the Dutchman Creek Conservation Bank.

The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program components are assumed to be within 1 mile of an active Swainson's Hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows:

- 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's Hawk; or

- 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands.

The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.

Impact BIO-9: Impacts on Special-status Passerine Species and Birds Protected under the MBTA (*Less than Significant with Mitigation*)

Program Components (except Future Grid Improvements FTGRID-01 and FTGRID-04)

Special-status passerines that may nest in the vicinity of Program components include tricolored blackbird, loggerhead shrike (*Lanius ludovicianus*), yellow-breasted chat (*Icteria virens*) and yellow warbler (*Dendroica petechia*). These special-status passerines nest in riparian habitat. Program components near riparian habitat include existing grid improvement pipelines EXGRID-02, EXGRID-05, and EXGRID-06. Various birds protected by the MBTA could also occur in the vicinity of any Program components.

Construction could disturb nesting passerines through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Nest failure or removal of a nest are considered significant impacts.

Implementation of **Mitigation Measure BIO-12 (Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas if Necessary)** would minimize impacts to passerines by conducting pre-construction surveys during the nesting season and establishing buffers around active nests. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Future Grid Pipelines FTGRID-01 and FTGRID-04

Portions of the future grid pipelines FTGRID-01 and FTGRID-04 cross sensitive habitat in the Tuolumne River and Dry Creek where nesting of special-status passerines are most likely to occur. Impacts would be minimized by using trenchless construction techniques for activities crossing these habitats. However, construction could still disturb nesting passerines through generation of noise, visual distraction, or direct impacts to occupied nests (e.g., vegetation removal or ground disturbance). Nest failure or removal of a nest are considered significant impacts. Implementation of Mitigation Measure BIO-14 would minimize impacts to passerines by conducting pre-construction surveys during the nesting season and establishing buffers around active nests. With implementation of this mitigation measure, impacts would be **less than significant with mitigation**.

Overall Conclusion

Construction activities that cross the Tuolumne River and Dry Creek could affect habitat where special-status passerines are likely to be present. Implementation of Mitigation Measure BIO-12 would minimize adverse effects by conducting pre-construction surveys during nesting season and establishing buffers around active nests. In conclusion, implementation of this mitigation measure would reduce the Proposed Program's overall impact to **less than significant with mitigation**.

> **Mitigation Measure BIO-12: Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas if Necessary.**
>
> The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required.
>
> If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.

Impact BIO-10: Impacts on Special-status Mammals (*Less than Significant*)

Special-status mammals with the potential to occur in the vicinity of the Proposed Program include western red bat (*Lasiurus blossevillii*), American badger (*Taxidea taxus*), riparian brush rabbit (*Sylvilagus bachmani riparius*), and riparian woodrat (*Neotoma fuscipes riparia*). Breeding of western red bats are strongly associated with Central Valley riparian habitat, especially mature stands of cottonwoods (*Populus* spp.) and sycamores (*Platanus racemosa*) (Pierson et al. 2006),

and this species may roost in trees along the Tuolumne River and Dry Creek. The only Program components that would cross these habitats are future grid pipelines FTGRID-01 and FTGRID-04. Riparian trees would not be removed for construction of the proposed components. Non-riparian trees in the vicinity of Program components are generally located in areas with a relatively high level of human activity. The proximity to human activity makes it unlikely that these trees would be used as special-status bat habitat. The Tuolumne River and Dry Creek floodplain provide potential foraging and dispersal habitat for badgers. Impacts to western red bat and American badger would be minimized by using trenchless construction techniques in the riparian areas where these species may occur. A captively-bred population of riparian brush rabbit has been released into San Joaquin River National Wildlife Refuge, near the Grayson outlying service area. A population of riparian woodrat has also been discovered in this Wildlife Refuge (USFWS 2012b). These species could potentially occur in riparian habitat adjacent to Grayson. However, no Program activities would occur in riparian habitat adjacent to Grayson. For these reasons, impacts to special-status mammals would be **less than significant**.

Impact BIO-11: Impacts on Riparian Habitat and Other Sensitive Natural Communities (*Less than Significant with Mitigation*)

Future grid pipelines FTGRID-01 and FTGRID-04 would traverse riparian habitat associated with Dry Creek and the Tuolumne River, respectively. Impacts to riparian habitat would be avoided by the use of trenchless construction techniques in riparian habitat. If a frac-out were to occur beneath riparian habitat, direct impacts on this habitat could occur.

Additionally, although the majority of Program components would take place in urban/developed habitats, vernal pool habitat may be present in areas where Program components would be constructed in grasslands and pastures. Vernal pool habitats would be identified on a project-specific basis. Construction-related impacts on vernal pool habitats could include sedimentation or alteration in drainage patterns. These impacts are considered significant. Implementation of Mitigation Measure HYD/WQ-1, which would require preparation of a frac-out Contingency Plan; and Mitigation Measures BIO-3 and BIO-4, which would require avoidance and minimization of impacts on vernal pools, would reduce this impact to **less than significant with mitigation**.

Impact BIO-12: Impacts on Federally Protected Wetlands (*Less than Significant with Mitigation*)

Program Components (except Future Grid Pipelines FTGRID-01 and FTGRID-04)

The study area contains wetlands and waters that are likely to be regulated by the USACE and the USEPA under Section 404 the CWA. In the study area, the Tuolumne River is considered Traditional Navigable Waters of the U.S., as is the San Joaquin River adjacent to the Grayson outlying service area and the Stanislaus River adjacent to the Del Rio outlying service area. Other wetlands and waters with a "significant nexus" to the Tuolumne, San Joaquin, or Stanislaus rivers would also be considered jurisdictional waters of the U.S. Wetlands and waters would be preliminarily identified during implementation of Mitigation Measure BIO-1. Drainages excavated wholly in uplands and draining only uplands are not likely to be jurisdictional features.

Program components located in or adjacent to wetlands and waters could cause impacts to wetlands or waters through temporary or permanent fill, and erosion or sedimentation. Implementation of Mitigation Measure HYD/WQ-1 which would reduce sedimentation; **BIO-13**

(Avoid and Minimize Impacts on Federally Protected Wetlands), which would avoid and minimize impacts to wetlands to the maximum extent practicable; and **BIO-14 (Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State)**, which requires regulatory permits for work in wetlands and waters and compensatory mitigation for unavoidable impacts to wetlands and waters, would reduce this impact to **less than significant with mitigation**.

Future Grid Pipelines FTGRID-01 and FTGRID-04

FTGRID-01 and FTGRID-04 would avoid impacts on wetlands and waters through the use of trenchless pipeline construction for crossings of Dry Creek and the Tuolumne River. If a frac-out were to occur beneath wetlands, direct impacts could occur. Implementation of Mitigation Measure HYD/WQ-1, which require preparation of a Frac-out Contingency Plan would reduce impacts to wetlands and waters. Other impacts to wetlands and waters could occur through temporary or permanent fill, and erosion or sedimentation. Implementation of Mitigation Measures HYD/WQ-1, BIO-13, and BIO-14 would reduce this impact to **less than significant with mitigation**.

Overall Conclusion

Construction of Program components could result in impacts to wetlands or waters. Implementation of Mitigation Measures HYD/WQ-1, BIO-13, and BIO-14 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-13: Avoid and Minimize Impacts on Federally Protected Wetlands.

The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands.

If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of Mitigation Measure BIO-14. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters. Mitigation Measure HYD/WQ-1 would also be implemented to minimize construction-related effects on wetlands and waters. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.

Mitigation Measure BIO-14: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.

The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory

Mitigation for Losses of Aquatic Resources (73 Fed. Reg. 19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.

Impact BIO-13: Impacts on Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites (*Less than Significant with Mitigation*)

Program Components (Except Future Grid Pipelines FTGRID-01 and FTGRID-04)

The majority of Program components (except FTGRID-01 and FTGRID-04, addressed below) would be constructed in previously developed areas or agricultural lands that do not function as a significant movement corridor for fish and wildlife. Some wildlife breeding does occur in agricultural lands and wetlands.

Impacts on breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season (through implementation of Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, and BIO-12). Open-cut pipeline construction would create temporary barriers to wildlife movement in agricultural lands and ruderal habitat, a significant impact. Impacts of open-cuts on wildlife movement would be minimized by implementation of **Mitigation Measure BIO-15 (Install Temporary Trench Plates over Open Trenches)**, which requires that trenches be covered at the end of each work day. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season. In addition, impacts to breeding wildlife would be minimized by conducting pre-construction surveys during the breeding season and implementing appropriate measures, such as no-work buffer areas if necessary, to minimize impacts on breeding wildlife (see Mitigation Measures BIO-8, BIO-9, BIO-11, and BIO-12). These Program components would not create any permanent barriers to wildlife movement or permanently disrupt breeding sites. With implementation of the above mitigation measures, impacts would be **less than significant with mitigation**.

Future Grid Pipelines FTGRID-01 and FTGRID-04

As described in Section 7.3.3, several fish and wildlife species utilize the Tuolumne River, and to a lesser degree Dry Creek, and adjacent riparian habitat as breeding sites and a migration corridor. Additionally, wildlife breeding does occur in agricultural lands and non-riparian wetlands. Impacts to wildlife migration and breeding in these riverine and riparian areas would be avoided by the use of trenchless construction methods.

In addition, impacts to breeding wildlife from future grid pipelines FTGRID-01 and FTGRID-04 would be minimized by conducting pre-construction surveys during the breeding season (see Mitigation Measures BIO-8, BIO-10, BIO-11, and BIO-12). Open-cut pipeline construction would create temporary barriers to wildlife movement, a significant impact. Impacts of open-cuts on wildlife movement would be minimized by implementation of Mitigation Measure BIO-15, which requires that trenches be covered at the end of each work day. Some mature trees which provide suitable nesting habitat for raptors may be removed during construction, but outside of the raptor nesting season. These Program components would not create any permanent barriers to wildlife movement or permanently disrupt breeding sites. With implementation of the above mitigation measures, impacts would be **less than significant with mitigation**.

Overall Conclusion

Construction of most WMP components would occur in developed areas or agricultural lands that do not function as wildlife movement corridors for fish and wildlife but open-cut pipeline construction could temporarily create barriers to wildlife movement. Implementation of Mitigation Measures BIO-8, BIO-9, BIO-10, BIO-11, BIO-12, and BIO-15 would minimize adverse effects. In conclusion, implementation of these mitigation measures would reduce the Proposed Program's overall impact to **less than significant with mitigation.**

Mitigation Measure BIO-15: Install Temporary Trench Plates over Open Trenches.

The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.

Impact BIO-14: Conflict with Local Ordinances or Policies Protecting Biological Resources (*Less than Significant with Mitigation*)

Implementation of Mitigation Measures BIO-1 through BIO-15 would ensure that the Proposed Program would be consisted with all local ordinances and policies protecting biological resource; reducing impacts to a level that is **less than significant with mitigation**.

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Chapter 8
CULTURAL, TRIBAL, AND PALEONTOLOGICAL RESOURCES

8.1 Overview

This chapter describes the regulatory setting, the study area's cultural resources setting, and impacts of the Proposed Program related to cultural and paleontological resources. Cultural resources include prehistoric and historic-era archaeological sites; tribal cultural resources (TCRs) or traditional cultural properties (TCPs); and historic-era buildings, structures, landscapes, districts, and linear features. Prehistoric archaeological sites are places where Native Americans lived or carried out activities during the prehistoric period, which is generally defined as before the early 1800s in the study area. Historic-era archaeological sites reflect the activities of people after initial exploration and settlement in the region during the early 1800s. Native American sites can also reflect the historic era. Prehistoric and historic-era sites may contain artifacts, cultural features, subsistence remains, and/or human burials. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. TCPs can include TCRs, but they also encompass resources that are culturally important to any community.

Paleontological resources are the fossil remains of prehistoric flora and fauna, or traces of evidence of the existence of prehistoric flora and fauna. This chapter addresses the occurrence of paleontological resources within the project area and the impact that construction activities and operation of the Proposed Program will have on scientifically important fossil remains, as identified in the State CEQA Guidelines. The analysis presented in this chapter conforms to the Society of Vertebrate Paleontology criteria.

The purpose of this chapter is to describe the regulatory setting associated with cultural and paleontological resources, the affected environment for these resources, project impacts on cultural and paleontological resources, and mitigation measures that would reduce these impacts.

The following key data sources support this chapter:

- Records search from the Central California Information Center of the California Historical Resources System at California State University, Stanislaus;
- Files search from the California Native American Heritage Commission (NAHC); and
- The City of Modesto Urban Area General Plan (City of Modesto 2019a) and Urban Area General Plan Master EIR (City of Modesto 2019b); and
- the City of Turlock, City of Ceres, and Stanislaus County general plans (City of Turlock 2012; City of Ceres 2018; Stanislaus County 2016).

8.2 Regulatory Setting

8.2.1 Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to cultural resources and the Proposed Program.

8.2.2 State Laws, Regulations, and Policies

CEQA and State CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Special limitations on measures to avoid, conserve, preserve, or mitigate significant effects on unique archaeological resources are also provided under Pub. Res. Code Section 21083.2. These limitations do not apply if an archaeological site is also a CEQA-defined "historical resource," as defined below. (CEQA Guidelines Section15064.5(c).)

Section 15064.5 of the State CEQA Guidelines notes that, "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historical resource or to its immediate surroundings, such that the significance of the historical resource would be materially impaired. Lead agencies must identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource before they approve such projects. "Historical resources" are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Pub. Res. Code Section 5024.1[k]);
- included in a local register of historic resources (Pub. Res. Code Sectoin5020.1) or identified as significant in an historic resource survey meeting the requirements of Pub. Res. Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

State CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under California Health and Safety Code Section 7050.5 and Pub. Res. Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well

as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

State CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with State CEQA Guidelines and other applicable statutes.

Assembly Bill (AB) 52, which was approved in September 2014 and which went into effect on January 1, 2015, requires that lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in State CEQA Guidelines Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Pub. Res. Code Section 21074 (a, b, and c), TCRs are:

(A.1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

a. Included or determined to be eligible for inclusion in the CRHR; or

b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(A.2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(B) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(C) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

AB 52 establishes a consultation process between California Native American tribes and lead agencies. A lead agency must notify a tribe of proposed CEQA projects if the tribe has submitted a request to a lead agency to be so notified. The lead agency then provides the tribe with formal notice of CEQA projects, and the tribe must request formal consultation within 30 days of receiving notice. As part of formal AB 52 consultation, measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to Pub. Res. Code

Section 21080.3.2. Pub. Res. Code Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs; treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource; conservation easements; and protecting the resource.

California Register of Historical Resources

Pub. Res. Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Are associated with the lives of persons important in our past;

3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

8.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019a) contains a progressive and extensive list of policies related to archaeological and cultural resources under Chapter VII, Environmental Resources, Open Spaces and Conservation. As is often the case with general plans that involve historic urban centers, many of the City of Modesto's policies focus on the preservation of buildings that reflect the history and historic character of the city. Because the Proposed Program will not directly impact the buildings in Modesto's historic district, those policies will not be presented here in detail. It is sufficient to note that projects involving the demolition or alteration of buildings aged 50 years or older will require evaluation for NRHP and CRHR eligibility, if the buildings haven't previously been evaluated, by a professional historian or architectural historian prior to project approval. This requirement is also applicable when construction is proposed within 100 feet of a building that is older than 50 years. Other policies identify measures to mitigate damage to historically significant buildings, which generally defer to the U.S. Secretary of the Interior's *Standards for the Treatment of Historic Properties*, and guidelines provided by the State Historic Preservation Officer.

A number of policies address potential impacts to archaeological resources for projects that involve ground disturbance. Those policies that are the most pertinent to the Proposed Program are listed below.

Policy VII-F.2[h]. When proposed development lies within an archaeological resource study area (shown on Figure V-7-1 in the Master EIR), analyze the area to determine whether it has a high potential to have been used by Native Americans or contain prehistoric deposits. Resources to be utilized include archival research through the Central California Information Center at CSU Stanislaus, preliminary surface field reconnaissance, consultations with the Native American Heritage Commission (NAHC) and individuals and organizations identified by the NAHC. Any archaeological resources discovered shall be recorded and mapped. Require an evaluation of the significance of any such resources only when proposed development might affect the resources.

Policy VII-F.2[i]. If land designated or proposed to be designated for development is discovered through archival research, consultation or by chance, to contain a sacred or traditional place, consult with the NAHC and the appropriate Native American groups and individuals for the purpose of determining the level of confidentiality required to protect the cultural place and for the purpose of developing treatment with appropriate dignity of the cultural place in any corresponding management plan. Avoid and preserve sacred sites whenever feasible.

Policy VII-F.2[j]. Consistent with AB 52 of 2016, conduct consultations with the Native American Heritage Commission and the appropriate Native American Tribes for the purpose of determining the level of confidentiality required to protect identified cultural place(s), if any, and for the purpose of developing treatment with appropriate dignity of said cultural place(s) in any corresponding management plan. Avoid and preserve sacred sites whenever feasible.

Policy VII-F.2[k]. For any project that involves earth-disturbing activities within the archaeological resource study area, or on a site determined to be archaeologically or culturally sensitive by City staff through consultation with Native American tribes or bands and a qualified archaeologist, require the project applicant to implement the following mitigation measures, at a minimum:

(1) Where excavation or construction would occur outside of areas where development has occurred, or where excavation / construction would occur at depths greater than existing foundations, roads, and/or trenches in the immediate vicinity, evaluate the site via a qualified archaeologist retained by the project applicant. Said evaluation would include at minimum a records search, a Phase I pedestrian survey, and preparation of an archaeological report containing the results of this cultural resources inventory identification effort for submittal to the Central California Information Center. If a Phase II archaeological evaluation is recommended, complete a report of the survey and any excavations with recommendations prior to project approval;

(2) In the event of the discovery of a burial, human bone, or suspected human bone, immediately halt all excavation or grading in the vicinity of the find and protect the area of the find. The project applicant shall immediately notify the Modesto Police Department and County Coroner of the find and comply with the provisions of California Health and Safety Code Section 7050.5, including California Public

Resources Code Section 5097.98, if applicable. If human remains are identified, also retain a Native American monitor at the applicant's expense;

(3) A qualified archaeological monitor will be present and will have the authority to stop and redirect grading activities, in consultation with the Native Americans and their designated monitors, to evaluate the significance of any Native American archaeological resources discovered on the property; and,

(4) Relinquish ownership of all Native American human remains and/or artifacts that are found within the project area, to the appropriate Native American Most Likely Descendent (MLD), as assigned by the Native American Heritage Commission, for proper treatment and disposition. The MLD will decide whether or not standard archaeological analysis will be allowed on human remains and associated artifacts from burials.

(5) If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find, and the City's Planning Manager shall be notified. A qualified paleontologist shall evaluate the resource and prepare a proposed mitigation plan in accordance with Society of Vertebrate Paleontology guidelines. The proposed mitigation plan may include a field survey of additional construction areas, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Policy VII-F.2[l]. Whenever possible, avoid disturbing or damaging archaeological resources. Preservation in place to maintain the relationship between the artifacts and the archaeological context is the preferred manner of mitigating impacts to archaeological sites. Preservation may be accomplished by:

(1) Planning construction to avoid archaeological sites;

(2) Incorporating sites within parks, green space, or other open space;

(3) Covering the sites with a layer of chemically stable soil; and/or,

(4) Deeding the site into a permanent conservation easement.

When in-place mitigation is not feasible, data recovery through excavation may be necessary. A data recovery plan, which makes provisions for adequately recovering the scientifically consequential information about the site, shall be prepared and adopted prior to any excavation being undertaken. Such studies must be deposited with the Central California Information Center in Turlock, California. Special rules apply to any archaeological sites known to contain human remains (Health and Safety Code Section 7050.5; Guidelines Section 15126.4(b)).

Data recovery shall not be required if the lead agency determines that testing or studies already completed have adequately recovered the necessary data, provided

that the data have already been documented in another EIR and are available for review at the California Historical Resource Regional Information Center (Guidelines Section 15126.4(b)).

Policy VII-F.2[m]. Allow reasonable time for the qualified archaeologist to notify the proper authorities for a more detailed inspection and examination of the exposed cultural resources. During this time, excavation and construction would not be allowed in the immediate vicinity of the find; however, those activities could continue in other areas of the project site.

Policy VII-F.2[n]. If any find is determined to be significant by the qualified archaeologist, representatives of the construction contractor and the City, the qualified archaeologist, and a representative of the Native American community (if the discovery is an aboriginal burial) will meet to determine the appropriate course of action.

Policy VII-F.2[o]. All cultural materials recovered as part of a monitoring program are subject to scientific analysis, professional museum curation, and a report prepared according to current professional standards.

Policy VII-F.3[a]. Any project subject to CEQA that involves substantial earth-disturbing activities should require consultation by the applicant for the purposes of determining archaeological and cultural resources impacts and creating appropriate mitigation to address such impacts.

Policy VII-F.3[b]. Any project that involves earth-disturbing activities within previously undisturbed soils in an area determined to be archaeologically or culturally sensitive by the City of Modesto through consultation with Native American tribes or bands and a qualified archaeologist should be subject to archaeological and Native American monitoring during all ground-disturbing activities.

Policy VII-F.3[c]. Any project that involves earth-disturbing activities within previously undisturbed soils in an area determined to be archaeologically or culturally sensitive by the City of Modesto through consultation with Native American tribes or bands and a qualified archaeologist should be required to carry out the following mitigation measures, at a minimum:

(1) If prehistoric archaeological remains are discovered during project construction (inadvertent discoveries), all work in the area of the find shall cease, and a qualified archaeologist should be retained by the project sponsor to investigate the find, and make recommendations as to treatment and mitigation. In the event of the discovery of a burial, human bone, or suspected human bone all excavation or grading in the vicinity of the find should halt immediately and the area of the find should be protected and the project applicant immediately should notify the County Coroner of the find and comply with the provisions of California Health and Safety Code Section 7050.5, including California Public Resources Code Section 5097.98, if applicable. If human remains are identified, the project sponsor should also retain a Native American monitor;

(2) A qualified archaeological monitor should be present and should have the authority to stop and redirect grading activities, in consultation with the Native Americans and their designated monitors, to evaluate the significance of any Native American archaeological resources discovered on the property;

(3) Native American monitors from the appropriate Native American Tribes, as determined by the NAHC should be allowed to monitor all groundbreaking activities, including all archaeological testing and data recovery excavations that are likely to affect Native American resources, as determined by a qualified archaeologist. The project proponent should be responsible for compensating Native American monitors. If human remains are discovered, the NAHC should assign a Most Likely Descendent (MLD); and,

(4) The landowner agrees to relinquish ownership of all Native American human remains and associated burial artifacts that are found within the project area, to the appropriate Native American MLD, as assigned by the NAHC, for proper treatment and disposition. The MLD will decide whether or not standard archaeological analysis will be allowed on human remains and associated artifacts from burials.

(5) If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find, and the City's Planning Manager shall be notified. A qualified paleontologist shall evaluate the resource and prepare a proposed mitigation plan in accordance with Society of Vertebrate Paleontology guidelines. The proposed mitigation plan may include a field survey of additional construction areas, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

These and other policies require proactive consultation by project proponents with Native American tribes for any projects that may impact culturally sensitive sites.

Furthermore, through the Modesto General Plan Update Final Master EIR (20019b), the City of Modesto has adopted Policies VII.F-2[h] through VII.F-3[c] to reduce a project's impacts to archaeological and/or historic resources to a less-than-significant level except where a significant historic building would be demolished. These policies largely reflect those found in the State CEQA Guidelines (Pub. Res. Code 15126.4[b]), including the treatment of human remains (Health and Safety Code Section 7050.5). The policies also outline procedures for address the unanticipated discovery of archaeological materials and human remains during construction.

Landmark Preservation Ordinance

The City of Modesto passed a Landmark Preservation ordinance in 1988 after many of the historic downtown buildings were demolished (City of Modesto 2017). The ordinance recognizes the cultural and economic benefits of preserving the City's historic landmarks. In addition to establishing a Modesto Landmark Preservation Committee, in response to the ordinance the City commissioned a survey of historic resources and developed a list of Designated Landmark Preservation Sites. The ordinance also provides guidance for review of permit applications for

proposed alterations, relocations, demolition or new construction on properties that are listed on the Designated Landmark list.

City of Turlock General Plan

The City of Turlock General Plan (2012) advocates for protection of cultural resources within the city and states that "[t]he Study Area has a rich history of human habitation, including primarily the Yocut tribe of Native Americans. Related to more recent history, a substantial inventory of historically significant buildings in Turlock has been developed, which contribute to the City's visual interest and unique sense of place." Table 7-4 in the Conservation Element of the general plan identifies five buildings designated as historic resources. The following policies address cultural resources:

> **7.5-a Protect Archaeological Resources.** Protect significant archaeological resources in the Study Area that may be identified during construction.
>
> **7.5-b Preserve Historic Places.** Integrate historic preservation into planning for Downtown and other areas with historic significance.

Ceres General Plan 2035

Policies in the *Ceres General Plan 2035* (2018) seek to develop a systematic and comprehensive historic preservation program to ensure that Ceres' historically and architecturally significant resources are preserved, as well as to identify and preserve any archaeological resources that may be disturbed by development activities. The following goals and policies are relevant to the Proposed Program:

Goal 4.H. Preserve and maintain sites, structures and landscapes that serve as significant, visible reminders of the city's social, architectural and agricultural history.

> **Policy 4.H.2. Reuse of Historic Buildings.** Encourage the preservation, maintenance, and adaptive reuse of existing historic buildings in the Planning Area in order to prevent demolition and disrepair.
>
> **Policy 4.H.3. Preservation of Historic Buildings.** Identify and preserve buildings of local historic importance Downtown and in surrounding areas through inclusion on the local historic resources register and the Historic Building Code.

Goal 4.I. Protect and preserve archaeological and paleontological resources in the Planning Area.

> **Policy 4.I.1. Archaeological Sites.** Refer development proposals that may adversely affect archaeological sites to the California Archaeological Inventory at California State University, Stanislaus. Do not knowingly approve any public or private project that may adversely affect an archaeological site without first consulting the California Archaeological Inventory, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendations of a qualified archaeologist. City implementation of this policy shall be guided by Appendix K of the CEQA Guidelines.

Policy 4.I.2. Archaeological Resource Management. Establish a procedure for the management of archaeological materials found on-site during a development, including the following provisions:

- If significant resources are known or suspected to be present on a site, require that a qualified archaeologist conduct monitoring of building demolition and/or construction grading activities.
- If materials are found on-site during construction activities, require that work be halted until a qualified archaeologist evaluates the find and makes a recommendation for the preservation in place or recovery of the resource.

Policy 4.I.3. Preservation in Place. Seek to preserve discovered archaeological resources in place in order to maintain the relationship between the artifacts and their archaeological context, where feasible. Preservation can be achieved through measures such as planning construction to avoid archaeological sites, incorporating sites within open space areas, capping the site prior to construction, and permanently protecting the site using a conservation easement.

Policy 4.I.4. Paleontological Resources. Establish a procedure for the management of paleontological materials found on-site during a development, including the following provisions:

- If materials are found on-site during grading, require that work be halted until a qualified professional evaluates the find to determine if it represents a significant paleontological resource.
- If the resource is determined to be significant, the paleontologist shall supervise removal of the material and determine the most appropriate archival storage of the material.
- Appropriate materials shall be prepared, catalogued, and archived at the applicant's expense and shall be retained within Stanislaus County if feasible.

Goal 4.J. Protect Ceres' Native American heritage.

Policy 4.J.1. Native American Outreach. Conduct outreach to local Native American tribal contacts to identify potential opportunities to highlight the area's Native American history

Policy 4.J.2. Coordination with Native American Tribes. Proactively coordinate with the local Native American tribes in the review and protection of any tribal cultural resources discovered at development sites.

Policy 4.J.3. Tribal Cultural Resources. Avoid the disturbance of tribal cultural resources and, where possible, seek to preserve resources in place, exploring opportunities for permanent protection of the resources where feasible. Treat tribal cultural resources with respect.

Policy 4.J.4. Native American Consultation. Conduct project specific Native American consultation early in the development review process to ensure adequate data recovery and mitigation for adverse impacts to significant Native American sites. Ensure that City staff and local developers are aware of their responsibilities to facilitate Native American consultation under SB 18 and AB 52.

Stanislaus County General Plan

The Stanislaus County General Plan (Stanislaus County 2016) has the following goal and policy pertaining to cultural resources listed in its Conservation and Open Space chapter.

Goal Eight. Preserve areas of national, state, regional, a local historical importance.

Policy Twenty-four. The County will support the preservation of Stanislaus County's cultural legacy of archeological, historical, and paleontological resources for future generations.

8.3 Environmental Setting

8.3.1 Prehistory

Very little archaeological work has been conducted in the Modesto area or in the San Joaquin Valley in general; therefore, the archaeology of the study area is understood within the prehistoric context developed for the Central Valley as a whole. Since the early 1930s, various schemes have been set forth by researchers to organize the archaeological data of California into a chronological framework. As reported by Moratto (1984), the Central Valley sequence established by Lillard, Heizer, and Fenenga in 1939 is particularly notable. Based on archaeological investigations in the lower Sacramento Valley, Lillard and colleagues divided human prehistory into three broad cultural horizons: Early, Middle, and Late. This chronology was first known as the Delta sequence and later became the basis of Richard Beardsley's Central California Taxonomic System (CCTS). The system relies on the identification of characteristics such as burial patterns, shell bead types, stone tools, and the types of locations where the sites tend to occur. These traits and characteristics are used to identify an archaeological resource as belonging to a specific time period.

The CCTS has continued to undergo significant refinement but remains the framework within which California archaeologists explain cultural change. The general system is still widely used by archaeologists, but it has been expanded and revised to include economic and technological strategies, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods. The current chronology (Rosenthal et al. 2010:150) for central California archaeology includes:

- Paleo-Indian: 11,550–8550 B.C.
- Lower Archaic: 8550–5550 B.C.
- Middle Archaic: 5550–550 B.C.
- Upper Archaic: 550 B.C. to 1100 A.D.
- Emergent: 1100 A.D. to Historic

The Paleo-Indian Period (11,550–8,550 B.C.) is generally characterized by big-game hunters occupying broad geographic areas. Archaeological deposits from the Paleo-Indian period are rarely found in the Central Valley, however, and those that have been identified have largely been discovered at the south end of the San Joaquin Valley near Tulare Lake. Post-depositional processes, mainly glacial outwash occurring at the end of the Pleistocene Epoch, either destroyed or deeply buried much of the existing evidence of human activity in the region from this period. As result, little is known about Paleo-Indian lifeways in the region (Moratto 1984).

Similar to the preceding period, the Lower Archaic Period (8550–5550 B.C.) is presumed to reflect a mobile population that continued to hunt big game. Few localities in the Central Valley are associated with this period, and those that have been found are largely isolated artifacts consisting of large wide-stemmed and leaf-shaped projectile points, along with flaked stone crescents. Only two sites with associated deposits of faunal and shell remains have been identified for the Lower Archaic Period, one at Buena Vista Lake in the southern San Joaquin Valley (Rosenthal et al. 2010:151-152) and one in Sacramento (Tremaine 2008). Some sites in the Sierra Nevada foothills from this period, however, indicate the use of milling equipment (hand stones and milling stones) to process seeds and nuts.

The Middle Archaic Period (5550–550 B.C.) indicates a shift to a more settled way of life that is reflected by substantial, though often deeply buried, archaeological sites with artifacts that are more elaborate in design, imply a more diverse subsistence regime, and indicate interregional trade. Sites are often situated along the major rivers and streams within the Central Valley, emphasizing a focus on riverine and marsh habitats. The Windmiller Tradition or Pattern, which was first identified in sites around the Sacramento–San Joaquin River Delta, is often considered representative of this period. Characteristic artifacts from this period include a variety of fish hooks and spears; large stemmed and leaf-shaped projectile points of obsidian and chert; shaped charmstones of alabaster, steatite, or marble; and a variety of Haliotis and Olivella shell ornaments and beads, respectively. Mortars and pestles, associated with acorn preparation, became commonplace by the middle of the period. The presence of ventrally and dorsally extended burials with a western orientation is particularly indicative of the Windmiller Pattern.

Increased sedentism and technological specialization are evidenced during the Upper Archaic Period (550 B.C. to 1100 A.D.), as populations exploited more diverse resources and established trade relationships. Mortars and pestles became the primary ground stone implements, suggesting that acorns had become a more important dietary staple. Regional diversity in artifact styles, such as Haliotis shell ornaments, bone tools, and ground charmstones or plummets, became more pronounced; burial postures also varied.

Archaeological sites from the Emergent Period (A.D. 1100 to the historic period) indicate increased social complexity and the development of large, central villages with resident political leaders and specialized activity sites. Enhanced regional diversity in terms of artifact styles, housing, and interment methods is evident in the archeological record. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a variety of shell and stone beads and ornaments.

8.3.2 Ethnography

The Modesto area lies within the ancestral territory of the Northern Valley Yokuts. "Yokuts" is a term applied to a large and diverse group of people inhabiting the San Joaquin Valley and Sierra Nevada foothills of central California. The Northern Valley Yokuts inhabited a 40- to 60-mile-wide area straddling the San Joaquin River, south of the Mokelumne River, east of the Diablo Range, and north of the sharp bend that the San Joaquin River takes to the east-northeast near Mendota in Fresno County. The Southern Valley Yokuts inhabited the San Joaquin Valley south of the bend in the river. Although they were divided geographically and ecologically, the two groups have a common linguistic heritage (Wallace 1978:462).

The Northern Valley tribes closely resembled the Yokuts groups to the south, although there were some cultural differences. The northerners had greater access to salmon and acorns, two important dietary resources, and some of their religious practices reflected the influences of groups to their north, such as the Miwok. While inhumation was the usual practice in the southern valley, the Northern Valley Yokuts either cremated their dead or buried them in a flexed position (Wallace 1978:464, 468). A chief headed the tribal villages, which averaged around 300 people. Family houses were round or oval, sunken, with a conically shaped pole frame, and covered with tule mats. Each village also had a lodge for dances and other community functions, as well as a sweathouse (Wallace 1978:462-464).

The Northern Valley Yokuts built their riverside villages on elevated areas along the water's edge to avoid the spring floods, which were a result of heavy Sierra Nevada snow melts. Living beside rivers and streams provided plentiful river perch, Sacramento pike, salmon, and sturgeon. Hunting provided waterfowl such as geese and ducks, as well as terrestrial animals such as antelope, elk, and brown bear, although by all indications, fish constituted most of their diet. The surrounding woodland, grasslands, and marshes provided acorns, tule root, and seeds.

The Northern Valley Yokuts used bone harpoon tips for fishing, stone sinkers for nets, chert projectile points for hunting, mortars and pestles, scrapers, knives, and bone awl tools to procure and process food. Marine shells, procured from coastal tribes, were used for necklaces and other adornments, and marine shell beads sometimes accompanied the deceased. The Yokuts used tule reed rafts to navigate the waterways for fishing and fowling. They also manufactured intricate baskets for a variety of purposes, including storing, cooking, eating, winnowing, hopper mortars, the transport of food materials, and ritual. Very little is known of the Northern Valley Yokuts' clothing, but drawings of their tattoos show that they served not only as a decoration but also as a form of identity (Wallace 1978:464).

Initially, the Diablo Range served as a natural barrier against heavy recruitment of Native Californians by the Spanish, who established missions along the coast. By the early 19th century, however, Spanish and (later) Mexican missionaries began to explore the inner valleys in search of potential neophytes. The Yokuts resisted recruitment and California Indians from a variety of tribes sought refuge among the Yokuts after fleeing the missions. Introduced diseases, destruction of traditional resources from cattle grazing, and forced relocation took a heavy toll on the Northern Yokuts. Despite decades of hardship, many individuals who can trace their ancestry to the Northern Valley Yokuts continue to live and thrive in the Central Valley and throughout California and the United States.

8.3.3 History

The historic era began in Stanislaus County when the first Spanish expedition entered the San Joaquin Valley in 1806 under the leadership of Gabriel Moraga. Traveling north and northwest through the region in search of possible mission sites, Moraga's party explored along what came to be known as the Stanislaus River. Moraga visited the area again in 1808 and 1810 (Kyle et al. 2002:516-517).

After Mexico gained its independence from Spain in 1822, two additional expedition forces entered the area; however, the purposes of their campaigns were no longer exploratory. Soldiers were sent into the Central Valley to recover stolen animals and punish hostile Indians in order to reduce the attacks upon coastal towns, missions, and ranchos.

Americans also began to enter the region during the Mexican period. In 1827 and 1828, Jedediah Smith entered the San Joaquin Valley through the Tejon Pass and trapped beavers along the San Joaquin, Kings, and other rivers and streams that flowed from the Sierra. Smith was followed by fellow trappers such as Peter Ogden, Ewing Young, Kit Carson, and Joseph Walker.

The first permanent European settlement may have occurred in Stanislaus County when two land grants were issued by the Mexican government in 1843. The first was the Rancho El Pescadero on the west side of the San Joaquin River near the border of what would eventually become San Joaquin County. The second was the Rancheria del Rio de Estanislao located north of the Stanislaus River bordering Tuolumne County. Two additional land grants were issued the following year. These were the Rancho del Puerto and Rancho Orestimba, both of which were on the west side of Tuolumne County near Rancho Pescadero (eReferenceDesk 2017).

The City of Modesto came into being in 1870 when the Central Pacific Railroad announced that the location would be the end point of the next extension of the rail line as it progressed south through the Central Valley (Kyle et al. 2002:521). By the time the tracks were completed in November of that year, a viable town had already been established by entrepreneurs (City of Modesto 2016). Modesto residents were among California's first irrigation advocates, and by 1904 a system of canals had been constructed to allow more productive agriculture. During the 19th century, grain-growing was Stanislaus County's dominant agricultural activity. Stock-raising, dairy farming, fruit and nut orchards, and vegetable farming all became more important over time. When Prohibition ended in 1933, the Gallo brothers came to Modesto, bringing the wine business to the area on an industrial scale. In the 21st century, almonds and walnuts are the most lucrative local crops, although fruit, vegetables, livestock, and other agricultural products remain important. Modesto is still the most important town in the region and is the Stanislaus County seat.

8.3.4 Paleontology

The standard guidelines for assessment and mitigation of adverse impacts on paleontological resources set forth by the Society of Vertebrate Paleontology (2010) have been used to establish three categories of sensitivity. These are High, Low, and Undetermined. Areas that consist of rock that is not of sedimentary origin and that have not been known to produce fossils are considered low sensitivity areas and monitoring is not required during project construction or operation. Additionally, when it can be demonstrated that the conditions of the unconsolidated sediments are such that fossils could not form in these sediments, and that any fossils found in the sediments

could not be considered in situ, they would have minimal scientific value, and the area would be considered low sensitivity. When both of these low sensitivity conditions were present, it was considered that no significant paleontological resource was present and consequently no impact would occur.

8.3.5 Cultural Resources Studies

For the purposes of this DEIR, a cultural resources evaluation based on archival data was conducted for the Proposed Program. These data were obtained largely through the Central California Information Center of the California Historical Resources System at California State University, Stanislaus, as well as the City of Modesto Urban Area General Plan and the General Plan Master Environmental Impact Report.

Archaeological Resources

Archaeological resources reflect past human occupation by the presence of cultural artifacts within or on top of the soil matrix. Prehistoric materials in the study area would most likely include obsidian, basalt, and chert flaked stone tools (e.g., projectile points, knives, and choppers) and tool-making debris, or milling equipment such as mortars and pestles. Darkened soils resulting from extended occupation of an area, along with residue from food preparation (animal bone, seeds, freshwater shell) might also be found. Historic era archaeological remains could include but not be limited to building foundations and structural remains (e.g., bricks, nails) and refuse such as glass and ceramic fragments, metal tools or tool fragments, tin cans, or items of clothing (buttons, buckles, shoes, etc.).

Information about cultural resources within the larger study area was available in the Modesto General Plan Update Final Master EIR (City of Modesto 2019b). The EIR noted that archaeological surveys have been sporadic throughout the area and have largely been conducted as part of urban development. Nevertheless, prehistoric and historic-era sites have been previously recorded primarily along waterways (Dry Creek, and the Stanislaus and Tuolumne rivers) and on adjacent terraces, which are considered particularly sensitive for archaeological remains. No specific information about archaeological sites is found within the Stanislaus County General Plan, and no other information about archaeological sites within the study area outside of the City of Modesto was garnered through archival research. However, record searches for other specific projects within the County has yielded information to suggest that types and locations of archaeological resources within the County would closely follow those identified within the City of Modesto.

Soils information presented in Chapter 9, *Geology*, *Soils, and Seismicity*, and geoarchaeological data (Rosenthal et al. 2004) indicates that the soils within the study area (Dinuba loamy sand, Hanford sandy loam, Madera sandy loam, Modesto clay loam, San Joaquin sandy loam, and Tujunga loamy sand) date from the late Pleistocene through the Holocene Epoch and have depths of up to 80 inches. These soils are largely considered to have low sensitivity ratings for buried archaeological remains, although the Hanford series is considered to be moderately sensitive and the Tujunga is rated as highly sensitive for buried archaeological remains (Rosenthal et al. 2004). Proximity to the Tuolumne and San Joaquin Rivers, and Dry Creek increases the potential for buried resources within the study area.

Built Environment Resources

A large number of built environment resources have been identified within the Program service area. These include residences, industrial and public buildings, railroads, and bridges along with historic-era features such as the Modesto Arch. The City of Modesto maintains a list of Designated Landmark Preservation Sites that contains 59 resources.[1] All of the built environment resources on the list are within the Program service area. The City of Modesto list also contains some landscape features as Landmark Preservation Sites. These include heritage trees, landscaped parks and cemeteries, and one is a golf course.

The Office of Historic Preservation's Directory of Properties in the Historic Property Data File for Stanislaus County (2017) indicates that hundreds of built resources within the Program service area, all within the City of Modesto, have been evaluated for eligibility for inclusion in the NRHP. (Although resources in Ceres, Turlock, and in other regions of Stanislaus County are also listed, they are not within the study area.) Most of these were determined to be not eligible for the NRHP, with the second largest category identified as resources that are contributors to a district that is eligible for listing by a local government. Six resources have been listed or are eligible for listing on the NRHP (City of Modesto 2019a, 2019b). One resource, the McHenry Mansion, has been dedicated as a State of California Point of Historical Interest (2019b).

Native American Coordination

The City of Modesto notified Native American tribes with a traditional and cultural affiliation with the region about the Proposed Project on June 8, 2016, pursuant to the requirements of Pub. Res. Code 21080.3.1 (also known as AB 52). Three tribes were contacted: the Northern Valley Yokuts Tribe, Southern Sierra Miwuk Nation, and Tule River Indian Tribe.

The City has received letters of interest from two Native American tribes pursuant to Pub. Res. Code Section 21080.3.1(b)(1) for all proposed City CEQA projects: the Northern Valley Yokuts and the Ione Band of Miwok Indians. However, after examining the map of the Ione Band's indigenous territory that accompanied their letter, it was determined that the Proposed Program is outside of the tribe's area of interest. A request to the NAHC for a list of tribes with a traditional and cultural association with the Proposed Program resulted in the identification of two tribes. In addition to the Northern Valley Yokuts, the NAHC listed the Southern Sierra Miwok Nation. The City notified these tribes about the Proposed Program pursuant in a letter dated June 8, 2016. A notification letter was also sent to the Tule River Indian Tribe, as there had been consultation with that tribe in the past. The City did not receive requests for formal consultation under Pub. Res. Code Section 21080.3.1(b)(2) from any of those contacted. Follow-up phone calls were made to the Tule River Indian Tribe but did not receive a response. All correspondence with tribes related to Pub. Res. Code Section 21080.3.1, including the Tribes' letters of interest to the City, is provided in Appendix C. None of the tribes requested consultation on the Proposed Program or expressed concerns about potential significant resources within the study area.

[1] The Central California Information Center of the California Historical Resources Information System, located at California State University, Stanislaus, provided the list, which was last updated in March 2011. The list is also available at www.modestogov.com/1966/City-Landmarks. Although 59 resources are identified, the list notes that one resource has been removed from landmark status, one has been demolished, and one has been moved.

Tribal Cultural Resources

No TCRs have been identified within the Program study area.

Paleontological Resources

A desktop study was conducted to assess the sensitivity of the study area or paleontological resources. The study area is predominantly underlain by Pleistocene-aged alluvial fan deposits of the Modesto Formation (California Geological Survey USGS 1991). The Modesto Formation is composed primarily of unconsolidated, unweathered, coarse sand and sandy silt along the upper portions of the unit. The older, deeper portions of this unit shift to more consolidated, slightly weathered, well-sorted silt and fine sand, silty sand, and sandy silt. The Modesto Formation is overlain by Holocene alluvium, particularly along watercourses within the study area. The Holocene soils can have depths of 6.5 feet.

The Modesto Formation has yielded a wide variety of fossils within Stanislaus County, including extinct land mammals such as ground sloths, mammoths, camels, and bison, among others. Fossils of petrified wood, clam shells, fishes, birds, and amphibians have also been uncovered (California Energy Commission 2017).

8.4 Impact Analysis

8.4.1 Methodology

The following impact analysis was conducted based on the records search, review of previous investigations and historic maps, and Native American consultation. The City of Modesto Urban Area General Plan and General Plan Master Environmental Impact Report provided city-wide data that supported the analysis of program-level impacts. The Stanislaus County General Plan also provided information for study areas within the County.

Consultation with tribes who have a traditional and cultural affiliation with the Proposed Project area followed the protocols outlined under Pub. Res. Code Sections 21080.3.1, 21080.3.2, and 21082.3, and guidelines provided by the NAHC (n.d.), and the Governor's Office of Planning and Research (2017; n.d.). Because tribes notified pursuant to Pub. Res. Code Sections 21080.3.1 declined consultation on the Program, the City determined that no TCRs exist within the study area.

8.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on cultural, tribal, and paleontological resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of a TCR, defined in Pub. Res. Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Pub. Res. Code Section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Pub. Res. Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Pub. Res. Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

CEQA does not establish criteria for determining significance of paleontological resources.

8.4.3 Environmental Impacts

Impact CR-1: Impacts on Known Historic, Archaeological, or Tribal Resources (*Less than Significant*)

The Proposed Program would occur partially within Modesto's incorporated limits and partially outside its incorporated limits, within the jurisdiction of the County but within the City's sphere of influence (SOI). Program-related activities would also take place within the cities of Ceres, Turlock, and Waterford. The County and the other cities do not maintain policies or requirements related to cultural resources that are more restrictive or otherwise incompatible with those of the City of Modesto. All subsequent projects, including those in Del Rio, Empire, Grayson, Hickman, and Salida, would implement existing City of Modesto Urban Area General Plan policies related to the investigation and mitigation of historical and archaeological impacts, as necessary.

The Proposed Program does not propose demolition or modification of existing structures. Based on the program information available, the Proposed Program does not appear to propose work in proximity to any of the historic resources listed in the cities of Ceres, Modesto, Turlock, or Waterford. Therefore, it is unlikely that the Proposed Program would adversely affect known, listed historic resources, and the WSER evaluated in this PEIR would have a less-than-significant impact on historic resources.

All site-specific projects proposed as part of the Proposed Program would be required to adhere to federal (if applicable), state, and local policies pertaining to the survey and impact analysis of historic resources. Accordingly, if subsequent projects propose to demolish or modify existing structures, or if they propose work within 100 feet of structures, those structures would need to be evaluated for their significance and for any project-related impacts and mitigation. Adherence to City of Modesto Urban Area General Plan Section VII-F Policies 2-c, 2-d, 2-e, 2-f, 2-h, 2-i, 2-j,

and 2-k (presented above) would ensure that subsequent projects would avoid significant impacts on historic resources, and that any unforeseen significant impacts would be less than significant.

It also should be noted that if subsequent projects were to use federal funds and proposed the demolition or modification of existing structures, such projects would be subject to historic property review and consultation with the SHPO under Section 106 of the National Historic Preservation Act (NHPA). Any impacts identified during that review would be mitigated fully by site-specific measures developed in consultation with the SHPO. As a result, impacts on known historic, archaeological, or tribal resources would be **less than significant**.

Impact CR-2: Impacts on Previously Undiscovered Archaeological Resources (*Less than Significant with Mitigation*)

Individual projects implemented pursuant to the Proposed Program would entail extensive excavation work to install certain components. Construction grading and earthmoving activities could disturb previously undiscovered archaeological deposits or buried historic resources. Proposed pipelines, storage tanks, and groundwater wells to be located within riverbeds and otherwise adjacent to natural channels are particularly susceptible to encountering Native American artifacts. The City has adopted guidelines to aid project compliance with requirements for archaeological resources analysis, and subsequent projects would be required to adhere to these guidelines.

Projects proposing earthwork within archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k (presented above), which requires reconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Improvements proposing earthwork outside of archaeological resource study areas must also adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c (also presented above), which require the applicant (the City, in this case) to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures..

All proposed improvements must adhere to City of Modesto Urban Area General Plan Section VII-F Policies 2-k, 2-l, 2-m, 2-n, 2-o, and 3-c (presented above), which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process. Adherence to existing City policies regarding archaeological investigation, construction requirements, and proper mitigation for any resources discovered on the site, as well as to **Mitigation Measure CR-1** below, would ensure that specific improvements would result in impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources that are **less than significant with mitigation**.

Mitigation Measure CR-1: Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work.

The City shall implement the following measures. Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive

information about the kinds of archaeological materials that could be present and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.

Impact CR-3: Disturb Any Human Remains, Including those Interred Outside of Dedicated Cemeteries (*Less than Significant with Mitigation*)

Based on the Program information for the proposed infrastructure improvements, the Proposed Program does not appear to propose earthwork in proximity to any known cemeteries or Native American burial grounds. However, projects implemented as part of the Proposed Program have the potential to disturb previously undiscovered human remains. All of the City of Modesto Urban Area General Plan policies identified above for Impact CR-2 also pertain to the discovery of human remains. Specifically, Policy VII-F.2[k](2) (presented above) cites California Health and Safety Code 7050.5, which requires the cessation of further excavation and disturbance in the event of a human remains discovery, and coordination with the County coroner and (if applicable) the Native American Heritage Commission (NAHC) regarding further action.

Adherence to Policy VII-F.2[k] and the California Health and Safety Code, as well as Mitigation Measure CR-1, will ensure that subsequent projects' impacts on human remains would be **less than significant with mitigation**.

Impact CR-4: Impacts on Paleontological Resources (*Less than Significant*)

The study area is underlain by the Modesto Formation, which is considered a paleontologically-sensitive rock unit under the Society of Vertebrate Paleontology guidelines (2010), as discussed earlier in this section. Records of vertebrate fossil localities throughout the San Joaquin Valley and all sediments referable to the Modesto Formation suggest there is a potential for uncovering additional similar fossil remains during construction-related earthmoving activities, as part of implementation of the proposed program. Though the large majority of the study area has been developed, and any fossil remains have previously been removed, there are parcels within the study area that have not yet been developed, and the proposed program would require excavation activities in undisturbed sediments below existing development. As such, the potential for damage to unique, scientifically important fossils during construction-related activities at project sites is considered a potentially significant impact. For projects located within the Baseline Developed and the Planned Urbanized areas identified in the City's General Plan, Policies VII-F.2[k](5) and VII-F.3[c](5) would apply. If paleontological resources are discovered during ground-disturbing activities, these policies would require that construction work cease in the vicinity of a find, ensure that a qualified paleontologist evaluates the resource, and that appropriate measures are taken to mitigate effects on paleontological resources if discovered. Therefore, impacts on paleontological resources would be **less than significant**.

Impact CR-5: Potential for a Substantial Adverse Impact on Tribal Cultural Resources (*Less than Significant with Mitigation*)

TCRs have not been identified within the Program study area. None of the tribes contacted under Pub. Res. Code Section 21080.3.1 have responded with concerns about the potential impact of the Program on TCRs; thus, the City, as the lead CEQA agency, has determined that no known TCRs exist within the study area.,

Project grading and earthmoving activities could disturb previously undiscovered archaeological deposits or buried historic resources. Proposed pipelines, storage tanks, and groundwater wells to be located within riverbeds and otherwise adjacent to natural channels are particularly susceptible to encountering Native American artifacts. The City has adopted guidelines to aid project compliance with requirements for archaeological resources analysis, and subsequent projects would be required to adhere to these guidelines.

Projects proposing earthwork within archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Sections VII-F Policy 2-k, which requires preconstruction archaeological investigations on the site and implementation of avoidance measures, if necessary. Projects proposing earthwork outside of archaeological resource study areas must adhere to City of Modesto Urban Area General Plan Section VII-F Policy 2-k as well as Policies 3-a, 3-b, and 3-c, which require the applicant to consult with Native American tribes and that a qualified archaeologist evaluate the site to determine its archaeological and cultural sensitivity, and if so, implement avoidance and minimization measures. All subsequent projects must adhere to the City of Modesto Urban Area General Plan Section VII-F policies listed above, including 2-l, 2-m, 2-n, and 2-o, which outline mitigation procedures that would prevent impacts on the unearthed resources and require on-site activity to cease until an archaeological site investigation is performed, in the event that resources are uncovered during construction. Construction specifications for individual projects must stipulate the relevant procedures that are to be followed in the event that cultural resources are encountered during the construction process. Adherence to existing City policies regarding archaeological investigations, construction requirements, and proper mitigation for any resources discovered on the site, as well as to Mitigation Measure CR-1, would ensure that specific projects implemented subsequent to the Proposed Program would result in impacts on archaeological resources that meet CEQA's definition of historic resources or unique archaeological resources being **less than significant with mitigation.**

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Chapter 9
GEOLOGY, SOILS, AND SEISMICITY

9.1 Overview

This chapter identifies geologic, soils, and seismic conditions that could affect or be affected by the Proposed Program. The chapter describes the regulatory setting, affected environment, impacts, and proposed mitigation measures based on published geologic reports and maps, a site-specific technical report, and professional expertise. The discussion of impacts considers the consequences of the Proposed Program on geology, soils, and seismicity, and how geology, soils, and seismicity would affect the Proposed Program. This chapter also evaluates whether project implementation would expose people or structures to substantial geologic hazards.

9.2 Regulatory Setting

9.2.1 Federal Laws, Regulations, and Policies

Section 402 of the Clean Water Act/National Pollutant Discharge Elimination System

The CWA is discussed in detail in Chapter 12, *Hydrology and Water Quality*. Because Section 402 of CWA is directly relevant to earthwork, additional information is provided here.

The 1987 amendments to CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. As described in Chapter 12, the USEPA has delegated to SWRCB the authority for the NPDES program in California, where it is implemented by the state's nine RWQCBs. Under the NPDES Phase II Rule, any construction activity disturbing 1 acre or more must obtain coverage under the state's General Permit for Storm Water Discharges Associated with Construction Activity (General Permit). General Permit applicants are required to prepare a Notice of Intent stating that stormwater will be discharged from a construction site, and that a SWPPP describes the BMPs will be implemented to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS; National Science Foundation (NSF); Federal Emergency Management Agency (FEMA); and National Institute of Standards and Technology. Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2017) are as follows:

1. Develop effective measures to reduce earthquake hazards;
2. Reduce facilities and system vulnerabilities to earthquakes;
3. Improve earthquake hazards identification and risk assessment methods; and
4. Improve the understanding of earthquakes and their effects.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

9.2.2 State Laws, Regulations, and Policies

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act; Pub. Res. Code Section 2621 *et seq*.) was enacted in 1972 to reduce the risk to life and property from surface faulting in California. The Alquist-Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during the Holocene (defined for purposes of the act as referring to approximately the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (Bryant and Hart 2007). Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

As with the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (SHMA) (Pub. Res. Code Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. The Alquist-Priolo Act addresses surface fault rupture, including strong groundshaking, liquefaction, and seismically induced landslides, and SHMA provisions are similar in concept in that the State is charged with identifying and mapping areas of risk of strong groundshaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within Seismic Hazard Zones.

Under SHMA, permit review is the primary mechanism by which development can be locally regulated. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been performed and measures to reduce potential damage have been incorporated into the development plans.

California Building Code and International Building Code

Title 24 of the CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California. CBC standards determine building strength based on regional seismic risks and recommended construction specifications to provide building strength above that risk.

9.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019) identifies the Stanislaus and Tuolumne Rivers, and Dry Creek, as regional parks. The River Greenway Program, which guides development within the Stanislaus River, Tuolumne River, and Dry Creek Comprehensive Planning Districts, includes the following policies that are potentially relevant to the Proposed Program and analysis of geology, soils, and seismicity:

> **Policy VII-K [a].** Continue to use building codes as the primary tool for reducing seismic risk in structures. The current version of the California Building Code, as adopted by the City of Modesto, is intended to ensure that buildings resist major earthquakes of the intensity or severity of the strongest experience in California, without collapse, but with some structural as well as nonstructural damage. In most structures, it is expected that structural damage could be limited to repairable damage, even in a major earthquake.
>
> **Policy VII-K[b].** Require all new buildings in the City to be built under the seismic requirements of the current adopted California Building Code.
>
> **Policy VII-K[c].** Enforce provisions of the Alquist-Priolo Earthquake Fault Zoning Act.
>
> **Policy VII-N[a].** Any construction that occurs as a result of the General Plan must conform with the current UBC regulations, which address seismic safety of new structures and slope requirements. As appropriate, require a geotechnical analysis prior to tentative map approval in order to ascertain site-specific subsurface information necessary to estimate foundation conditions. These geotechnical studies should reference and make use of the most recent regional geologic maps available from the California Department of Conservation Division of Mines and Geology.
>
> **Policy VII-N[e].** Control construction-related fluvial erosion by a construction erosion control program filed with the City's Public Works Department and kept current throughout site development.
>
> **Policy VII-N[f].** Include "best management practices" in the erosion control program, as appropriate, given the specific circumstances of the site and/or project. Table V-9-2 in the Master Environmental Impact Report presents examples of best management practices.

Ceres General Plan 2035

The *Ceres General Plan 2035* (City of Ceres 2018) guides land use and development in the City of Ceres. Goals and policies in the General Plan related to geology, soils, and seismicity that are potentially relevant to the Proposed Program include the following:

Chapter 7, Health and Safety

Goal 5.G Minimize loss of life, injury, and property damage due to seismic and geologic hazards.

Policies

5.G.1 Building Standards. Require that new structures and alterations to existing structures be designed and constructed according to current California Building Code standards to minimize risk to the safety of occupants during groundshaking.

5.G.2 Improving Knowledge Base. Support investigations conducted by local, State, and federal agencies and other institutions to refine, enlarge, and improve the body of knowledge regarding active fault zones, unstable areas, groundshaking risks, and other seismic conditions in the Planning Area.

5.G.6 Expansive Soils. Limit the siting of structures across soil materials of substantially different expansive properties. Require appropriate design specifications, including special slabs, where foundations are located in areas of expansive soils.

5.G.7 Critical Facilities. Ensure that critical facilities are sited, designed, and maintained to avoid damage from seismic and geologic hazards. Critical facilities include, but are not limited to, water and wastewater facilities, energy stations, hospitals, and public safety facilities.

Critical facilities provide services and functions essential to a community, especially during and after a disaster.

City of Turlock General Plan

The *City of Turlock General Plan* (City of Turlock 2012) guides land use and development in the City of Turlock. Goals and policies in the General Plan related to geology, soils, and seismicity that are potentially relevant to the Proposed Project include:

Conservation Element

Policy 7.2-c. Protect Soil and Water. Work to protect and restore natural resources essential for agricultural production.

Policy 7.2-n. Minimize Soil Erosion. Require new development to implement measures to minimize soil erosion related to construction. Identify erosion-minimizing site preparation and grading techniques in the zoning code.

Policy 10.2-a. Minimize Geologic and Seismic Risk. Continue to use building codes as the primary tool for reducing seismic risk in structures.

Policy 10.2-b. Meet Most Current Seismic Standards. Continue to require all new buildings in the City to be built under the seismic requirements of the latest adopted California Building Code.

Policy 10.2-e. Ensure Stability of Sensitive Public Facilities. Evaluate the structural stability and ability to withstand seismic activity of water tanks, underground utilities, berms, and other sensitive public facilities, and plan for any needed repairs.

Policy 10.2-f. Require Geotechnical Investigations for Proposed Critical Structures. Require that geotechnical investigations be prepared for all proposed critical structures (including water towers and wastewater lift stations) before construction or approval of building permits, if deemed necessary. The investigation shall include estimation of the maximum credible earthquake, maximum ground acceleration, duration, and the potential for ground failure because of liquefaction or differential settling.

Policy 10.2-g. Require Investigations for All Development on Sites Where Soils Pose Risk. Require soils reports for new development projects where soils pose a potential geologic risk, and use the information to determine appropriate permitting requirements, if deemed necessary.

Policy 10.2-h. Require Erosion Control Plans. Require new development to include grading and erosion control plans prepared by a qualified engineer or land surveyor.

Stanislaus County General Plan

The *Stanislaus County General Plan* guides land use and development in the unincorporated area of Stanislaus County (Stanislaus County 2016). Goals and policies in the general plan related to geology, soils, and seismicity that are potentially relevant to the Proposed Program include the following:

Conservation and Open Space Element

Goal Two. Conserve water resources and protect water quality in the County.

Policy Five. Protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

Policy Six. Preserve natural vegetation to protect waterways from bank erosion and siltation.

Goal Five. Reserve, as open space, lands subject to natural disaster in order to minimize loss of life and property of residents of Stanislaus County.

Policy Sixteen. Discourage development on lands that are subject to flooding, landslide, faulting, or any natural disaster to minimize loss of life and property.

Safety Element

Goal One. Prevent loss of life and reduce property damage as a result of natural disasters.

Policy Three. Development should not be allowed in areas that are particularly susceptible to seismic hazard.

Goal Two. Minimize the effects of hazardous conditions that might cause loss of life and property.

Policy Six. All new development shall be designed to reduce safety and health hazards.

Policy Fourteen. The County will continue to enforce state-mandated structural Health and Safety Codes, including but not limited to the California Building Code, the International Property Maintenance Code, the California Fire Code, the California Plumbing Code, California Electric Code, and Title 24, Parts 1-9.

Agricultural Element

Goal Three. Protect the natural resources that sustain our agricultural industry.

Policy 3.7. The County shall encourage the conservation of soil resources.

9.3 Environmental Setting

The City and study area are located in the Great Valley geomorphic province of central California, often referred to as the California Central Valley. This geomorphic province is characterized as an alluvial plain approximately 50 miles wide and 400 miles long (California Geologic Survey [CGS] 2002). The study area is within the central portion of the province at the northern end of the San Joaquin Valley. The San Joaquin Valley is bounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Coast Range (Diablo Range) to the west.

The study area is drained primarily by the Tuolumne River, a major tributary to the San Joaquin River. The study area is predominantly flat. Elevations within the City range from approximately 115 feet above msl in the northeast portion of the City to 45 feet msl along the Tuolumne River in West Modesto. Most variations in surface topography are relatively minor with more appreciable changes in grade directly adjacent to surface water features (e.g., Tuolumne River and Dry Creek).

9.3.1 Local Geology

Alluvial sediments have accumulated within the San Joaquin Basin almost persistently for the last 160 million years. Most sediments in the basin derive from the Sierra Nevada Mountains, transported and deposited by the alluvial fans draining the western flanks of that range. Some sediments originate from the Diablo Range on the western side of the basin.

The study area is predominantly underlain by Pleistocene-aged alluvial fan deposits of the Modesto Formation (USGS 1991). The Modesto Formation is composed primarily of unconsolidated, unweathered, coarse sand and sandy silt along the upper portions of the unit. The older, deeper portions of this unit shift to more consolidated, slightly weathered, well-sorted silt and fine sand, silty sand, and sandy silt. Younger (Holocene) alluvium is present near the Tuolumne River area.

9.3.2 Soils

Soils consist of younger alluvial material overlying older alluvium. These alluvial fan soils are highly fertile and productive for agricultural uses. Soil associations mapped as occurring in the study area generally consist of: Hanford, Dinuba, Tujunga, or Modesto (Natural Resources Conservation Service [NRCS] 2016). Most soils range from moderate to deep (i.e., 36 to 80+ inches deep).

The most predominant soils in the study area consist of sandy loam to fine sandy loam of the Hanford, Dinuba, Tujunga associations. In general, these soils are considered moderately well to well drained, with a very low to medium runoff class (NRCS 2016). A west-southwest trending band of Modesto loam-clay loam traverses the area north of Dry Creek. This association is moderately well drained with a high runoff class (NRCS 2016). San Joaquin and Madera sandy loams underlie the northeastern portion of the study area. These soils are moderately drained with very high runoff and a hardpan layer approximately 20 to 40 inches below ground surface (bgs) (NRCS 2016).

Soil Erosion

Soil erosion is the process of removing soil particles from a land surface by wind, water, or gravity. Factors influencing the rate of erosion may include climatic conditions, soil composition and roughness, soil moisture, ground cover, and topography and slope. Most natural erosion occurs slowly. However, ground-disturbing construction activities may increase the rate of erosion by exposing bare soils to the effects of wind and/or water. Erosion also may occur along the Tuolumne River and Dry Creek corridors during storm events, resulting in locally significant bank failures if the bank integrity is comprised or not properly stabilized. In general, the erosion potential of most soils in the study area are considered low to moderate, with the exception of the Dinuba sandy loam, which is highly susceptible to erosion by water and Modesto clay loam, which is susceptible to erosion by wind (NRCS 2016).

Expansive Soils

Expansive soils are predominantly composed of clays and can undergo substantial volume change in response to changes in moisture content. During wetting and drying cycles, expansive soils may shrink and swell, creating differential ground movements. In general, the expansion potential of most soils in the study area are considered low to moderate, with the exception of Modesto clay loam (NRCS 2016).

9.3.3 Seismicity

California is subjected to enormous tectonic forces stemming from the lateral motion of the Pacific (west) and North American (east) plates moving in opposing directions. The shearing forces of the plate movement results in an extremely fractured boundary referred to as the “San Andreas

Fault Zone." Many smaller active and historic fault zones are associated with the Pacific/North American tectonic movement as well.

The eastern portion of the San Joaquin Valley and study area lies in a region with limited faulting and relatively low seismic activity. Despite limited seismic activity, there have been several large earthquakes that resulted in ground shaking in the study area during the last 200 years. Potential seismic hazards resulting from a regional moderate-to-major earthquake include: fault ground rupture (surface faulting); ground shaking; liquefaction, subsidence, and differential settlement; and landslide, slope failure, and lateral spreading. Discussion of regional seismic faulting and hazards and their potential to occur in the study area is discussed below.

Alquist-Priolo Fault Zones and Ground Rupture

Horizontal and/or vertical surface or ground ruptures can occur during seismic events, typically along existing fault lines. Ground rupture that occurs along a fault trace (mapped location of the intersection(s) of a fault with the ground surface) is referred to as *fault rupture*. Some seismogenic faults (e.g., blind thrusts) do not extend to the ground surface and may not generate fault rupture even during major earthquakes. Other rupturing of the ground surface can occur as the result of slope failure or settlement caused by seismic shaking. Ground ruptures can result in damage to buildings, roads, and underground utilities. The potential for ground rupture depends on the proximity of faults, shaking severity, and local geologic conditions.

Fault areas considered to be of greatest risk are identified as Alquist-Priolo fault zones. No Alquist-Priolo designated fault zones or potentially active faults exist within or near the study area. Most seismic activity in this region stems from the San Andreas Fault Zone and associated fault systems west of the study area. Past evidence of recent fault displacement can be seen throughout the San Andreas Fault Zone and San Francisco Bay area. Active and potentially active faults near the study area are presented in **Table 9-1**.

Table 9-1. Regional Faults in Proximity to the Study Area

Fault	Approximate Distance from Proposed Program	Last Known Major Displacement
San Joaquin Fault (potentially active)	8 miles west	11,700–700,000 years ago; without historical record
Vernalis (inactive)	10 miles west	Within last 1.6 million years; age undifferentiated
Ortigalita Fault Zone, Cottonwood Arm Section (potentially active)	23 miles southwest	11,700–700,000 years ago; without historical record
Foothills Fault System, Southern Reach Section (potentially active)	25 miles east	11,700–700,000 years ago; without historical record

Fault	Approximate Distance from Proposed Program	Last Known Major Displacement
Greenville Fault Zone (active)	25 miles west	1980, Magnitude (M) 5.8
Calaveras Fault Zone, Central Calaveras Section (active)	44 miles southwest	1979, M 5.7 2007, M 5.6
San Andreas Fault Zone, Santa Cruz Mountains Section (active)	50 miles southwest	1989, M 7.2 1906, M 7.9

Sources: CGS 2010; USGS 2016

Ground Shaking

Seismically induced ground shaking can cause substantial damage to structures. The severity of ground shaking experienced at a specific location depends on a variety of factors, such as the magnitude and duration of the seismic event, fault type associated with the event, distance from the epicenter, and physical properties of the underlying geology and soils. The Modified Mercalli Intensity Scale (MMI) of perceived intensity, shown in **Table 9-2,** is based on observed effects and is the current standard used throughout the United States. Less intense earthquakes are typically rated on the basis of individual accounts, whereas higher intensity events are rated based on observed structural damage.

Table 9-2. Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not Felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.

Intensity	Shaking	Description/Damage
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS 1989

Although ground shaking in the Modesto area has historically been very minimal, ground shaking events periodically affect the region. In Stanislaus County, the level of seismic ground shaking decreases from "High" risk along the western border of the County and the foothills of the Diablo Range, to "Moderate" risk in the central part of the County, to "Low" risk in the eastern portion (CGS 2008). The study area lies within the central portion of the County and is considered "Moderate" to "Low" to risk for earthquake shaking potential. In addition, the expected (10 percent chance of occurring in the next 50 years) peak ground shaking (acceleration[1]) in the study area is relatively low at an average of 0.247*g* (CGS 2008).

Differential Settling, Subsidence, and Liquefaction

Settlement of the ground surface can be caused by a number of geologic processes. Settlement is the lowering of the land surface elevation as a result of the compression, compaction, or consolidation of underlying soils, sediment, or rock. These processes are exasperated under increased loading (e.g., additional sediment deposition or construction of structures, including fills) or the withdrawal of groundwater. The processes cause a reduction in the volume of the materials. Compaction and compression generally occur within unconsolidated granular soils or sediment over a relatively short timeframe. Consolidation usually occurs over a longer period (sometimes many years) in saturated finer grained material as pore water (i.e., water within the spaces between sediment grains) is forced out of the sediment structure under loading or groundwater pumping. The potential for differential settlement is dependent upon local geologic conditions, soil properties, and land usage.

[1] Ground shaking is usually quantitatively expressed as the acceleration of movement relative to the acceleration of gravity (*g*).

Surface settlement can be referred to as subsidence, a term generally used for settlement of large magnitude or affecting a large area. Subsidence can also occur following oxidation of buried organic material. Areas consisting of fine-grained sediments (i.e., clays and silts) are more susceptible to ground subsidence. Although mining and extraction activities may also lead to subsidence, excessive pumping of groundwater is the predominant cause for this phenomenon. Historic land subsidence has occurred in large portions of the San Joaquin Valley, with more recent subsidence areas around El Nido and Tulare-Kettleman City (California Department of Water resources [DWR] 2014; DWR 2017a; DWR 2017b). In the Modesto area, the effects of subsidence have been subtler with surface elevations generally 0 to 5 feet lower as compared to 1949 elevations (DWR no date). However, more recent groundwater elevations from local wells within the study area generally show declines in groundwater elevations ranging from 0 to 50 feet below the historical spring low levels (DWR 2014). As such, and in consideration of other basin-wide factors, DWR has classified the San Joaquin Valley Groundwater Basin, Turlock Subbasin as having a low to medium overall potential for future land subsidence, the Modesto Subbasin as having a medium to high overall potential, and the Delta-Mendota Subbasin as having a high overall potential (DWR 2004; DWR 2006a; DWR 2006b; DWR 2017a). Please refer to Chapter 12, *Hydrology and Water Quality*, for further discussion on groundwater resources.

Ground settlement can cause the development of cracks or fissures in the ground surface. When ground settlement is non-uniform or uneven, differential settlement results, potentially inducing stress to structures.

Liquefaction can occur when water-saturated, loose sandy soils suddenly lose strength during seismic shaking. The primary factor that triggers liquefaction is moderate to strong ground shaking. The probability of liquefaction correlates directly with the intensity and duration of ground shaking (i.e., the stronger and/or longer the earthquake, the greater the chance of liquefaction). Additionally, physical properties may increase the susceptibility of soil to liquefaction. Saturated relatively clean/loose granular soils have a relatively high susceptibility for liquefaction while cohesive soils (even if saturated) have a low susceptibility.

No specific liquefaction hazards have been identified in Stanislaus County (Bryant and Hart 2007). However, areas with higher water tables and unconsolidated, granular sandy soils, such as the areas adjacent to the Tuolumne River, may be at increased risk for liquefaction due to the potential for the presence of a high water table and sandy, liquefiable soils.

Landslide, Slope Failure, and Lateral Spreading

Landslides or slope failure may occur in steeply sloped areas (15 percent slope or greater) following heavy rains, seismic events, or human activities (e.g., grading or excavation activities). Similarly, horizontal displacement of gently sloping ground (five percent or less slope) may occur along river banks or exposed embankments, a phenomenon known as lateral spreading. Saturated, loosely consolidated soils and precipitation events increase the likelihood that an earthquake will trigger landslides, slope failure, or lateral spreading.

Modesto and the surrounding area, including the outlying service areas, is relatively flat with little variation in topography. Some gradual slopes may be observed near river terraces and former sand dunes. However, effects of landslides, slope failures, and lateral spreading are negligible throughout most of the Modesto area and the outlying service areas.

9.4 Impact Analysis

9.4.1 Methodology

The methods used to evaluate the environmental impacts of the Proposed Program on geology, soils, and seismicity involved a review and assessment of published maps, professional publications, and reports pertaining to the geology, soils, and seismicity within the study area vicinity. Information reviewed included USGS and CGS geologic maps (USGS 1991; CGS 2002), NRCS soils maps (NRCS 2016), California seismic hazard zone mapping (Bryant and Hart 2007; CGS 2008; CGS 2010; CGS 2002;), DWR groundwater basin information (DWR 2004; 2006a, 2006b; 2017a; 2017b), and USGS historic earthquake data (not cited).

9.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on geology, soils, and seismicity if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
  - Strong seismic ground shaking;
  - Seismic-related ground failure, including liquefaction; or
  - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

The first criterion and sub-criterion regarding rupture of a known earthquake fault are not included in the detailed EIR impact analysis because the Proposed Program is not located within an Alquist-Priolo designated hazard zone. The nearest known active fault (i.e., surface displacement in the last 10,000 years) is the Greenville Fault Zone, approximately 25 miles west (CGS 2010). The nearest potentially active fault (i.e., surface displacement in the last 1.6 million years) is the San Joaquin Fault, approximately 8 miles west of the study area (CGS 2010). Since

there are no known faults in the study area, there would be no impact from ground rupture of a known fault.

In addition, the last criterion regarding use of septic tanks or alternative wastewater disposal systems is not included in the detailed EIR impact analysis as the Proposed Program does not involve construction of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact related to the suitability of soils to support septic tanks or alternative disposal systems.

9.4.3 Environmental Impacts

Impact GEO-1: Cause Damage to Facilities and Exposure of People to Hazards from Strong Seismic Events, Including Ground Shaking or Landslides (*Less than Significant*)

Due to the Proposed Program's substantial distance from active faults and the underlying geologic and soil conditions, the Central Valley generally experiences infrequent, lower levels of ground shaking than many other regions of California. Recent seismic events associated with the San Andreas Fault Zone have resulted in light or moderate ground shaking in the study area. Little to no damage would occur to most newly constructed structures (e.g., storage tanks and groundwater wells) in the Modesto area following ground shaking of this magnitude. Additionally, the City would be required to comply with CBC standards which would further minimize seismic-related impacts by ensuring that all structures are designed and constructed in compliance with California's seismic-related engineering standards. Any potential for foundational or structural damage associated with seismic ground shaking and adverse effects to structures or people would be minimal.

The floor of the Central Valley is relatively flat with only minor changes in topography. Some gradual slopes may be observed near river terraces and the banks of the Tuolumne River and Dry Creek. However, landslides are not likely to occur on or near any of the proposed component sites.

Based on the above, impacts related to seismic ground shaking and landslides would be **less than significant**.

Impact GEO-2: Result in Risk to Property and Life from Expansive Soils (*Less than Significant*)

Soils that contain a relatively high percentage of clay minerals have the potential to shrink and swell with changing moisture conditions. This uneven movement can fracture concrete foundations and footings, resulting in potential damage or failure of infrastructure. In general, most of the study area contains sandy or loamy soils exhibiting low to moderate plasticity characteristics (NRCS 2016). In addition, development of Program facilities (e.g., storage tanks) and upgrades to existing water distribution systems on expansive soils typically can be addressed through suitable design and compliance with CBC seismic standards by designing and building structures to a level of strength appropriate to regional seismic risks. However, the Proposed Program includes numerous components throughout the Modesto area, including areas with underlying soils exhibiting moderate to high expansive characteristics that may result in damage to infrastructure.

The City's Standard Specifications require under Section 11.05 that a comprehensive soils report be prepared for each project in the City. The report must be prepared by a licensed Geologist or Geotechnical Engineer and must include R-values of soil test samples, groundwater elevations, stripping and grading recommendations, and a determination of whether expansive soil is present. Section 11.08 of the City's Standard Specifications further requires that projects be graded/constructed in accordance with the recommendations in the soils report and any additional recommendations provided during construction by the project Geotechnical Engineer. These requirements would ensure that Proposed Program components would not be constructed on expansive soils such as to subject persons or property to substantial risks of harm. Therefore, this impact would be **less than significant**.

Impact GEO-3: Result in Substantial Soil Erosion or Loss of Topsoil (*Less than Significant*)

Construction-related activities would involve disturbance and exposure of soils, which could leave soils susceptible to erosion to precipitation and wind. The Proposed Program would include grading, excavation, trenching, or other activities that could loosen soils and increase the risk of erosion or sediment transport. In addition, construction of some components like the new storage tanks or well pump houses may involve removing, stockpiling, and transporting a substantial volume of topsoil. These impacts are considered significant. As discussed in Chapter 12, *Hydrology and Water Quality*, construction-related impacts on water quality would be avoided or minimized through implementation of BMPs and compliance with the NPDES General Construction Permit and SWPPP requirements. For Program components that would result in disturbance of less than one acre, similar construction-related impacts on water quality due to erosion would be avoided and minimized by complying with the City of Modesto's Standard Specifications which require development of a Local SWPPP or Erosion Control Plan and implementation of stormwater BMPs. Therefore, by implementing BMPs pursuant to either the NPDES General Construction Permit or the City of Modesto's Standard Specifications, this impact would be considered **less than significant**.

Impact GEO-4: Result in Subsidence, Liquefaction, or Collapse Due to Seismic Activity or an Unstable Geologic Unit or Soil (*Less than Significant*)

Under certain conditions, some geologic units or soils can become unstable and lead to landslides, trench collapse, lateral spreading, and liquefaction, especially when construction activities result in exposed soils and/or steep slopes. Construction-related ground-disturbing or excavation activities could alter soil stability. Although most Program construction activities would generally occur in relatively flat areas not at risk from landslides and lateral spreading, excavation and trenching for structures and pipelines would temporarily create potentially unstable slopes. Groundwater would likely not be encountered during shallow excavation and grading activities associated with construction of most Program components, such as storage tanks, and would not require dewatering. The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) outlines specific Excavation and Trenching standards for building (29 CFR Section 1926.650) and utility trenching operations (29 CFR Section 1926.652). To reduce the risk of excavation-related accidents, the City and its contractor(s) would adhere to such OSHA standards.

The Proposed Program would include new and replacement wells within the contiguous and outlying Modesto water service areas, as well as upgrades to existing wells. Concentrated or intensive extraction of groundwater supplies can result in an insular cone of depression and potentially lead to localized plastic deformation or surface collapse of unconsolidated soils during strong seismic groundshaking. This differential settling can compromise the strength or integrity of a structure and damage building foundations and other infrastructure. However, this phenomenon is more prevalent following extensive groundwater withdrawal from soils containing high percentages of fine material (i.e., clays and silts). Soils in the study area predominantly consist of sandy loam to fine sandy loam (NRCS 2016). Due to the physical composition of the soils, subsidence in the Modesto area has historically been minor with surface elevation loss of 0- to 5 feet (compared to 1949 elevations) despite significant observed subsidence in other portions of the San Joaquin Valley (DWR no date). In addition, the Proposed Program was developed in consideration of the operating yield of the Modesto and Turlock groundwater sub-basins to better manage the groundwater basin in consideration of estimates of annual recharge and pumping activities, and to prevent lowering of the groundwater table. Therefore, the potential for the Proposed Program to lead to area subsidence is considered less than significant. For further discussion of groundwater resources, please refer to Chapter 12, *Hydrology and Water Quality*.

Liquefaction may occur in water-saturated soils during moderate to large earthquakes. The potential for liquefaction to occur depends on soil composition, soil saturation levels, and intensity and duration of seismic ground shaking and can lead to severe damage in concrete foundations and infrastructure. Although the study area is located in a seismically limited region, several proposed components would be located near the Tuolumne River and Dry Creek with the potential for the presence of a high water table and sandy, liquefiable soils. Therefore, impacts related to seismic-related ground failure, including liquefaction would be significant if not adequately addressed. Adherence to current CBC standards would reduce these risks by designing and building structures to a level of strength appropriate to regional seismic risks. In addition, as described in Impact GEO-2, per Section 11.08 of the City's Standard Specifications, all WMP components would be graded/constructed in accordance with the recommendations in a required soils report and any additional recommendations provided during construction by the project Geotechnical Engineer. Incorporating the findings and recommendations identified for the project into the final project designs, would reduce significant risks of subsidence, liquefaction, or collapse by ensuring new structures are designed and constructed in a manner that addresses underlying geologic conditions. In addition, the risks of landslides and lateral spreading in the study area would not be substantial. Thus, with adherence to the City's Standard Specifications, adverse effects from unstable geologic units would be **less than significant**.

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Chapter 10
GREENHOUSE GAS EMISSIONS AND ENERGY RESOURCES

10.1 Overview

This chapter describes the regulatory and environmental setting related to greenhouse gases (GHGs) and energy resources and then evaluates impacts related to the Proposed Program's forecasted GHG emissions. The impact evaluation begins by describing the methodology used to evaluate significance and the GHG significance criteria, and then presents the impact evaluation.

10.2 Regulatory Setting

10.2.1 Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting and reporting requirements for large stationary emitters of GHGs. The following sections briefly describe the history and content of the regulatory programs developed to date by USEPA and the U.S. Supreme Court (Court).

The Court ruled for the first time in 2007 that GHG emissions are air pollutants covered under the federal Clean Air Act, in its decision *Massachusetts v. Environmental Protection Agency* (549 U.S. 497). The Court held that GHGs fit the definition of an air pollutant causing and contributing to air pollution, which reasonably may be anticipated to endanger public health or welfare. In 2009, the USEPA Administrator determined that existing and projected concentrations of GHGs threaten public health and welfare of present-day and future generations, and that combined emissions from motor vehicles contribute to GHG pollution. USEPA's endangerment finding covers emissions of six key GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These GHGs are discussed further in Section 10.3, "Environmental Setting."

GHG Emission Standards

On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012–2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses. On October 15, 2012, USEPA and NHTSA established a program to reduce GHG emissions and improve fuel economy standards for new cars and light trucks through 2025 (USEPA 2012). In August 2016, USEPA and the NHTSA jointly finalized Phase 2 Heavy-Duty National Program standards to reduce GHG emissions and improve fuel efficiency of medium- and heavy-duty vehicles for model year 2018 and beyond (USEPA 2017a). However, on March 15, 2017 President Donald Trump ordered a midterm evaluation of the later years of the 2017-2025 standards, and thus the increased mileage standard requirements may be subject to change (Reuters 2017).

Clean Power Plan

In 2015, President Barack Obama and USEPA announced the Clean Power Plan, which is aimed at reducing carbon pollution from existing fossil fuel–fired electric generating units. The plan was designed to be flexible while implementing strict regulations to encourage the development of cleaner and lower-polluting American energy. On February 9, 2016, the Court stayed implementation of the Clean Power Plan pending judicial review. While awaiting action by the Court, USEPA was continuing to work with states that choose to find ways to reduce GHG emissions from power plants. However, in 2018, the USEPA proposed to repeal the Clean Power Plan and replace it with the proposed Affordable Clean Energy (ACE) rule (USEPA 2018). The ACE rule identifies a "best system of emission reduction", provides states with a list of "candidate technologies" that can be used to establish standards of performance, and updates EPA's New Source Review Permitting program to incentivize efficiency improvements at existing power plants (USEPA 2018). This regulation could influence the indirect GHG emissions associated with electricity use.

10.2.2 State Laws, Regulations, and Policies

GHG Reduction Goals

In recent years, California has enacted a number of policies and plans to address GHG emissions and climate change. Efforts on a statewide level to regulate and reduce GHG emissions are detailed below but include establishing GHG emission goals, developing vehicle emission standards, and promoting sustainable land use and transportation planning. Most recently, the state's efforts to continuing GHG emission control and regulation progress include developing international partnerships.

AB 32, SB 32 and Executive Orders

In 2006, the California State Legislature enacted AB 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. EOs S-3-05 and B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050. EO B-30-15 established an interim target to cut California's GHG emissions to 40 percent below 1990 levels by 2030. Senate Bill 32 codified the 40 percent below 1990 levels by 2030 target.

CARB approved the First Update to the AB 32 Scoping Plan on May 22, 2014 (CARB 2014). This update defines climate change priorities for the next 5 years and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update also highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals and evaluates how to align the State's longer term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB is updating the Scoping Plan to reflect progress since 2005, additional reduction measures, and plans for reductions beyond 2020.

CARB released and adopted a 2017 Scoping Plan Update (CARB 2018a) to reflect the 2030 target set by EO B-30-15 and codified by SB 32 (CARB 2017a, 2017b). The 2017 Scoping Plan Update suggests several areas where measures for water and wastewater treatment could be considered. This includes improving the energy consumption for water pumping, treatment, heating; utilizing anaerobic digestion and wastewater treatment plant capacity to help process organic waste

diverted from landfills; using biosolids for soil amendments; and incentivizing methane capture systems at wastewater treatment plants to produce renewable electricity, transportation fuel, or pipeline biomethane.

California has adopted several vehicle emission reduction and fuel efficiency regulations that are similar and consistent with the federal USEPA and NHTSA regulations. These California vehicle regulations were granted under a waiver request by the USEPA and would not necessarily be affected by changes in the federal policies. The current federal administration has suggested revoking California's waiver, and if the waiver is revoked the California standards may be subject to change.

GHG Reporting and Reduction Regulations

CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional GHG emission reduction regulations. These include the low carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the renewable portfolio standard (RPS), which requires electricity suppliers to increase the amount of electricity generated from renewable sources to 33 percent by 2020 and to 50 percent by 2030.

In January 2012, CARB approved the Advanced Clean Cars Program, a vehicle emission control program for model years 2017–2025. To further California's support of the national program to regulate emissions, CARB submitted a proposal that would allow automobile manufacturer compliance with USEPA's requirements to show compliance with California's requirements for the same model years. The final rulemaking package was filed on December 6, 2012, and the final rulemaking became effective December 31, 2012. CBC Title 24 governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect GHG emissions associated with buildings.

SB 1383 directed ARB to develop a Short-Lived Climate Pollutant (SLCP) reduction strategy with targets of reducing emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and black carbon emissions 50 percent below 2013 levels by 2030 (CARB 2017c, SB 1383 2016).

California requires industrial sources with GHG emissions over 10,000 metric tons (MT) to annually report their GHG emissions under the Mandatory Reporting Rule. Wastewater treatment facilities may be required to report GHG emissions depending on their size and types of equipment used in the wastewater treatment process.

Climate Change Adaptation Policies

In 2009, California adopted a statewide Climate Adaptation Strategy that summarizes climate change impacts and recommends adaptation strategies across seven sectors: public health, biodiversity and habitat, oceans and coastal resources, water, agriculture, forestry, and transportation and energy. The California Natural Resources Agency, in coordination with other state agencies, has updated the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009). The new Safeguarding California Plan augments previously identified strategies in light of advances in climate science and risk management options (California Natural Resources Agency 2014). The Safeguarding California Plan highlights climate risks in nine broad

areas (e.g., energy, forestry, transportation, water) in California, discusses progress to date, and makes realistic sector-specific recommendations. For the Proposed Program, the Water and Public Health sectors are relevant.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every two years (CEC 2018). The reports and report updates analyze data and provide policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2018). The 2018 Integrated Energy Policy Report Update highlights California's innovative policies and the related clean energy economy (CEC 2018).

10.2.3 Local Laws, Regulations, and Policies

San Joaquin Valley Air Pollution Control District

The SJVAPCD's *Climate Change Action Plan*, adopted in 2008, directed the District Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change (SJVAPCD 2009a, 2017). On December 17, 2009, the SJVAPCD adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (Guidance) (SJVAPCD 2009b). The Guidance establishes a streamlined process that can be used to evaluate the significance of project-specific GHG emission impacts on global climate change, based on the use of Best Performance Standards (BPS) (SJVAPCD 2009b); the streamlined evaluation process is designed to meet the reduction goals of AB 32. The SJVAPCD defines BPS as "the most effective achieved-in-practice means of reducing or limiting GHG emissions from a GHG emissions source." Types of BPS include equipment type, equipment design, operational and maintenance practices, measures that improve energy efficiency, and measures that reduce vehicle miles traveled (SJVAPCD 2009b). If BPS are not available, the SJVAPCD encourages users to demonstrate at least a 29-percent reduction from business as usual (BAU); however, the Guidance does not provide clear BPS or thresholds for the evaluation of construction-related effects under CEQA.

Stanislaus County Regional Transportation Plan / Sustainable Communities Strategy

Stanislaus County's *Regional Transportation Plan / Sustainable Communities Strategy, (RTP/SCS),* adopted in 2014, contains land-use and transportation goals and objectives for the County and addresses requirements, including those in SB 375, for reductions in GHG emissions from the transportation sector (Stanislaus Council of Governments [StanCOG] 2014). The WMP is a tool to ensure implementation of appropriate water management policies for the land-use goals outlined in the RTP/SCS.

Stanislaus County Regional Sustainability Toolbox

Stanislaus County, in collaboration with the nine cities within the county, completed the Stanislaus Regional Sustainability Toolbox (RST) (Stanislaus County 2017). The RST includes multiple planning tools to achieve regional GHG reductions. The planning tools include an example climate action plan (CAP) with regional CAP strategies and low-impact development

standards and specifications. Regional strategies from this model CAP related to water-related infrastructure projects like the Proposed Program include the following (ESA 2013):

Goal E.1: Increase Building and Equipment Efficiency Community-Wide

> **Strategy 1.7:** Industrial Equipment Energy Efficiency Promotion. Promote San Joaquin Valley Air Pollution Control District Best Performance Standards to increase energy efficiency in industrial equipment.

Stanislaus County General Plan

The *Stanislaus County General Plan's* Conservation and Open Space Element (2016) identifies water conservation-related goals and policies that would contribute to reduced GHG emissions by conserving water resources and reducing related energy use for water and implementation measures for reducing air pollutant emissions that would also reduce GHG emissions:

Goal Six: Improve air quality.

> **Policy Nineteen:** The County will strive to accurately determine and fairly mitigate the local and regional air quality impacts of proposed projects.

Implementation Measure 1. Require all development proposals, where appropriate, to include reasonable air quality mitigation measures.

Implementation Measure 2. Minimize case-by-case analysis of air quality impacts through the use of standard criteria for determining significant environmental effects, a uniform method of calculating project emissions, and standard mitigation methods to reduce air quality impacts.

> **Policy Twenty:** The County shall strive to reduce motor vehicle emissions by reducing vehicle trips and vehicle miles traveled and increasing average vehicle ridership.

City of Modesto General Plan

The *City of Modesto's General Plan* Chapter VII, Environmental Resources, Open Space and Conservation (2019) contains the following goals related to energy conservation may be relevant to the Proposed Program:

> **Policy I.2.a.** Require shade trees, where feasible and appropriate, in landscape plans for all new development proposals. Mature trees have lower water needs. Develop shade-tree specifications for development projects, including appropriate types of trees (size, deciduous or evergreen, absence or lower branches, etc), locations (e.g., distance from structures), density (i.e. within a subdivision or parking lot), and orientation (trees on the west side of a building generally provide the most benefit) for use in landscape plans.
>
> **Policy I.1.c.** Discourage removal of street trees unless they are badly diseased and have become a threat to public safety. If a tree must be removed, it should be replaced no later than the end of the next planting season with a large-canopy species.
>
> **Policy I.1.g.** Encourage the use of solar energy systems for residential, agricultural, parks, public buildings, and business purposes as provided in Government Code Section 65850.5.

Policy I.1.j. Support the State of California's commitment to the "Renewable Portfolio Standard," which requires electrical utility providers to obtain one-third (33%) of their electricity from renewable energy sources by 2020.

Policy I.1.l. Consider purchasing clean-fuel / alternative-fuel fleet vehicles.

City of Turlock General Plan

The *City of Turlock General Plan's* Air Quality and Greenhouse Gases Element, (2012) contains the following policies that may be relevant to the Proposed Program:

8.2-a Reduce Greenhouse Gas Emissions. Reduce greenhouse gas emissions to support statewide GHG reduction goals under the California Global Warming Solutions Act (AB 32).

8.2-n Wastewater and Water System Efficiency. Maximize the efficiency of City-operated wastewater treatment, water treatment, pumping, and distribution equipment.

8.2-s Require Energy Efficiency for Projects Receiving Public Assistance. Require that projects receiving assistance from the City of Turlock, including but not limited to infrastructure projects and affordable housing, include energy efficiency measures beyond the minimum standards of Title 24.

Ceres General Plan 2035

The *Ceres General Plan 2035,* in Chapter 5, Health and Safety (2018), contains the following goals and policies related to energy use and greenhouse gas emissions that may have direct or indirect beneficial effects on the generation of GHGs that may be relevant to the Proposed Program:

Goal 5.E: Reduce the community's GHG emissions to mitigate the rate and extent of climate change.

Policy 5.E.1. Green Building Code: Continue to implement and enforce the Green Building Code to promote energy efficient building design and construction.

Policy 5.E.2. LEED Certification: Encourage new development to participate in the Leadership in Energy and Environmental Design (LEED) certification program for the design, operation, and construction of high-performance energy efficient buildings.

Policy 5.E.4. Energy Efficient Design: Reduce the need for artificial temperature control and lighting by establishing standards to encourage the following:

- Passive cooling measures in new and existing development; and
- Design that incorporates windows that open to the outside in all habitable rooms to maximize the use of daylight and promote ventilation.

Policy 5.E.5 Energy Efficient Lighting. Establish standards to improve energy efficiency related to outdoor lighting by limiting unnecessary fixtures and utilizing low-energy fixtures.

Policy 5.E.7 Energy Efficient Municipal Operations. Demonstrate leadership by reducing the use of energy and fossil fuel consumption in municipal operations, increasing energy efficiency in transportation, waste management, building design and use, and the purchasing of goods and services.

10.3 Environmental Setting

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (CO_2, methane, and N_2O) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. GHG emissions are typically reported in terms of carbon dioxide equivalents (CO_2e), which converts all GHGs to an equivalent basis taking into account their global warming potential (GWP) compared to CO_2. **Table 10-1** shows the six GHGs and their respective GWP.

Table 10-1. Greenhouse Gas Overview and Global Warming Potential

Greenhouse Gas	GWP over 100 years (in IPCC 2013/SAR)(a)	Description
Carbon Dioxide (CO_2)	1/1	Released into the atmosphere through burning of fossil fuels (coal, natural gas and oil), solid waste, trees, and wood products, and also because of certain chemical reactions; removed from the atmosphere when it is absorbed by plants and oceans; remains in the atmosphere for 50 to more than 100,000 years.
Methane (CH_4)	28/21	Emitted during the production and transport of coal, natural gas, and oil; methane emissions also result from livestock and other agricultural practices and from the decay of organic waste, notably in municipal solid waste landfills; remains in the atmosphere for about 10 years.
Nitrous Oxide (N_2O)	265/310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste; remains in the atmosphere for about 100 years.
Hydrofluoro-carbons (HFCs)	4-12,400/ 650–11,700	Typically used in refrigeration and air conditioning equipment, as well as in solvents; emissions are generated primarily from use in air conditioning systems in buildings and vehicles; remains in the atmosphere from 10 to 270 years.
Perfluoro-carbons (PFCs)	6,630-11,100/ 6,500–9,200	Emitted as by-products of industrial and manufacturing sources; remains in the atmosphere from 800 to 50,000 years.
Sulfur Hexa-fluoride (SF_6)	23,500/23,900	Used in electrical transmission and distribution; remains in the atmosphere approximately 3,200 years.

(a) As scientific understanding of the global warming potential (GWP) of various greenhouse gases (GHGs) improves over time, GWP values are updated in the Intergovernmental Panel on Climate Change

(IPCC) scientific assessment reports. For regulatory consistency, however, the United Nations Framework Convention on Climate Change reporting guidelines (and international treaties) for national inventories continue to the use of GWP values to those published in the IPCC's 1996 Second Assessment Report (SAR). The table shows GWP values for 100 years from IPCC 2013 and SAR.

Sources: USEPA 2015; IPCC 2013; IPCC 1996

These six gases are the major GHGs that were recognized by the United Nations Framework Convention on Climate Change and other international climate change treaties including the Kyoto Accords which was the first international treaty to establish GHG emission reduction goals. Other GHGs were not recognized by the international treaties, chiefly because of the smaller role that they play in global climate change or the uncertainties surrounding their effects. One GHG not recognized by the international treaties is atmospheric water (H_2O) because no obvious correlation exists between H_2O and specific human activities. Water appears to act in a feedback manner; higher temperatures lead to higher H_2O concentrations, which in turn cause more global warming (IPCC 2003). Nitrogen trifluoride was not recognized in the initial Kyoto Accords, but was subsequently included by the United Nations Framework Convention on Climate Change and recognized in California as a GHG.

The most important GHG in human-induced global warming is CO_2. Although many gases have much higher GWP than the naturally occurring GHGs, CO_2 is emitted in such vastly higher quantities that it accounts for about 82 percent of the GWP of all GHGs emitted by the United States (USEPA 2017b). Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions over time and, thus, substantial increases in atmospheric CO_2 concentrations. In 2005, atmospheric CO_2 concentrations were about 379 ppm, more than 35 percent higher than the pre-industrial concentrations of about 280 ppm (IPCC 2008). In addition to the sheer increase in the volume of its emissions, CO_2 is a major factor in human-induced global warming because of its long lifespan in the atmosphere (50,000–100,000 years).

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and

droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

In 2016, total California GHG emissions were 429.4 million tons of carbon dioxide equivalents (MMT CO_2e) (CARB 2019). This represents a reduction in total GHG emissions from 2012, which had the first emissions increase since 2007. The 2012 increase was driven primarily by strong economic growth in the state, the unexpected closure of the San Onofre Nuclear Generating Station, and drought conditions that limited in-state hydropower generation. Overall GHG emissions reached a peak in 2004 and have since decreased by 13 percent. In 2016, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 39 percent of the total emissions. On-road vehicles accounted for roughly 91 percent of emissions in the transportation sector.

10.3.1 Energy Resources and Consumption

MID also provides electricity services to the City of Modesto in addition to water services through a network of over 1,800 miles of power lines throughout its service area (MID 2017a). MID also provides power to the Cities of Waterford, Salida, Mountain House, and parts of Ripon, Escalon, Oakdale and Riverbank. Approximately 23 percent of the power provided comes from solar and wind renewable sources, while the remaining 77 percent comes from a mixture of coal, large hydroelectric, natural gas, and unspecified sources of power. Turlock Irrigation District (TID) and PG&E also provide power in the Program area. **Table 10-2** provides a more detailed breakdown of MID's, TID's, and PG&E's energy resources. As mentioned in 10.2.2, California's RPS requires electricity suppliers to increase the amount of electricity generated from renewable sources to 33 percent by 2020 and to 50 percent by 2030, which will decrease the GHG intensity of the electricity the Proposed Program will utilize in the future.

Table 10-2. Summary of Energy Sources for the Modesto Irrigation District, Turlock Irrigation District, and PG&E

Energy Resources	Utility Power Mix (%)		
	MID (2016)	TID (2015)	PG&E (2015)
Eligible Renewable	23	21	30
Coal	19	10	0
Large Hydroelectric	10	14	6
Natural Gas	21	36	25
Nuclear	0	0	23
Unspecified Power*	27	19	17
Total	100	100	100

*Unspecified power is defined as electricity from transactions that are not traceable to specific generation sources.

Source: MID 2017b, CEC 2017a, CEC 2017b

The TID in conjunction with MID owns and operates the San Pedro Dam, providing up to 203 megawatts of hydroelectric power to customers throughout the City of Modesto. Out of the 203 megawatts produced by this dam, 139 megawatts go to TID and the remaining 64 go to MID (TID 2017).

10.4 Impact Analysis

10.4.1 Methodology

For WMP components within the SJVAB, construction and operation-related GHG emissions and energy use impacts were evaluated qualitatively by considering the Proposed Program's potential sources of GHG emissions, including fossil-fueled or electric energy consuming equipment and vehicles, potential frequency and duration of emissions. Where specific construction or operation-related details were lacking, impacts were conservatively judged to be significant, and prescriptive mitigation measures were developed to minimize significant impacts.

Projected changes in climate associated with global warming may have related effects on other resources in the future, including effects on the Proposed Program (such as changed weather patterns). Anticipated potential worldwide climate change effects include coastal erosion, sea level rise, melting glaciers, atmospheric temperature warming, increased wildfire risk, ocean warming, food production issues (e.g., decreased crop yields), effects on terrestrial and marine ecosystems, flooding and/or drought conditions, and altered hydrologic patterns such as changes in river flows or lake levels (IPCC 2014). California-specific climate change effects and indicators of climate change are similar to those that may be experienced globally and are discussed in *Indicators of Climate Change in California,* a report prepared by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment in 2013 (OEHHA 2013). The evaluation of such effects on the Proposed Program is beyond the scope of this GHG analysis.

10.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on greenhouse gas emissions if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs;
- Cause wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance; or
- Cause a substantial increase in energy demand and the need for additional energy resources.

With regard to the first criterion, construction and operational emissions were considered less than significant if GHG emissions were consistent with the local air district's significance thresholds. The SJVAPCD has adopted a BMP threshold for GHG emissions based on an achievable

in practice analysis of improvement over a business-as-usual scenario or 29 percent improvement. However, at this time there is not an approved BMP for this type of project nor has suitable data to establish a business-as-usual scenario been provided by the SJVAPCD. The SJVAPCD threshold has also not been updated to reflect the SB 32 2030 goal which needs to be considered given the timeline of the Program construction activities. Therefore, the published California air district mass emissions thresholds were reviewed and considered in developing an appropriate threshold. The applicable threshold for the Proposed Program was determined to be 10,000 metric tons per year, which is the threshold for industrial sources used by the Santa Barbara County Air Pollution Control District (SBCAPCD) (SBCAPCD 2015) and the South Coast Air Quality Management District (SCAQMD) (SCAQMD 2008). Although quantitative construction-specific thresholds have not been determined by the SCAQMD, the SBCAPCD recommends amortizing construction emissions over the life of the project (defined as 30 years) and adding it to the operational emissions (SCAQMD 2008). In addition, where construction-specific quantitative significance thresholds have not been defined, operational significance thresholds are typically applied or construction emissions are amortized and considered along with operational emissions to determine a project's overall significance. Therefore, for the Proposed Program, GHG emissions have been considered less than significant if the generated GHG emissions are less than the operational threshold of 10,000 MT CO_2e/year.

With regard to the second criterion for consistency with the applicable plans and policies, the following impact analysis evaluates the Program's operational-related emissions for consistency with CARB's Scoping Plan and updates, which outline the strategies that will need to be implemented for the state to meet the goals of AB32, SB 32 and EO S-3-05. Specifically, if a proposed component would not conflict with CARB's GHG emission reduction policies, it would have a less than significant impact.

The last two significance criteria were considered qualitatively for the Proposed Program.

10.4.3 Environmental Impacts

Impact GHG-1: Generate a Substantial Amount of GHG Emissions *(Significant and Unavoidable*)

Construction Impacts. Construction of Program components including tanks, pump stations, wells, and pipelines would involve activities that would result in one-time emissions of GHGs. Changes in carbon sequestration due to land use change and tree planting would also result in one-time emissions of GHGs. GHG emissions from construction equipment exhaust, including exhaust from haul or equipment trucks and worker commutes. Specific project-level data about the amount, use, and locations of these equipment are not available at this time, nor are specific project-level data about the construction periods for each individual CIP. In general, replacement and maintenance of existing facilities and strengthening and replacement of existing water lines would be categorically exempt from CEQA. New water mains or extension of water mains that have been identified in the WMP would therefore be considered to fall below the significance threshold. For other CIPs, in the absence of specific project-level information, it has been conservatively assumed that construction activities for each WMP component would generate GHG emissions that, in combination with the other Program components, could be substantial because they would exceed the significance threshold of 10,000 MT CO_2e/year. This is considered a significant impact.

Consulting with and permitting through the SJVAPCD for stationary source projects would reduce GHG emissions from construction of WMP components. However, it is still possible that these emissions would not be reduced below the applicable significance threshold of 10,000 MT CO_2e/year of GHG emissions and therefore the Proposed Program would result in a significant and unavoidable impact.

Operational Impacts. The Proposed Program would indirectly and directly generate GHG emissions through operation of booster pump stations, use of new or larger emergency electrical generators, and employee vehicle trips for operation and maintenance of future facilities. Employee trips would be similar to the City's existing maintenance and operation activities. Emissions for emergency electrical generators would be infrequent and would not be substantial. Operation of new or larger pumps at booster pump stations as well as the increased capacity and improved level of water distribution could generate GHG emissions that are substantial because they would increase GHG emissions over the applicable significance threshold of 10,000 MT CO_2e/year of GHG emissions Therefore, this impact would be significant. Again, consulting with and permitting through the SJACPCD for stationary source projects would reduce GHG emissions from project operation under the Proposed Program. However, these emissions may not be able to be reduced below the applicable significance threshold, and no other feasible mitigation has been identified which can further reduce emissions. Therefore, the Proposed Program would result in a **significant and unavoidable** impact.

Overall Conclusion

On the whole, since specific details regarding the WMP components are not yet available, construction and operation impacts of these components have been conservatively determined to generate GHG emissions that exceed the significance threshold. Therefore, the Proposed Program's impact related to increased GHG emissions would be **significant and unavoidable**.

Impact GHG-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs (*Significant and Unavoidable*)

Consistency with strategies outlined in CARB's Scoping Plan and future updates are used to ensure that the state goals of AB32, SB 32 and EO S-3-05 will be met. The Renewable Portfolio Standard would reduce GHG emissions compared to the existing mix of energy sources, and would likely result in the program-level components having a 29-percent reduction by at least 2030. This is consistent with the emissions reductions goal of AB 32 and SB 32, as well as the policies/actions described in CARB's 2017 Scoping Plan.

In addition, individual WMP components would comply with the RST/SCS's regional CAP goals, strategies, and policies, as well as the County's general plan policies related to reduced energy use. Specifically, WMP components would have an energy-efficient design, and utilize Modesto Irrigation District's, TID's, & PG&E's increased renewable energy sources.

WMP components would achieve GHG emission reductions in their design, as discussed above, and would minimize GHG emissions to the maximum extent feasible. Therefore, these components would generally comply with applicable plans, policies, and regulations, including AB 32 and SB 32, as well as the policies/actions described in CARB's 2017 Scoping Plan. However, at this time the state is still developing strategies that will be needed to fully reach the goals of SB 32 and EO S-3-05 and new strategies may be developed that are inconsistent with the Proposed

Program. As described in Impact GHG-1 above, the GHG emissions for the entire Program would be significant and, as such, may impede the state from reaching the goals of AB 32, SB 32, and EO S-3-05 to reduce GHG emissions within California. Consulting with and permitting through the SJVAPCD would reduce this impact, but not necessarily to less-than-significant levels, and may not be consistent in the future with new strategies. Therefore, this impact would be **significant and unavoidable**.

Impact GHG-3: Cause Wasteful, Inefficient, and Unnecessary Consumption of Energy During Construction, Operation, and/or Maintenance (*Less than Significant*)

Construction Impacts. Construction activities would require the consumption of energy (fossil fuels) for construction equipment, worker vehicles, and truck trips. However, energy consumption during construction is necessary to maintain and improve the water conveyance and storage system for the City of Modesto and surrounding areas to meet future water needs. These construction activities would not cause wasteful, inefficient, and unnecessary consumption of energy, or cause a substantial increase in energy demand and increase the need for additional energy resources. Therefore, the Proposed Program's effects on energy resources would be **less than significant**.

Operational Impacts. The operational activities associated with some WMP components would require the consumption of energy including fossil fuels, natural gas, and electricity. Fossil fuel use would include worker vehicle and truck trips to and from the storage tanks and wells. In addition, emergency generators would use diesel fuel. The design of new and replaced water infrastructure will utilize the latest energy efficient design, as required by Title 24 of the California Code of Regulations. Water supply and reliability improvements are necessary to counteract the effects of climate change and therefore these program components are necessary to ensure a reliable water supply infrastructure. These operational activities would not cause wasteful, inefficient, and unnecessary consumption of energy or cause a substantial increase in energy demand and the need for additional energy resources. Therefore, the Proposed Program's effects on energy resources would be **less than significant**.

Overall Conclusion. Considering the WMP components as a whole, construction and operation impacts would not cause wasteful, inefficient, and unnecessary consumption of energy. Therefore, impacts are considered less than significant. In conclusion, the Proposed Program's effect on energy resources would be **less than significant**.

Impact GHG-4: Cause a Substantial Increase in Energy Demand and the Need for Additional Energy Resources (*Less than Significant*)

Substantial quantities of fossil fuel would not be required for the Proposed Program since maintenance and operation vehicle trips would be similar to existing conditions. Construction activities would require some fossil fuel use for construction equipment, material hauling, and worker commuting. However, the amount of fossil fuel use would not result in the need for additional fossil fuel energy resources beyond what is projected to be available with existing resources.

The various booster pumps and wells require electrical power and would likely increase the energy use as the Program is completed with increased services to future development and buildout areas. The amount of electricity required would not be substantial compared to the projected available electricity supply from MID, TID, and PG&E and new sources of electricity generation would therefore not be required to meet this demand. Since there would not be a substantial increase in energy demand or the need for additional energy resources, this impact would be **less than significant.**

Chapter 11
HAZARDS AND HAZARDOUS MATERIALS

11.1 Overview

This chapter evaluates the Proposed Program's impacts related to hazards and hazardous materials. Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if misused or released. Hazardous materials occur in various forms and can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazardous materials can include explosives, flammable and combustible substances, poisons, radioactive materials, pesticides, petroleum products, and other materials defined as hazardous under the Resource Conservation and Recovery Act of 1976 (RCRA) in 40 CFR 261. CEQA also considers hazards from proximity of projects to airports and schools, and hazards from wildfire.

Impacts are evaluated in light of existing laws and regulations governing hazards and hazardous materials, and the existing physical environmental setting as it relates to hazards and hazardous materials, as described in Section 11.2, "Regulatory Setting," and Section 11.3, "Environmental Setting."

11.2 Regulatory Setting

Because regulations for hazardous materials were developed over time, numerous agencies, whose jurisdictions and responsibilities sometimes overlap, are involved in regulating these materials. Federal agencies that regulate hazardous materials include USEPA and OSHA. At the state level, agencies such as the California Department of Industrial Relations, the California Occupational Safety and Health Administration (Cal/OSHA) and the California Emergency Management Agency (Cal EMA) govern the use of hazardous materials. State and local agencies often have either parallel or more stringent rules than federal agencies.

Generation, transport, and disposal of hazardous wastes can also be regulated by different agencies, and USEPA is the lead federal agency overseeing these aspects of hazardous waste. The California Department of Toxic Substances Control (DTSC) has primary state regulatory responsibility, but may delegate enforcement authority to local jurisdictions that enter into agreements with the state agency.

The following is a review of federal, state, and local regulations and policies that are potentially pertinent to the Proposed Program.

11.2.1 Federal Laws, Regulations, and Policies

Resource Conservation and Recovery Act

RCRA (42 USC Section 6901 *et seq*.), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the

United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in California.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq*.) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program**.**

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank [UST] Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the UST Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from USTs. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs]), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing. CUPAs are described in more detail below.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure Rule (40 CFR Part 112) applies to facilities with a single above-ground storage tank with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges into navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement these plans.

Renovation and Demolition of Buildings Containing Asbestos

The National Emission Standards for Hazardous Air Pollutants regulations (40 CFR Part 61, Subpart M), established under the federal Clean Air Act, require that specific practices for handling asbestos-containing building materials be followed during demolition and renovation of all structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). The regulations require a thorough inspection of the demolition or renovation site

and notification to the appropriate state agency before any demolition or renovation of buildings that could contain a certain threshold amount of asbestos or asbestos-containing material. In addition, certain requirements must be followed when removing asbestos-containing waste. USEPA is the lead enforcement agency. The Asbestos Hazard Emergency Response Act's Model Accreditation Plan (MAP) (40 CFR, Part 763, Subpart E, Appendix C) requires that professionals working with asbestos-containing building materials be accredited under the USEPA MAP or a program at least as stringent as the USEPA MAP program.

Occupational Safety and Health Act

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances, as well as other workplace hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. 29 CFR Chapter XVII, Subpart Z, Section 1926.1101 includes regulations to prevent worker exposure to unsafe levels of asbestos during construction and demolition activities. These regulations require contractors to set up regulated areas in dealing with asbestos materials and ensure that persons entering these areas are wearing respirators.

11.2.2 State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public about exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. The OEHHA, an agency under the California Environmental Protection Agency (Cal/EPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program (20 Health and Safety Code [HSC] Sections 25404-25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, and it works with other state agencies and delegates its authority to local jurisdictions that enter into agreements with the state. Local agencies, including Stanislaus County, administer these laws and regulations. DTSC, CalEPA, and other state agencies set the standards for their programs while local governments implement the standards. These local implementing agencies, the CUPAs, regulate/oversee the following for each county:

- Hazardous materials business plans (HMBPs) (19 CCR Sections 2650-2660);

- California accidental release prevention plans or federal risk management plans (RMPs) (19 CCR Sections 2735-2785);
- The operation of USTs (23 CCR Sections 2610-2729) and above-ground storage tanks (20 HSC Sections 25270-25270.13);
- Universal waste and hazardous waste generators and handlers (22 CCR Division 4.5);
- On-site hazardous waste treatment (22 CCR Division 4.5);
- Inspections, permitting, and enforcement (22 CCR Division 4.5);
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

HMBPs are required for businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A; California Governor's Office of Emergency Services [Cal OES] 2014). HMBPs are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees. In addition, HMBP information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers also must make material safety data sheets available to employees and document employee information and training programs.

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention program (19 Cal. Code Regs. Section 2735 et seq.) is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a RMP. This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can

be implemented to reduce accident potential. CUPAs implement the California Accidental Release Prevention program through review of RMPs, facility inspections, and public access to information that is not confidential or trade secret.

CAL FIRE Wildland Fire Management

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CAL FIRE) administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Pub. Res. Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Pub. Res. Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Pub. Res. Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Pub. Res. Code Section 4431).

11.2.3 Local Laws, Regulations, and Policies

Stanislaus County General Plan

The *Stanislaus County General Plan* (Stanislaus County 2016a) guides land use, development, and impact mitigation decisions in Stanislaus County. Goals and policies relevant to hazards and hazardous materials include the following:

Safety Element

Goal One: Prevent loss of life and reduce property damage as a result of natural disasters.

Policy One: The County will adopt (and implement as necessary) plans inclusive of the Multi-Jurisdictional Hazard Mitigation Plan, to minimize the impacts of natural and man-made disasters.

Policy Two: Development should not be allowed in areas that are within the designated floodway or any areas that are known to be susceptible to being inundated by water from any source.

Goal Two: Minimize the effects of hazardous conditions that might cause loss of life and property.

Policy Thirteen: The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required.

City of Modesto Urban Area General Plan

The *Modesto Urban Area General Plan* (City of Modesto 2019) guides land use and development within the City's incorporated areas. Goals and policies contained in the General Plan related to hazards and the Proposed Program include the following:

Policy VII-J[a]. Support the Local Hazard Mitigation Plan (LHMP) and ensure the LHMP will be monitored, evaluated, and updated every three years or more frequently as the need arises.

Policy VII-J[b]. Ensure that all new development is designed to reduce potential safety and health hazards.

Policy VII-J[d]. Support efforts to improve levels of emergency response.

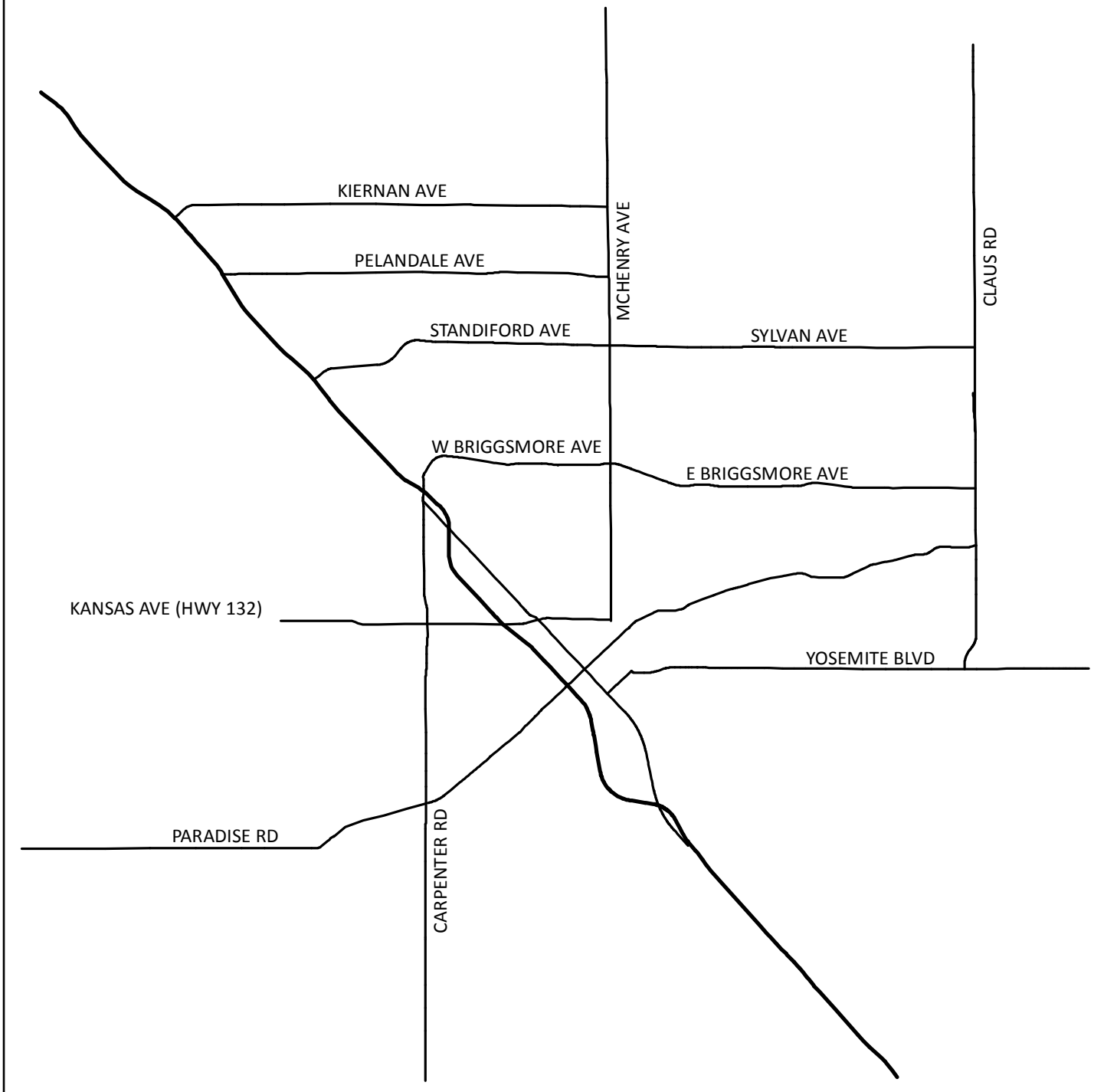
Policy VII-M.C[2]. Design and maintain roads so as to ensure adequate access in hazardous conditions.

Policy VII-N [h]. The City shall promote public awareness of the following local routes (shown in **Figure 11-1**) for the public's use in evacuating the City in the event of an emergency:

(1) State Highways 99, 132, 219, and 108
(2) Briggsmore Avenue
(3) Claus Road
(4) Standiford/Sylvan Avenue
(5) Scenic Drive
(6) Pelandale Avenue
(7) Ninth Street
(8) Paradise Road
(9) Carpenter Road

Policy VI-E.5[b]. City plans and policies shall not interfere with any emergency evacuation and response plans. This would include the continued maintenance of adequate police and fire services, and identified emergency evacuation routes [refer to Figure 11-1 of this DEIR].

Policy VI-E.5[c]. The City shall ensure the provision of adequate and accessible evacuation routes.



Source: City of Modesto 2008

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Figure 11-1. City of Modesto Emergency Evacuation Routes

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Del Rio and Salida Community Plans

The *Del Rio Community Plan* (Stanislaus County 1992) and *Salida Community Plan* (Stanislaus County 2007) do not contain any goals or policies specifically related to hazards and hazardous materials.

Ceres General Plan 2035

The *Ceres General Plan 2035* (City of Ceres 2018) contains the following goals and policies related to hazards and hazardous materials that are applicable to the Proposed Program:

Goal 5.I Minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials.

Policies

5.I.1 Hazardous Materials Standards. Ensure that the use and disposal of hazardous materials in the city comply with local, State, and federal safety standards. Ensure that industrial facilities are constructed and operated in accordance with current safety and environmental protection standards and best practices.

5.I.5 County Cooperation. Work with the County to strictly regulate the storage of hazardous materials and wastes.

5.I.6 Development Standards. Ensure that industrial facilities and other uses where hazardous materials are created, stored, or disposed of are designed, constructed, and operated in accordance with current safety and environmental protection standards. Require secondary containment and periodic examination for storage of large quantities of toxic materials.

5.I.10 Coordinated Emergency Response. Work with other agencies, including the City of Modesto and Stanislaus County, to ensure an adequate countywide response capability for hazardous materials emergencies. Provide for safe and efficient hazardous waste emergency response and contaminated site cleanup.

City of Turlock General Plan

The *City of Turlock General Plan* (City of Turlock 2012) includes the following policies related to hazards and hazardous materials that are applicable to the Proposed Program:

Guiding Policies

10.1-a Protect Lives and Property. Prevent loss of lives, injury, illness, and property damage due to hazardous materials and wastes.

10.1-b Protect Natural Resources. Protect soils, surface water, and groundwater from contamination from hazardous materials.

10.1-c Coordinate Efforts to Minimize Risks. Cooperate with State agencies and the Stanislaus County Environmental Resources Department efforts to identify hazardous materials users, implement hazardous materials plans, provide safe waste disposal sites, and minimize risks associated with hazardous cargoes, agricultural spraying, and electromagnetic fields.

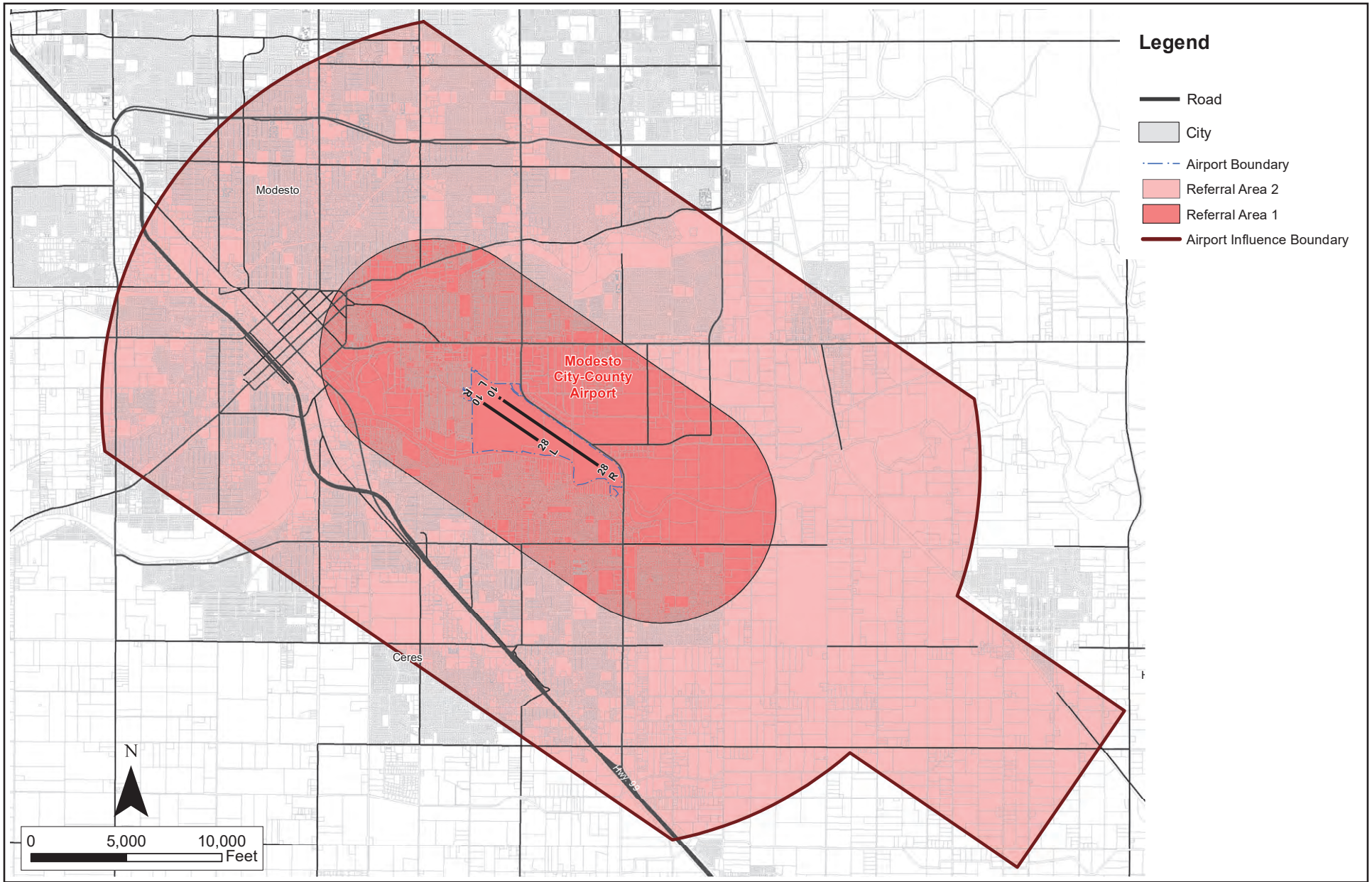
Stanislaus County Airport Land Use Compatibility Plan

The *Stanislaus County Airport Land Use Compatibility Plan* identifies compatible land uses in proximity to airports in Stanislaus County including the Modesto City-County Airport. Compatible land uses are those that will not threaten the safe operation of an airport or create hazards endangering public safety (Stanislaus County 2016). Each airport has a designated airport influence area, which is defined by the area encompassing lands on which uses could be negatively affected by existing or future aircraft operations. As shown in

Figure 11-2, the Modesto City-County Airport's referral area is divided into two areas: "Referral Area 1" and "Referral Area 2". Referral Area 1 encompasses locations where noise and/or safety represent compatibility concerns and airspace protection and air flight may also be concerns; and Referral Area 2 includes areas where airspace protection and/or overflight are compatibility concerns but not noise or safety.

Stanislaus County Hazard Mitigation Plan

The Stanislaus County Hazard Mitigation Plan is a countywide plan that identifies risks posed by disasters and ways to minimize damage from those disasters. Among other functions, the Hazard Mitigation Plan creates a decision tool for management, promotes compliance with state and federal program requirements, enhances local policies for hazard mitigation capability, and provides for inter-jurisdictional coordination (Stanislaus County Office of Emergency Services [OES] 2017).



Source: Stanislaus County 2016

Figure 11-2. Modesto City-County Airport Planning Area Boundary Map

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11.3 Environmental Setting

11.3.1 Schools

Numerous schools exist within the study area, as shown in **Figure 11-3**. These include Modesto City Schools, which include over a dozen elementary schools, four middle schools, and nine high schools (Modesto City Schools 2017), as well as schools in the Salida Union District, Ceres Unified School District, Empire School District, and Turlock School District. Numerous Modesto schools are located within 0.25 mile of proposed components. Schools in Salida, Ceres, and Empire are within 0.25 mile of Proposed Program components. Three Turlock area schools (First Baptist Academy, Los Gatos Academy, and Turlock Junior High) are located within 0.25 mile of Proposed Program components. No schools in other outlying service areas are located within 0.25-mile of proposed components.

11.3.2 Existing Hazards and Hazardous Materials

Both the SWRCB's GeoTracker database and DTSC's EnviroStor database were searched for up to one-quarter mile of the study area. **Figure 11-4** shows hazardous material sites identified by these databases within one-quarter mile of the Proposed Program components. **Table 11-1** provides further information on these sites. The database searches include the following hazardous materials site lists: leaking underground storage tank cleanup sites, spills, leaks, investigation and cleanup sites, and other cleanup sites.

In general, hazardous materials contamination is most often connected with past land uses such as gas stations, industrial facilities with underground storage tanks, military bases, and other sites that commonly use or store hazardous materials.

11.3.3 Airports and Private Strips

The Modesto City-County Airport is located at 617 Airport Way in the southwest portion of Modesto near the Tuolumne River. Several Program improvements would be located near this airport. The Turlock Airpark had been located in the southern portion of Turlock, but according to the Stanislaus County Airport Land Use Compatibility Plan (2016), this facility is in the process of being sold for a non-aeronautical use. No other airports or private airstrips are located within two miles of the Proposed Program.

11.3.4 Wildfire Hazards

The study area is primarily urban in nature, with limited potential for wildfire hazards. The majority of the study area is unzoned for fire hazards, with several isolated patches zoned as moderate (CAL FIRE 2007). **Figure 11-5** shows wildfire risk in the Proposed Program vicinity, as mapped by CAL FIRE.

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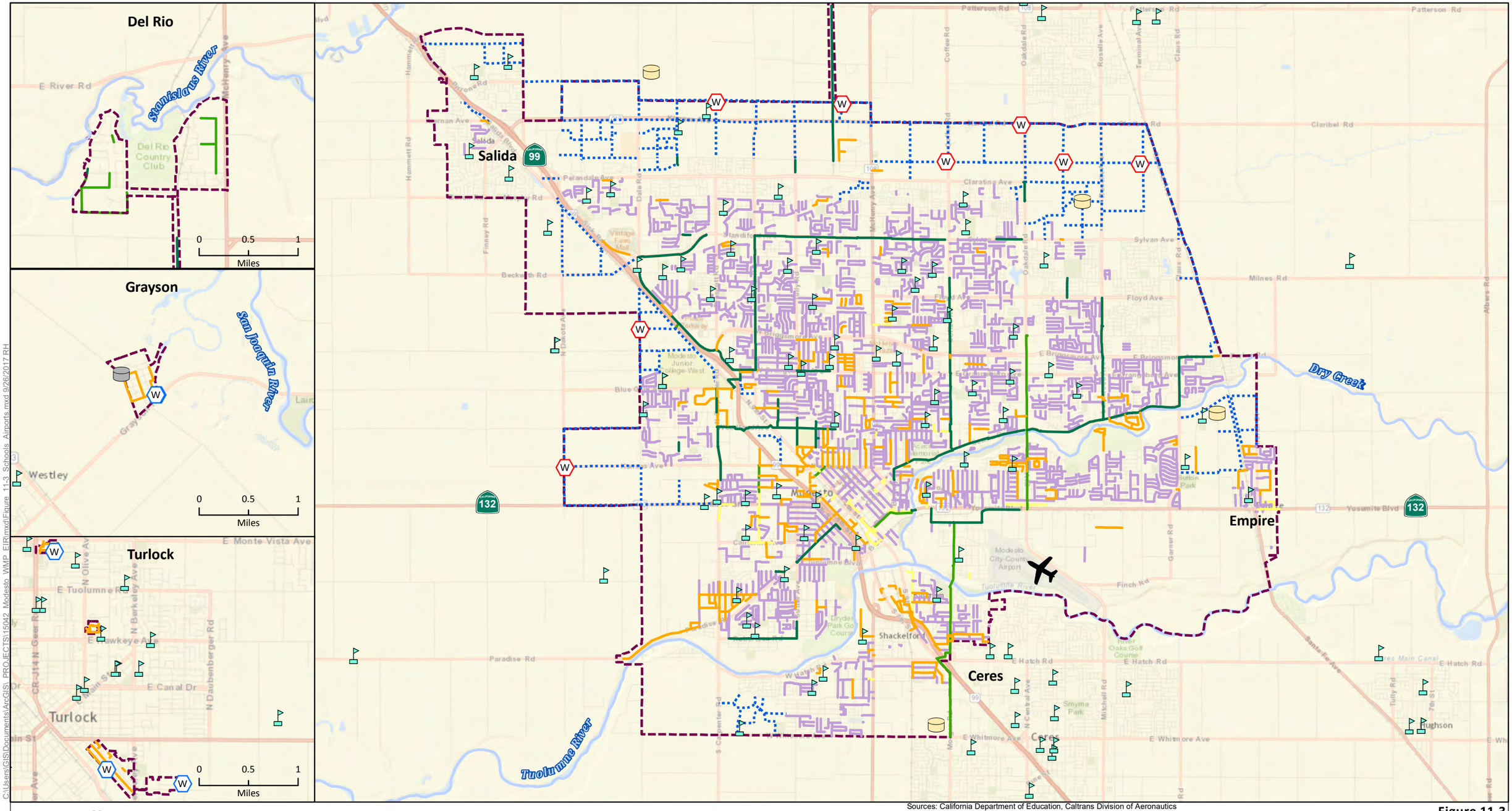

Sources: California Department of Education, Caltrans Division of Aeronautics

Figure 11-3
Schools and Airports in the Proposed Program Vicinity

City of Modesto
Water Master Plan EIR

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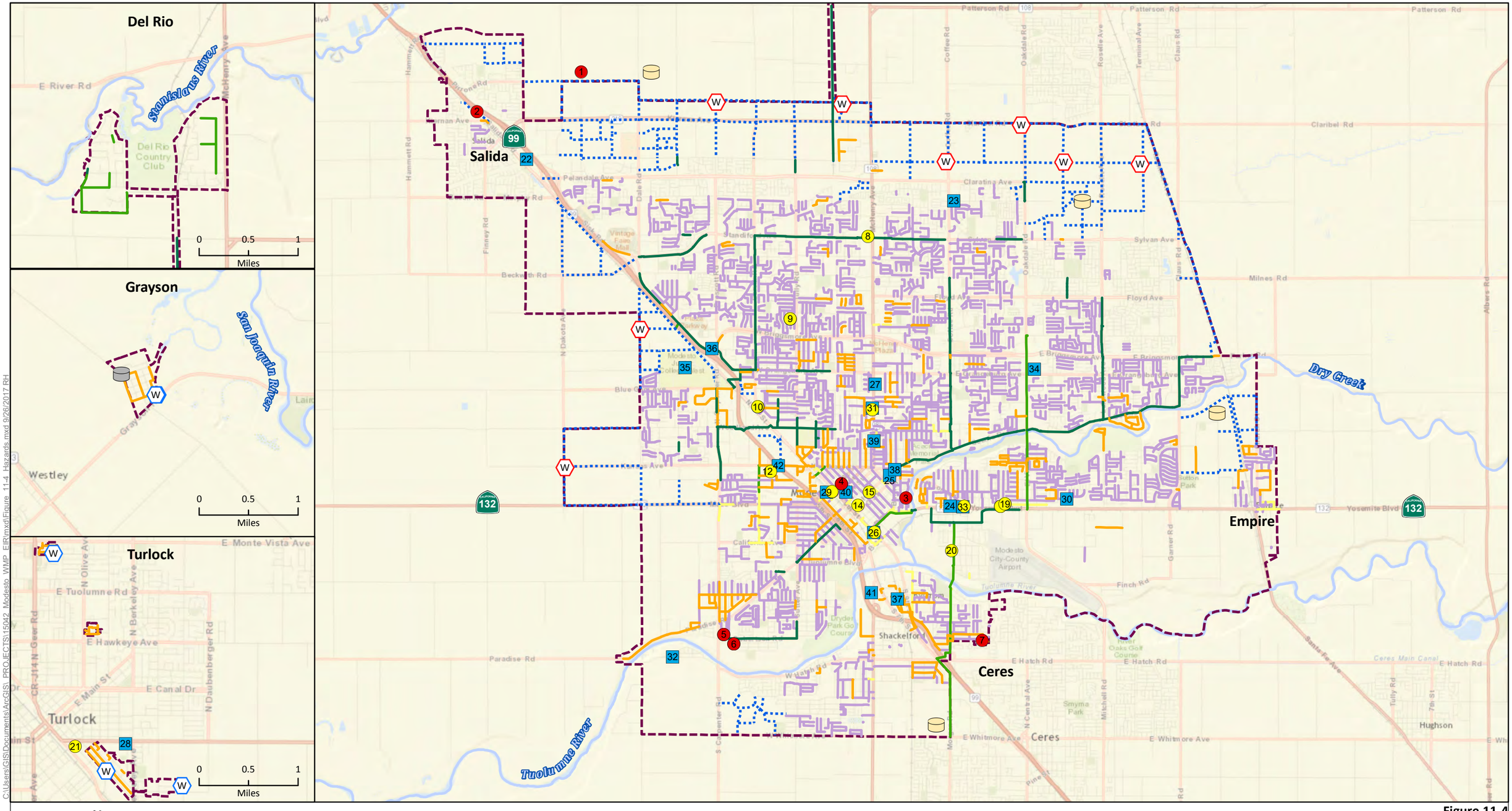

Figure 11-4
Existing Hazardous Materials Sites within the Proposed Program Vicinity

City of Modesto
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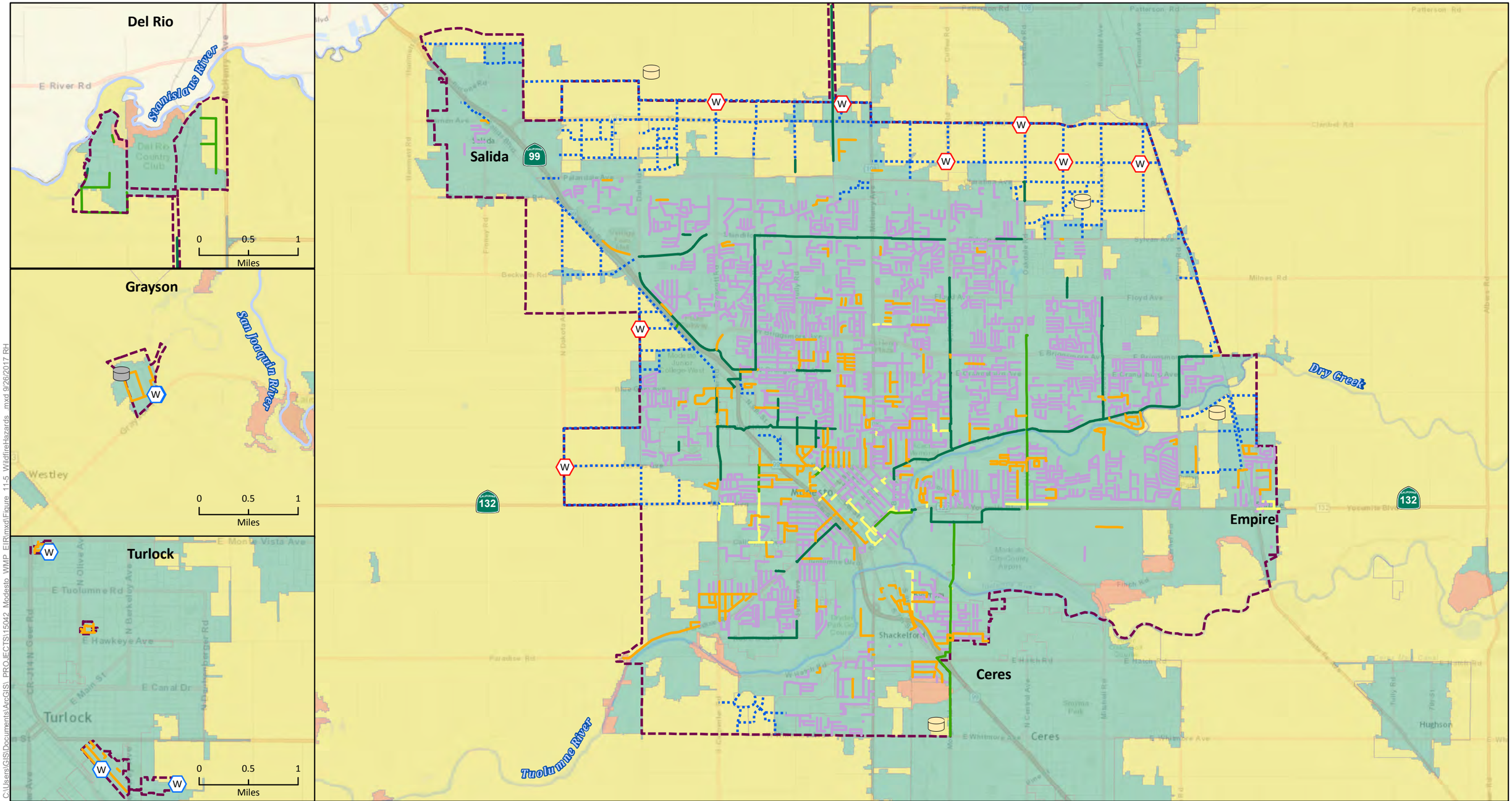

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Horizon WATER and ENVIRONMENT

Component Types of Existing Water System

- Tank
- Well
- Fire Flow Improvements
- Grid Improvements

Proposed New Water System Components

- Future Tanks
- Future Well Sites
- Build Out Pipelines
- Fire Flow Improvements
- Grid Improvements
- Strengthen and Replace

- WMP Study Area

LRA Fire Hazard Severity Zones

- Moderate
- Non-Wildland/Non-Urban
- Urban Unzoned

Figure 11-5
Wildfire Hazards in the Proposed Program Vicinity

City of Modesto
Water Master Plan EIR

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Table 11-1. Existing Hazardous Material Sites within 0.25 Mile of Proposed Components

Figure ID	Site/Business Name	Address	City	Site/Case Type	Lead Agency	Site Status	Past Uses/Site History	Potentially Contaminated Media
1	Joseph A. Gregori High School Site	3701 Pirrone Road	Modesto	School Cleanup	DTSC's Site Mitigation and Brownfields Reuse Program (SMBRP)	Certified	Agricultural	Soil, groundwater
2	Safety-Kleen Salida	5050 Salida Blvd.	Salida	Corrective Action	DTSC	Certified	Hazardous waste storage	Groundwater, soil, soil vapor
3	Gallo Glass-Raffle Site	North of Highway 132 and adjacent east bank of Dry Creek	Modesto	State Response	None specified	Certified	LDF	Soil
4	Modesto Convention Center	10th and L Streets	Modesto	State Response	SMBRP	Certified	None	No media affected
5	Littell Property	1921 Vernon Avenue	Modesto	State Response	SMBRP	Certified	Junkyard	Soil
6	Elias Property	2120 Kenneth Street	Modesto	State Response	None specified	Certified	None	Contaminated surface/structure, soil
7	Martinez Property	1627 Nadine Avenue	Modesto	State Response	None specified	Certified	None specified	Soil
8	Acme Cleaners	3501 McHenry Avenue	Modesto	Voluntary Cleanup	SMBRP	Active	Dry cleaning	Groundwater, indoor air, soil, soil vapor
9	Cesi Drycleaning Center	2021 Tully Road	Modesto	Evaluation	SMBRP	Active	Dry cleaning	Groundwater, indoor air, soil, soil vapor
10	Sunshine Carpet & Drapery	1645 Princeton Avenue	Modesto	Evaluation	SMBRP	Active	Dry cleaning	Groundwater, indoor air, soil, soil vapor
11	Modesto Groundwater Contamination	McHenry Avenue, south of Orangeburg Avenue (behind Halford's Cleaners at 941 McHenry Avenue)	Modesto	Federal Superfund	USEPA	Active	Dry cleaning	Groundwater, soil vapor, indoor air
12	State Route 132 West Expressway (also known as State Route 132/99 Interchange)	Intersection of State Route 132/99	Modesto	Voluntary Cleanup	SMBRP	Active	Manufacturing – chemicals	Soil
13	Modesto Groundwater Investigation	Project area defined in oversight agreement	Modesto	Voluntary Cleanup	SMBRP	Active	Dry cleaning	Groundwater, soil, soil vapor, indoor air
14	PG&E Manufactured Gas Plant Sq-St-Mod-2	Block bound by H, F, 10th, and Alley Northeast of 10th Streets	Modesto	Evaluation	None specified	Inactive – Needs evaluation	None specified	Soil
15	The Modesto Bee	1325 H Street	Modesto	Tiered Permit	None specified	Inactive – Needs evaluation	None specified	None specified
16	PG&E Manufactured Gas Plant Sq-St-Mod-1	Blocks of C, D, 8th, and 10th Streets	Modesto	Evaluation	None specified	Inactive – Needs evaluation	Manufactured gas plant	Soil
17	Former Service Cleaners	Vicinity of La Loma Avenue and Yosemite Blvd.	Modesto	Voluntary Cleanup	SMBRP	Active	Dry cleaning	Groundwater, indoor air, soil vapor

Figure ID	Site/Business Name	Address	City	Site/Case Type	Lead Agency	Site Status	Past Uses/Site History	Potentially Contaminated Media
18	Hi Grade Drive In Cleaners	1915 Yosemite Blvd.	Modesto	Voluntary Cleanup	SMBRP	Active	Dry cleaning	Groundwater, indoor air, soil, soil vapor
19	Jerry's Drapery Service	123 Phoenix Avenue	Modesto	Evaluation	SMBRP	Active	Dry cleaning	Groundwater, indoor air, soil, soil vapor
20	Gallo Glass – South Field Landfill	615 South Santa Cruz Avenue	Modesto	Evaluation	SMBRP	Inactive – Needs evaluation	Landfill	Groundwater, soil
21	So Cal Gas/Turlock MGP	650 South Golden State Blvd.	Turlock	Voluntary Cleanup	SMBRP	Active	Engine testing/repair, machine shop, etc.	Groundwater, soil
22	Salida Radiator & Muffler (former Fuentes Sedano Property)	4648 Salida Blvd.	Salida	Cleanup Program Site	CVRWQCB	Open - Inactive	Reported spill of antifreeze, hot tank liquid, and sludge waste	Surface water, groundwater, soil
23	Modesto Rock Well Closures	Coffee Road	Modesto	Cleanup Program Site	CVRWQCB	Open - Inactive	N/A	Surface water, under investigation
24	Three Star Gas	1131 Yosemite Blvd.	Modesto	LUST Cleanup Site	CVRWQCB	Open – Verification Monitoring	N/A	Groundwater
25	Modesto Polanco-Ideal Cleaners	1801 H Street	Modesto	Cleanup Program Site	DTSC	Open - Inactive	N/A	N/A
26	Berberian Company Property	320 9th Street	Modesto	Cleanup Program Site	Stanislaus County	Open - Inactive	Manufactured gas plant	Under investigation
27	Flanagan's Spray Service		Modesto	Cleanup Program Site	CVRWQCB	Open - Inactive	N/A	N/A
28	Rodgers Min Mart Case #2	1570 East	Turlock	LUST Cleanup Site	CVRWQCB	Open - Remediation	N/A	Groundwater
29	Modesto Steam Laundry	1201 8th Street	Modesto	Cleanup Program Site	CVRWQCB	Open – Verification Monitoring	Dry cleaning	Groundwater, soil
30	BK's Liquors and Foods (Former)	150 North Riverside Drive	Modesto	LUST Cleanup Site	CVRWQCB	Open – Verification Monitoring	N/A	Groundwater, under investigation
31	Modesto Groundwater Contamination Superfund – Halford's Cleaners	941 McHenry Street	Modesto	Cleanup Program Site	CVRWQCB	Open – Site Assessment	N/A	Groundwater, indoor air, soil vapor, under investigation
32	Bonzi Class III LF/Unclass, LF	2650 Hatch	Modesto	Land Disposal Site	CVRWQCB	Open	N/A	N/A
33	L and E Auto Short Property	1411 Yosemite Blvd.	Modesto	LUST Cleanup Site	CVRWQCB	Open – Site Assessment	N/A	Groundwater
34	Century Center Cleaners	2401 East Orangeburg Avenue	Modesto	Cleanup Program Site	CVRWQCB	Open - Remediation	Dry cleaning	Under investigation
35	Hammond General Hospital	N/A	Modesto	Military Cleanup Site	CVRWQCB	Open – Site Assessment	N/A	N/A
36	Chevron No. 96397	1600 Sisk Road	Modesto	LUST Cleanup Site	CVRWQCB	Open – Site Assessment	N/A	Groundwater
37	Royaltone Paints	451 Sonora Avenue	Modesto	Cleanup Program Site	CVRWQCB	Open – Inactive	Discharge of fire suppression water contaminated with paint and painting products to drainage well	Groundwater, soil

Figure ID	Site/Business Name	Address	City	Site/Case Type	Lead Agency	Site Status	Past Uses/Site History	Potentially Contaminated Media
38	Arco – T and T	402 Downey Avenue	Modesto	LUST Cleanup Site	CVRWQCB	Open – Assessment & Interim Remedial Action	N/A	Groundwater
39	Elwood's Dry Cleaner	441 McHenry Avenue	Modesto	Cleanup Program Site	CVRWQCB	Open - Remediation	Dry cleaning	N/A
40	City of Modesto, Modesto Groundwater Investigation	1010 10th Street	Modesto	Cleanup Program Site	CVRWQCB	Open - Remediation	Dry cleaning and dry cleaning chemicals production	Under investigation
41	Crop Production Services, Crows Land Road	541 Crows Landing Road	Modesto	Cleanup Program Site	CVRWQCB	Open – Inactive	Agricultural products distribution	N/A
42	Caltrans Modesto Soil Stockpiles	State Route 99 & Kansas Avenue	Modesto	Cleanup Program Site	DTSC	Open – Site Assessment	N/A	N/A

Notes: LUST = Leaking Underground Storage Tank; NPL = National Priorities List; RWQCB = regional water quality control board; SMBRP = Site Mitigation and Brownfields Reuse Program.

Source: SWRCB 2017, DTSC 2017

11.4 Impact Analysis

11.4.1 Methodology

Impacts from the Proposed Program related to hazards and hazardous materials were evaluated qualitatively by considering aspects of the Proposed Program in relation to the CEQA significance criteria. In many instances, where the precise locations and designs of Proposed Program are not yet known, possible impacts are discussed more generally, and mitigation is prescribed in the event certain conditions are encountered during future project planning.

11.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

11.4.3 Environmental Impacts

Impact HAZ-1: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Construction (*Less than Significant*)

Construction of the Proposed Program improvements would involve use of heavy construction equipment, which would use hazardous materials in their operation. These materials would include fuel, grease, oil, and other materials that may be contained within the equipment and/or stored on-site by the construction contractor. Contractors may routinely transport these materials to and from the site, and dispose of the materials once they have been used. In addition, the disinfection and flushing of newly constructed pipelines would require the use of hazardous materials (i.e., chlorination or de-chlorination chemicals).

Transport, use, and disposal of hazardous materials during construction could expose workers, the public, or the environment to hazards if adequate precautions are not taken. Construction workers could inhale toxic vapors or make bodily contact with materials, which could subject them to harm. The public or the environment could be exposed to toxic substances if materials were not stored, transported, or disposed of properly. The potential for harm may depend on the site-specific characteristics at any given Program improvement site, as well as proximity to sensitive receptors or environmental resources.

In accordance with applicable regulations, the City of Modesto and its contractors would be required to identify and track hazardous waste from "cradle to grave" (see RCRA under Section 11.2.1) and provide training and personal protective equipment to workers, if necessary, to prevent exposure to hazardous substances in excess of exposure limits (see "OSHA" under Section 11.2.1). Additionally, the City and/or its contractors would be required to follow protocols established under the NESHAP regulations (described in Chapter 6, *Air Quality*), which are designed to limit health impacts associated with hazardous substances.

Compliance with these laws and regulations described in the regulatory setting would prevent significant impacts from occurring during construction activities, and the WMP does not create unique hazards from use, storage, transport, and disposal of materials. Therefore, this impact would be **less than significant.**

Impact HAZ-2: Create a Substantial Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials during Operation (*Less than Significant*)

During operation, Proposed Program facilities would not use or store large amounts of hazardous materials. New emergency generators supplying back-up power to various booster pump stations for tank and well sites throughout the water system would store fuel. New groundwater wells installed under the Proposed Program also would each have diesel generators, which would store and use diesel fuel. Depending on the wellhead treatment process selected (e.g., coagulation/filtration, oxidation, coagulation assisted microfiltration, lime softening, sorbtion processes, ion exchange, microfiltration, ultrafiltration, reverse osmosis, electrodialysis reversal, or blending), these activities may require disposal of hazardous materials. Wellhead treatment could generate waste streams (e.g., spent media, dewatered sludge, liquid brine) that contain

toxins, heavy metals, radio nucleotides, or other hazardous materials that may require disposal in a hazardous waste landfill. In accordance with USEPA's Spill Prevention and Countermeasure Rule (see Section 11.2.1), the City would be required to provide secondary containment structures and spill counter-measure protocols for storage tanks that exceed the threshold volume (660 gallons), but, regardless, the City would provide secondary containment for all fuel storage tanks.

City of Modesto workers also may use, transport, or dispose of hazardous materials during ongoing routine maintenance, routine facility repair activities, or wellhead treatment system maintenance. If water treatment filtration media is used, these media would potentially accumulate heavy metals, and possibly other hazardous substances present in the source water and underlying rock/soil. This filtration media would need to be periodically disposed of, during which workers may be exposed to the materials. However, the same regulations described above under Impact HAZ-1 with respect to construction would apply to these activities to ensure that workers are not exposed to unsafe levels of toxic substances, and that hazardous materials are transported and disposed of in accordance with applicable laws.

In general, use, storage, transport, and disposal of hazardous materials under the Proposed Program would be similar to its current activities related to operating and maintaining the City's water system, and would not create a substantial hazard to the public or the environment. The Program would add approximately 22 new back-up, diesel generators with fuel tanks associated with new wells and tanks/booster pump stations. As described above, secondary containment structures and existing requirements related to hazardous materials would prevent accidental releases of fuel and adverse impacts. Therefore, this impact would be **less than significant**.

Impact HAZ-3: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Construction (*Less than Significant*)

As described under Impact HAZ-1, the Proposed Program would involve use, storage, transport, and disposal of hazardous materials during construction. If these materials were to be accidentally released, such as through a spill or encountering contaminated soil, it could harm workers, the public or the environment. However, compliance with all local, state, and federal regulations concerning hazardous materials would result in less-than-significant impacts. Once operational, these facilities would not result in additional hazard emissions or the use of hazardous materials near students or school facilities. Storage of onsite hazardous materials, such as diesel fuel, would require secondary containment to prevent leaks or spills, as required by federal and state regulations. This impact would be **less than significant.**

Impact HAZ-4: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment during Operation (*Less than Significant*)

As described under Impact HAZ-2, the Proposed Program would involve limited use, storage, transport, and disposal of hazardous materials during operation. Improper storage or use of such materials could lead to upset and accident conditions involving the release of hazardous materials into the environment. In accordance with applicable laws and regulations, the City would be

required to track any hazardous wastes generated during Program operation from "cradle to grave" and dispose of this material appropriately. The City also would be required to implement spill prevention and counter-measures in accordance with USEPA's Spill Prevention and Countermeasure Rule for fuel storage tanks under the Proposed Program that exceed the threshold volume, but the City would include secondary containment on all fuel storage tanks. Compliance with these requirements would reduce this impact to a **less-than-significant** level.

Impact HAZ-5: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School (*Less than Significant*)

Depending on the specific WMP component, Proposed Program activities may involve use or handling of hazardous materials within 0.25 mile of a school. As shown in Figure 11-3, numerous schools are located throughout Modesto, many of which are located in relatively close proximity to Proposed Program components. Several schools in Turlock also are located within 0.25-mile of proposed components.

Use and handling of hazardous materials near schools during construction of proposed components would be as described under Impact HAZ-1 (e.g., use of fuel, grease, or related materials in construction equipment). These activities would not create a hazard, even if located in close proximity to a school, by complying with applicable regulations described in Impact HAZ-1. Construction equipment may emit some amount of TAC emissions, such as DPM from operation of diesel-fueled construction equipment; however, these emissions would be temporary.

Program activities would use relatively limited hazardous materials during operation and the operation of emergency generators and staff vehicle trips would emit limited amounts of TACs. Adherence to SJVAPCD's permitting process would ensure that TAC emissions would not create unacceptable health risks for nearby sensitive receptors, such as schools. As such, this impact would be **less than significant.**

Impact HAZ-6: Location on a Site Which Is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment (*Less than Significant*)

As indicated in Figure 11-4, various Proposed Program elements are located within 0.25 mile of identified hazardous materials sites. In accordance with Modesto City Council Resolution 2003-66, a Phase 1 Environmental Site Assessment is required prior to the acquisition of real property. The Phase 1 Environmental Site Assessment would identify any past sources of contamination on or near a site and, if contamination is identified, may recommend performance of a more detailed Phase 2 Environmental Site Assessment, including soils testing. The City may not purchase a property on which significant contamination is discovered during the due diligence phase and which may create a significant hazard to the public or the environment. Proposed pipeline improvements would generally be located within the public right-of-way and not within documented clean-up sites. Therefore, this impact would be **less than significant.**

Impact HAZ-7: Location in an Airport Land Use Plan or within 2 miles of a Public Airport, Resulting in a Safety Hazard for People Residing or Working in the Program Area (*Less than Significant*)

As shown on Figure 11-3, only one major public airport is located in Modesto: the Modesto City-County Airport. Under the Proposed Program, facilities may be constructed within the Modesto City-County Airport or the Turlock Municipal Airport land use plan areas. However, these facilities would be primarily belowground and would not pose any risks to aviation or exceed maximum height requirements. Impacts are considered **less than significant**.

Impact HAZ-8: Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan (*Less than Significant*)

In general, the Proposed Program would not substantially impair or interfere with an emergency response plan. The Proposed Program would be limited to upgrades/ improvements to the City's water infrastructure. As described in Chapter 2, *Program Description,* construction of Proposed Program facilities, such as installation of water pipelines, would involve trenching/excavation within the roadway. These activities could require temporary closure of one lane of traffic, which could interfere with emergency evacuation procedures or emergency vehicle access.

All projects would be required to follow the current version of the City of Modesto Standard Specifications. Section 12 of the General Provisions includes Temporary Traffic Control requirements that must be incorporated into all projects. As part of the Traffic Management Plan (TMP), the public and appropriate fire and police departments are notified in advance of temporary road closures. This ensures that any impacts on emergency protection services during construction would be **less than significant**.

Impact HAZ-9: Expose People or Structures, Either Directly or Indirectly, to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires (*No Impact*)

The prevalent land uses in the Program area are rural agricultural and developed. There are no wildlands in the Program area, as shown in Figure 11-5. As such, implementation of the Proposed Program would have **no impact** related to wildfires.

Chapter 12
HYDROLOGY AND WATER QUALITY

12.1 Overview

This chapter evaluates impacts of the Proposed Program on hydrology and water quality. It identifies the existing federal, state, and local laws, regulations, and policies related to hydrology and water quality that may be applicable to the Proposed Program; describes the existing physical environmental conditions in the study area; and evaluates impacts on hydrology and water quality from the Proposed Program.

12.2 Regulatory Setting

12.2.1 Federal Laws, Regulations, and Policies

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections of the CWA that are potentially relevant to the Proposed Program are Sections 303(d) and 402.

Section 303(d)

Under CWA Section 303(d), states are required to identify "impaired water bodies" (i.e., those that do not meet established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for developing control plans to improve water quality. USEPA then approves the state's recommended list of impaired waters or adds and/or removes waterbodies. USEPA also reviews and approves the control plan developed for each pollutant, known as the total maximum daily load (TMDL). Section 303(d), Category 5 water body segments are segments in which at least one beneficial use is not supported and a TMDL is needed. **Table 12-2** in Section 12.3.3 lists Section 303(d), Category 5 water body segments in the study area.

Section 402

CWA Section 402 regulates stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES), which is officially administered by the USEPA. In California, USEPA has delegated its authority to the SWRCB; SWRCB, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in regard to the Porter–Cologne Water Quality Control Act. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. Relevant general NPDES permits are described further under Section 12.2.2, "State Laws, Regulations, and Policies."

National Flood Insurance Program

Congress established the National Flood Insurance Program (NFIP) to provide property owners with access to federally-backed flood insurance protection and to reduce the destructive consequences of flooding. FEMA administers the NFIP and works closely with state and local officials to identify flood hazard areas and flood risks. FEMA's Flood Insurance Rate Maps (FIRMs) show the extent of areas within the 100-year floodplain (i.e., areas that would be inundated by the 1-percent annual chance flood), providing the basis of the NFIP regulations and flood insurance requirements (FEMA 2017).

12.2.2 State Laws, Regulations, and Policies

State Reclamation Board

The State Reclamation Board, deriving its regulatory authority from CCR Title 23, Waters, and, in cooperation with USACE, is responsible for the control of flooding along the Sacramento and San Joaquin Rivers and their tributaries, including the Tuolumne River. The State Reclamation Board cooperates with federal and state agencies and local governments in establishing, planning, constructing, operating, and maintaining flood control works, and maintains the integrity of the existing flood control system and designated floodways through the issuance of permits for encroachments. Designated floodways have been established on both Dry Creek and the Tuolumne River and are subject to regulation by the Reclamation Board. Encroachment permits are required from the Reclamation Board for any project occurring within the boundaries of the designated floodways or within ten feet of a levee.

Several proposed pipeline improvements would cross or be located within the Designated Floodway along the Tuolumne River and Dry Creek, as shown on **Figure 12-1**. Two proposed wells in Grayson are located within 300 feet of the Designated Floodway along the San Joaquin River.

Porter–Cologne Water Quality Act

The 1969 Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act) dovetails with CWA (see discussion of CWA above). It established the SWRCB and divided the state into nine regions, each overseen by its own RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 303[d] and 402. In general, the SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires that the RWQCB develop water quality control plans (also known as Basin Plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin Plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, Basin Plans must be updated every three years.

The Proposed Program is located within the planning area/jurisdiction of the Central Valley RWQCB. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region* (Central Valley RWQCB 2016) establishes beneficial uses for the San Joaquin River, Stanislaus River, Tuolumne River and the downstream water bodies to which they are tributary, as shown in **Table 12-1**. The Basin Plan does not identify beneficial uses for Dry Creek. In regards to groundwater, the Basin Plan states that "unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered as suitable or potentially suitable, at a minimum, for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO)" (Central Valley RWQCB 2016).

National Pollutant Discharge Elimination System Permits

Construction Activities

Most construction projects that disturb 1 acre or more of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a SWPPP. The SWPPP must include a site map and a description of the proposed construction activities; demonstrate compliance with relevant local ordinances and regulations; and present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor and report on all construction-related activities to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Dewatering Activities

Although some construction-related dewatering is covered under the General Construction Permit, the Central Valley RWQCB has also adopted a general permit for limited threat discharges to surface water, including construction dewatering discharges (Order No. R5-2016-0076 [NDPES No. CAG995002]) (Central Valley RWQCB 2016). This permit would most likely apply to the Proposed Program if construction would require dewatering in greater quantities than that allowed by the General Construction Permit and would discharge the effluent to surface waters. The general permit for limited threat discharges to surface water contains waste discharge limitations and prohibitions similar to those in the General Construction Permit. To obtain coverage, the applicant must submit a Notice of Intent and a pollution prevention and monitoring program.

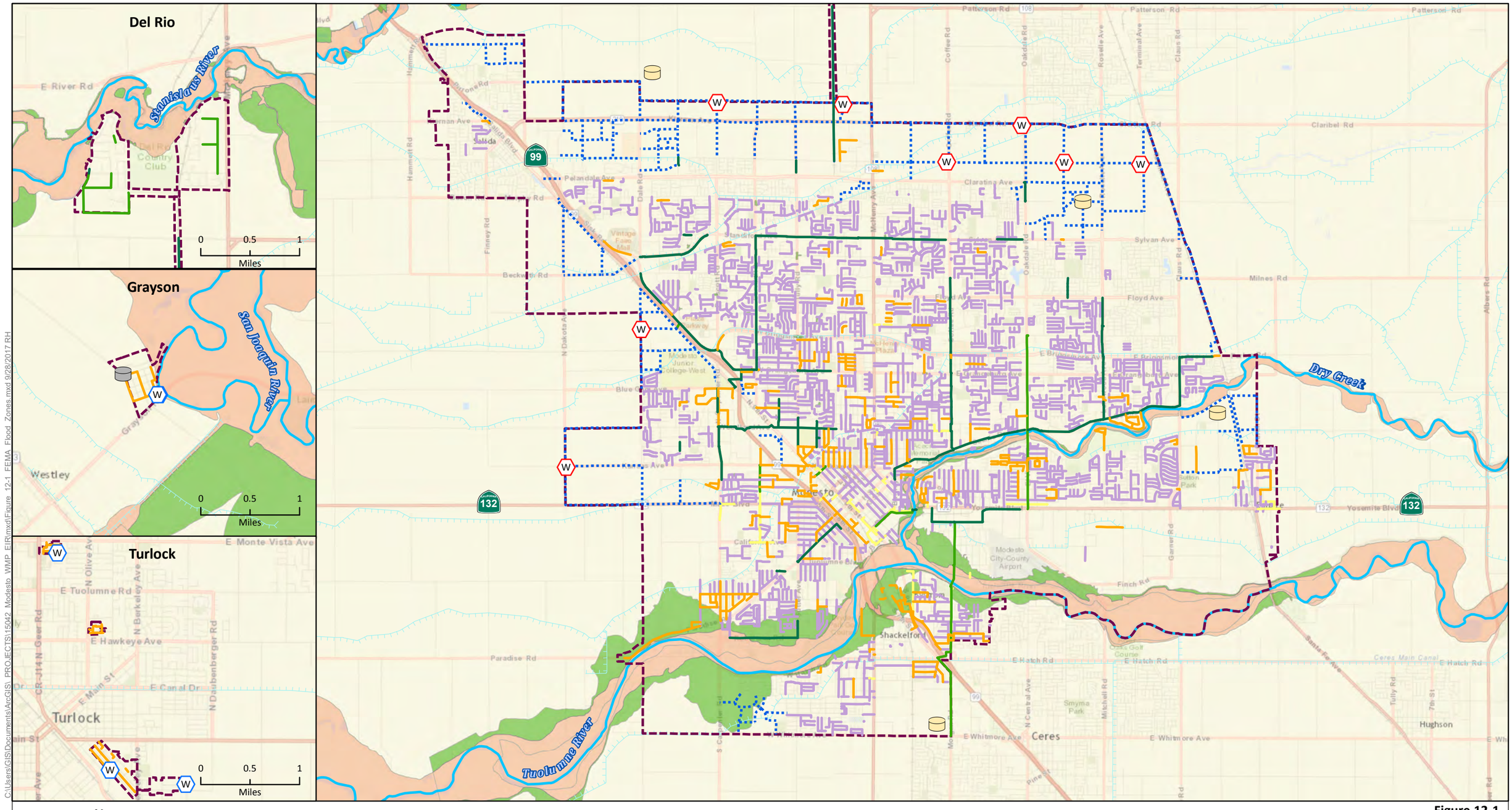
Municipal Stormwater Permitting Program

The SWRCB and RWQCBs regulate stormwater discharges from municipal separate storm sewer systems (MS4) through the Municipal Stormwater Permitting Program. Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000) and large (population of 250,000 or more) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. The City of Modesto is covered under a Phase I permit, Order R5-2015-0025. The Order requires the City to continue implementing its Storm Water Program, which includes requirements for construction projects to implement BMPs to

control sediment and pollutants from construction sites. The Storm Water Program also includes a Municipal Program, which, among other things, seeks to prevent sanitary sewer overflows (SSO) or spills from entering the storm drain system (Central Valley RWQCB 2015).

Water Reclamation Requirements for Recycled Water

In 2016, the SWRCB adopted the proposed Water Reclamation Requirements for Recycled Water Use (General Order), which replaced the existing 2014-0090-DWQ General Waste Discharge Requirements for Recycled Water Use. The General Order establishes standard conditions for recycled water use and conditionally delegates authority to an Administrator to manage a Water Recycling Program and issue Water Recycling Permits to recycled water users. Only treated municipal wastewater for non-potable uses can be permitted, such as landscape irrigation, crop irrigation, dust control, industrial/commercial cooling, decorative fountains, etc. (SWRCB 2017).



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Horizon WATER and ENVIRONMENT

Proposed Components for Existing Water System

- Tank
- Well
- Fire Flow Improvements
- Grid Improvements

Proposed New Water System Components

- Future Tanks
- Future Well Sites
- Build Out Pipelines
- Fire Flow Improvements
- Grid Improvements
- Strengthen and Replace
- Build Out Pipes

Other Features

- WMP Study Area
- Rivers
- Canals

Flood Zone

- 100-Year Flood Zone
- 500-year Flood Zone

Source: Federal Emergency Management Agency

Figure 12-1
Surface Waters and FEMA Flood Zones in the Study Area

City of Modesto
Water Master Plan EIR

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Table 12-1. Beneficial Uses for Water Bodies Potentially Affected by the Proposed Program

			AGRICULTURE		INDUSTRY			RECREATION			FRESHWATER HABITAT		MIGRATION		SPAWNING			
		MUN	AGR		PROC	IND	POW	REC-1		REC-2	WARM	COLD	MIGR		SPWN		WILD	NAV
Water Bodies	HUC No.	Municipal and Domestic Supply	Irrigation	Stock Watering	Process	Service Supply	Power	Contact	Canoeing and Rafting	Other Non-Contact	Warm	Cold	Warm	Cold	Warm	Cold	Wildlife Habitat	Navigation
San Joaquin River																		
Mouth of Merced River to Vernalis	535/ 541	P	E	E	E			E	E	E	E		E	E	E		E	
Stanislaus River																		
Goodwin Dam to San Joaquin River	535	P	E	E	E	E	E	E	E	E	E	E		E	E	E	E	
Tuolumne River																		
New Don Pedro Dam to San Joaquin River	535	P	E	E				E	E	E	E	E		E	E	E	E	
Sacramento–San Joaquin Delta																		
Sacramento–San Joaquin Delta	544	E	E	E	E	E		E		E	E	E	E	E	E		E	E

Notes: AGR = agricultural supply; COLD = cold freshwater habitat; HUC = hydrologic unit code; IND = industrial service supply; MUN = municipal and domestic supply; NAV = navigation; POW = power; PROC = industrial process supply; REC-1 = water contact recreation; REC-2 = non-contact water recreation; SPWN = spawning, reproduction, and/or early development; WARM = warm freshwater habitat; WILD= wildlife habitat.

Beneficial Use Status: E = Existing beneficial uses; P = Potential beneficial uses; L = Existing limited beneficial uses

Source: Central Valley RWQCB 2016

California Toxics Rule

On May 18, 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other provisions for new water quality standards to be applied to waters in the state of California. USEPA promulgated this rule, also known as the California Toxics Rule, based on a determination that the numeric criteria were necessary in California to protect human health and the environment (USEPA 2017).

The California Toxics Rule fills a gap in California water quality standards that was created in 1994 when a state court overturned the state's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the State of California has been without numeric water quality criteria for many priority toxic pollutants as required by the CWA, necessitating the action by the USEPA. The federal criteria included in the California Toxics Rule are legally applicable in the state of California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the CWA (USEPA 2017).

Sustainable Groundwater Management Act

On September 16, 2014, Governor Edmund G. Brown, Jr., signed the Sustainable Groundwater Management Act (SGMA), comprised of three separate bills: AB 1739, Senate Bill (SB) 1319, and SB 1168. A central feature of SGMA is that it allows local agencies to customize groundwater sustainability plans (GSPs) to their regional economic and environmental conditions and needs (DWR 2017a). Among other things, SGMA requires that a GSP be adopted for high- and medium-priority groundwater basins (127 out of 515 basins and subbasins) in California. SGMA defines sustainable groundwater management as the "use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results." Undesirable results are defined as the following (DWR 2017b):

- Chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed);
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies;
- Significant and unreasonable land subsidence that substantially interferes with surface land uses; or
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

SGMA outlines the following timetable for adoption of GSPs:

- By 2017, local groundwater sustainability agencies (GSAs) must be identified.
- By 2020, overdrafted basins must be covered by a GSP; other high- and medium-priority basins not in overdraft must have plans by 2022.

- By 2040, each high- and medium-priority basin must achieve sustainability, although this deadline can be extended 10 years for good cause.

GSAs within the study area include the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA), which covers roughly the Modesto Subbasin (i.e., from the Stanislaus River to the Tuolumne River), and the West Turlock Subbasin Groundwater Sustainability Agency, which covers the area south of the Tuolumne River within the Turlock Subbasin (DWR 2017c).

CASGEM Basin Prioritization

In 2009, the California State Legislature amended the California Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California (DWR 2017d). Pursuant to this amendment, DWR established the California Statewide Groundwater Elevation Monitoring (CASGEM) Program. The CASGEM Program establishes the framework for regular, systematic, and locally managed monitoring in all of California's groundwater basins (DWR 2017d). To facilitate implementation of the CASGEM Program and focus limited resources, as required by the California Water Code, DWR ranked all of California's basins by priority: high, medium, low, and very low based on the following factors (DWR 2017e):

1. Population overlying the basin;
2. Rate of current and projected growth of the population overlying the basin;
3. Number of public supply wells that draw from the basin;
4. Total number of wells that draw from the basin;
5. Irrigated acreage overlying the basin;
6. Degree to which persons overlying the basin rely on groundwater as their primary source of water;
7. Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation; and
8. Any other information determined to be relevant by DWR.

DWR classifies the Modesto Subbasin as a high-priority basin, with noted impacts of "water quality degradation due to industrial and agricultural practices," though the basin is not specifically noted as being in overdraft (DWR 2014). The Turlock and Delta-Mendota subbasins are also both classified as high-priority basins, with noted groundwater overdraft issues (DWR 2014).

DWR Water Well Standards (Bulletins 74-81 and 74-90 combined)

DWR's well standards, contained in Bulletin 74-81 together with the well standards in the supplement Bulletin 74-90, are recommended minimum statewide standards for the protection of groundwater quality. The construction standards contained in Bulletins 74-81 and 74-90 apply to all water wells and cover such topics as well location with respect to contaminants and pollutants, sealing the upper annular space (i.e., space between the well casing and wall of the

drilled hole), and surface construction features. The well standards require that the surface portions of wells be adequately sealed such that contaminated water cannot enter through the well and into the groundwater.

Central Valley Flood Protection Board

The Central Valley Flood Protection Board (CVFPB) is the state regulatory agency responsible for ensuring that appropriate standards are met for the construction, maintenance, and protection of the Central Valley's flood control system, including along the Sacramento and San Joaquin Rivers and their tributaries. The 2017 Central Valley Flood Protection Plan Update provides an updated vision and strategy for flood system improvements within the State Plan of Flood Control (SPFC) (see below). Designated floodways have been established on the Tuolumne River, Stanislaus River, San Joaquin River, and portions of Dry Creek. In general, CVFPB requires a permit for proposed work that is located within the SFPC (see below), within 300 feet of a Designated Floodway that has been adopted by the CVFPB, or within 30 feet from the banks of a CVFPB Regulated Stream (CVFPB 2017). Several proposed pipeline improvements would cross or be located within the Designated Floodway along the Tuolumne River and Dry Creek, as shown on Figure 12-1. Two proposed wells in Grayson are located within 300 feet of the Designated Floodway along the San Joaquin River.

State Plan of Flood Control

The SPFC (Central Valley Flood Management Planning Program 2010) provides an inventory and description of the existing State-federal flood protection system in the Central Valley of California. The State-federal flood protection system refers to the set of federally authorized project levees and related facilities for which the State has provided assurances of cooperation to the federal government. No SPFC facilities are located along the Tuolumne River in the vicinity of Modesto and the study area. An SPFC levee is located along the east bank of the San Joaquin River near the location of the proposed improvements in Grayson; however, the proposed improvements would not affect this levee (Central Valley Flood Management Planning Program 2010).

12.2.3 Local Laws, Regulations, and Policies

Stanislaus County General Plan

The *Stanislaus County General Plan* guides land use and development in the unincorporated area of Stanislaus County (Stanislaus County 2016a). Goals and policies in the general plan related to hydrology and water quality include the following:

Conservation and Open Space Element

Goal Two. Conserve water resources and protect water quality in the County.

Policy Five. Protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

Goal Five. Reserve, as open space, lands subject to natural disaster in order to minimize loss of life and property of residents of Stanislaus County.

Policy Sixteen. Discourage development on lands that are subject to flooding, landslide, faulting, or any natural disaster to minimize loss of life and property.

Safety Element

Goal One. Prevent loss of life and reduce property damage as a result of natural disasters.

Policy Two. Development should not be allowed in areas that are within the designated floodway or any areas that are known to be susceptible to being inundated by water from any source.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019a) identifies the Stanislaus and Tuolumne Rivers, and Dry Creek, as regional parks. The River Greenway Program, which guides development within the Stanislaus River, Tuolumne River, and Dry Creek Comprehensive Planning Districts, includes the following policies that are potentially relevant to the Proposed Program and the hydrology and water quality impacts analysis:

Policy VII-B.7[l]. Sensitive habitats and natural areas, including wetlands and riparian corridors, will be protected and enhanced, when feasible.

Policy VII-B.7[n]. Aquatic species and habitat will be protected and enhanced, when feasible.

Policy VII-B.7[o]. The natural forces influencing the development of recreational areas, including potential flooding, prevailing winds, sun orientation, and topography will be considered during design.

Policy VII-B.7[p]. A flood management program that provides protection from catastrophic flooding and contributes to the ecological values of the river corridor will be promoted.

Del Rio Community Plan

The *Del Rio Community Plan* (Stanislaus County 1992) includes the following goal and policy that are relevant to hydrology and water quality:

Goal 5 Future development shall be served by adequate public infrastructure.

Policy A. All future development in Del Rio shall require underground utilities and facilities for community-wide secondary sewage treatment and water supply systems.

Salida Community Plan

The *Salida Community Plan* (Stanislaus County 2007) does not include any goals or policies that are relevant to the hydrology and water quality analysis for the Proposed Program.

City of Ceres General Plan

The City of Ceres General Plan (1997) includes the following goals and policies related to hydrology and water quality:

Goal 4.C To ensure a safe and reliable water supply sufficient to meet the future needs of the city.

Policies

4.C.2. The City shall only approve new development that relies on a public water system and where an adequate water supply and conveyance system exists or will be provided.

4.C.5. The City shall promote aquifer and wellhead protection programs to limit infiltration of pollutants that might contaminate the groundwater supply.

4.C.6. The City shall participate in a groundwater management program to preserve existing groundwater quality and quantity and to ensure future supplies.

Goal 4.E To collect and dispose of stormwater in a manner that minimizes inconvenience to the public, minimizes potential water-related damage, and enhances the environment.

Policies

4.E.1 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the city and immediately adjacent to the city in unincorporated Stanislaus County.

4.E.2 All drainage designs shall be in accordance with the accepted principles of civil engineering, the Stanislaus County *Storm Drainage Design Manual,* and City improvement standards.

4.E.4 The City shall encourage project designs that minimize drainage concentrations and impervious coverage.

4.E.6. The City shall require projects that have significant impacts on the quality of surface water runoff to incorporate mitigation measures for water quality impacts related to urban runoff.

Goal 6B To protect and enhance the natural qualities of the Ceres area's rivers, creeks, and groundwater.

Policies

6.B.1. The City shall cooperate with other agencies in the conservation of the Tuolumne River for the protection of its water resources and its open space qualities.

6.B.3. The City shall help protect groundwater resources from overdraft by promoting water conservation and groundwater recharge efforts.

6.B.4. The City shall continue to require the use of feasible and practical best management practices (BMPs) to protect receiving waters from the adverse effects of construction activities and urban runoff.

City of Turlock General Plan

The *City of Turlock General Plan* (2012) includes the following policies related to hydrology and water quality:

Guiding Policies

3.3-a Protect Water Quality and Supply. Continue efforts to safeguard the quality and availability of Turlock's water supply.

3.3-b Use Groundwater at a Sustainable Rate. Undertake steps to ensure the use of groundwater does not exceed the sustainable supply by verifying the estimated sustainable supply of 24,550 acre-feet per year and limiting groundwater use to the sustainable supply.

3.3-d Meet Projected Needs. Promote the orderly and efficient expansion of public utilities and the storm drainage system to adequately meet projected needs, comply with current and future regulations, and maintain public health, safety, and welfare.

3.3-e Coordinate Infrastructure Provision with Growth. Coordinate capital improvements planning, design, and construction for all municipal service infrastructure with the direction, extent, and timing of growth.

Integrated Regional Groundwater Management Plan for the Modesto Subbasin

The *Integrated Regional Groundwater Management Plan for the Modesto Subbasin* (IRGMP) (STRGBA 2005) was developed by the STRGBA, an association of the following six agencies: City of Modesto, Modesto Irrigation District, City of Oakdale, Oakdale Irrigation District, City of Riverbank, and Stanislaus County. The IRGMP was developed in compliance with the Groundwater Management Planning Act of 2002 (SB 1938) and the Integrated Regional Water Management Planning Act of 2002 (SB 1672). The overarching goal of the IRGMP is "to provide for the integrated use of groundwater and surface water within the basin to ensure the reliability of a long-term water supply to meet current and future beneficial uses including agricultural, industrial, and municipal water requirements while protecting the environment" (STRGBA 2005).

Consistent with SB 1938, the IRGMP contains basin management objectives (BMOs) to meet the purpose and goals of the groundwater management plan. BMOs that may be applicable to the Proposed Program include the following:

- Maintain groundwater levels
  - Identification and mapping of the basin's natural recharge areas
  - Development of a water budget to determine if the basin is in overdraft and, if so, to determine the amount of overdraft

- Control degradation of groundwater quality
  - Maintaining groundwater levels to control the movement of poor quality water into and within the basin. Groundwater pumping that results in the lowering of groundwater levels in part of the basin could alter the natural groundwater flow direction in the basin. In the area with groundwater contamination, this change could result in the movement of poor quality water in the basin. The City of Modesto has reduced groundwater pumping in some parts of the basin, augmenting its groundwater with surface water deliveries to its customers. Other actions may include implementing the actions summarized for the groundwater level BMOs listed above.
- Protect against potential inelastic land surface subsidence
- Groundwater monitoring and assessment

Groundwater Management Plan for the Turlock Groundwater Basin

The Groundwater Management Plan for the Turlock Subbasin presents BMOs and recommended protection measures to meet the Turlock Groundwater Basin Association's (TGBA's) overall goal to "ensure that groundwater remains a reliable, safe, efficient, and cost-effective water supply for the local area." The TGBA is a formal group for coordinating groundwater management activities within the Turlock Subbasin, which has included input from the Turlock and Modesto irrigation districts; the cities of Ceres, Turlock, Modesto, and Hughson; the Hilmar and Delhi county water districts; the Keyes, Denair, and Ballico community services districts; the Eastside and Ballico-Cortez water districts; and Stanislaus and Merced counties. BMOs described in the Groundwater Management Plan include the following (TGBA 2008):

1. Maintain an adequate water level in the groundwater basin.
2. Protect groundwater quality and implement measures, where feasible, to reduce the potential movement of existing contaminants.
3. Monitor groundwater extraction to reduce the potential for land subsidence.
4. Promote conjunctive use of groundwater and surface waters.
5. Support and encourage water conservation.
6. Develop and support alternate water supplies, and educate users on the benefits of water recycling.
7. Continue coordination and cooperation between the TGBA members and customers.

Stanislaus County Groundwater Ordinance

The Stanislaus County Groundwater Ordinance requires that all applications for a Well Construction Permit filed after November 25, 2014 demonstrate, based on substantial evidence, that either (1) one or more of the exemptions set forth in Section 9.37.050 apply, or (2) extraction of groundwater from the proposed well will not constitute unsustainable extraction of

groundwater. The ordinance notes that the above conditions do not apply to a well designed to replace an existing well that has been permitted under Chapter 9.36 prior to November 25, 2014, if the replacement well has no greater capacity than the well it is replacing.

The exemptions set forth in Section 9.37.050, referenced above, include the following:

> Water resources management practices of public water agencies that have jurisdictional authority within the County, and their water rate payers, that are in compliance with and included in groundwater management plans and policies adopted by that agency in accordance with applicable state law and regulations, as may be amended, including but not limited to the California Groundwater Management Act (Water Code Sections 10750 et seq.), or that are in compliance with an approved Groundwater Sustainability Plan.

12.3 Environmental Setting

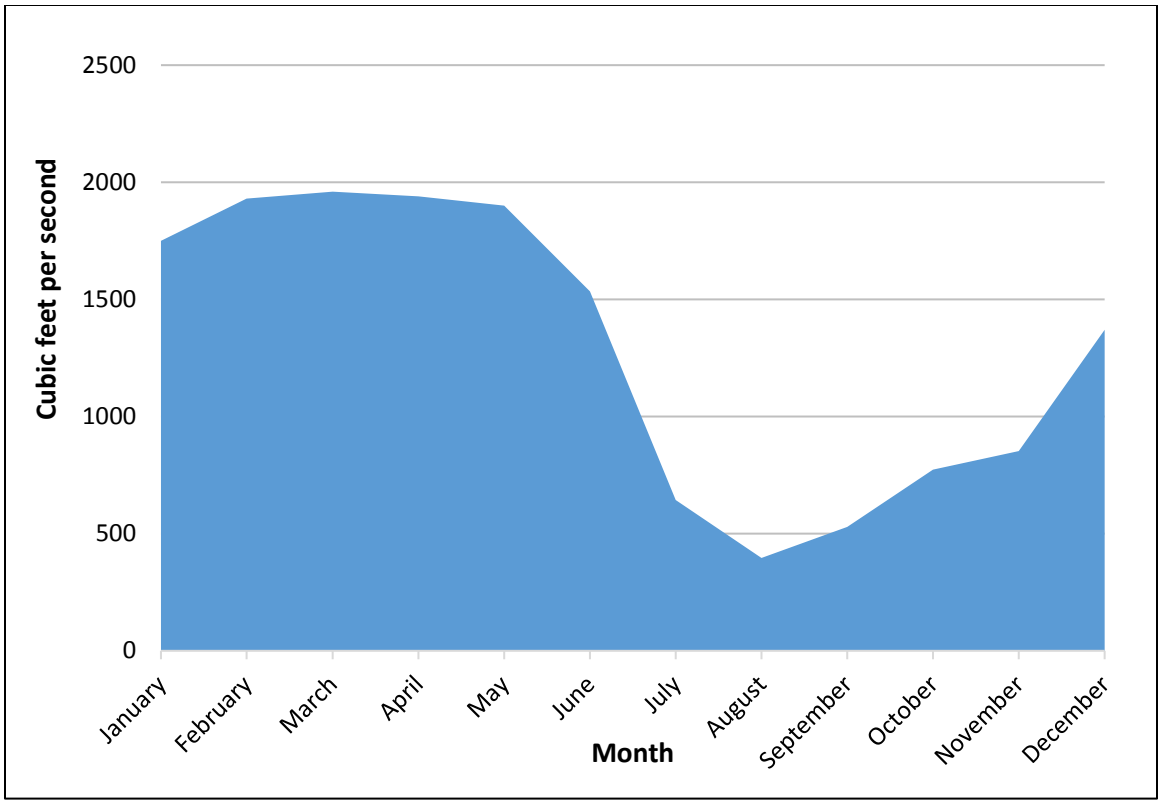
12.3.1 Topography and Climate

Being located in the Central Valley of Northern California, the City of Modesto and its outlying service areas are generally flat and subject to a Mediterranean climate and precipitation pattern. Summers are typically hot and dry, while winters are cool and wet. Most precipitation falls from November through April. Flows in area surface waters are typically highest during this period as well. Snowmelt may contribute substantially to flows in the Tuolumne River during the spring.

12.3.2 Surface Water Hydrology

The Tuolumne River is the primary surface water feature in the City of Modesto area, passing through roughly the center of the City. The Stanislaus River flows in an east-west direction to the north of the City, making up the northern boundary of Stanislaus County and passing near the communities of Del Rio, Salida, and Riverbank. The Tuolumne River drains to the San Joaquin River, which flows northwest through the Central Valley before joining the Sacramento River and flowing out to San Francisco Bay and the Pacific Ocean. Dry Creek flows through northeast Modesto before discharging into the Tuolumne River. Figure 12-1 shows surface water bodies in the study area.

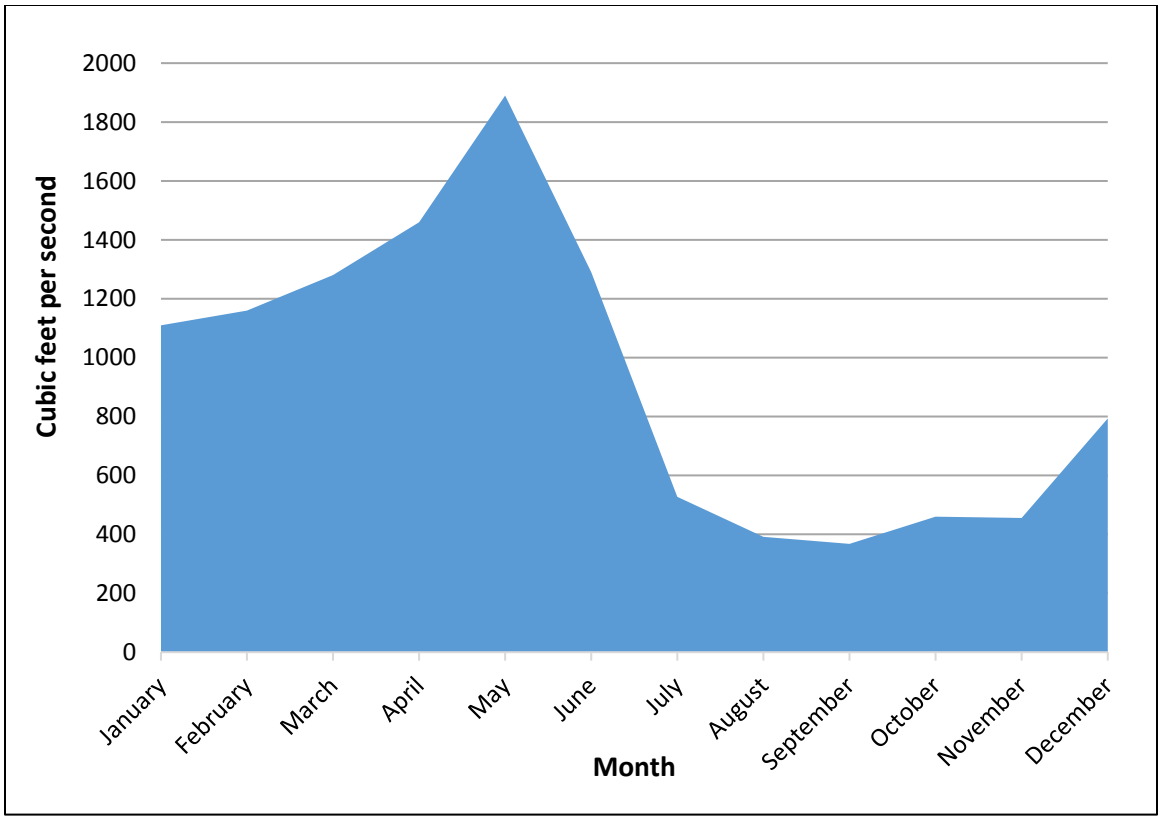
Flows in study area waters vary seasonally, roughly in line with the seasonal precipitation pattern. Flows in the Tuolumne River are regulated by reservoirs and power plants upstream from Modesto, including Hetch Hetchy Reservoir and Don Pedro Reservoir. Don Pedro Reservoir, jointly operated by the Modesto Irrigation District (MID) and the Turlock Irrigation District (TID), has a capacity of 2,030,000 acre-feet (AF) and provides flood control for the Modesto area (City of Modesto 2019b). **Figure 12-2** shows the mean monthly flow in the Tuolumne River as measured at the USGS stream gage at Modesto (USGS 11290000).



Source: USGS 2017a

Figure 12-2. Mean Monthly Discharge at USGS Gage 11290000 (Tuolumne River at Modesto, CA), Water Years 1940-2016

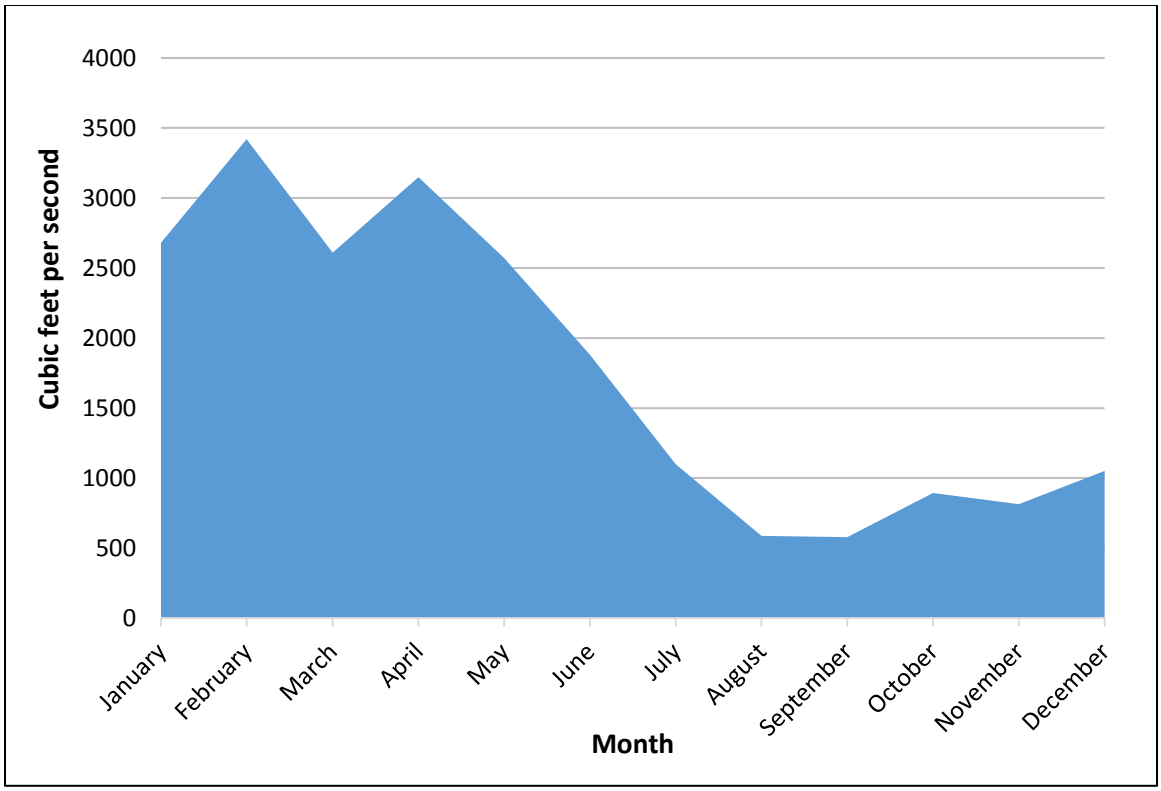
Flows in the Stanislaus River also are regulated by upstream dams and reservoirs, including the Tulloch Reservoir and New Melones Lake. **Figure 12-3** shows mean monthly flow in the Stanislaus River as measured at the USGS stream gage at Ripon (USGS 11303000).



Source: USGS 2017b

Figure 12-3. Mean Monthly Discharge at USGS Gage 11303000 (Stanislaus River at Ripon, CA), water Years 1940-2016

Upstream reservoirs on the San Joaquin River include Millerton Lake and Mammoth Pool Reservoir. **Figure 12-4** shows mean monthly flow in the San Joaquin River as measured at the USGS stream gage near Crows Landing (USGS 11274550).



Source: USGS 2017c

Figure 12-4. Mean Monthly Discharge at USGS Gage 11274550 (San Joaquin River near Crows Landing, CA), Water Years 1995-2016

No stream gage exists on Dry Creek, but it can be assumed that flows follow a generally similar pattern, with higher flows in the winter and spring and lower flows in the summer and fall.

12.3.3 Water Quality

Surface water quality in the San Joaquin, Stanislaus, and Tuolumne rivers is excellent at their sources in the Sierra Nevada Mountains (Stanislaus County 2016b). However, as each river flows through the San Joaquin Valley, water quality declines. Agricultural and domestic use-and-return both contribute to water quality degradation. During dry summer months, the concentration of pollutants increases, particularly in the San Joaquin River, which drains domestic and industrial wastewater for the entire San Joaquin Valley. Water quality in the Stanislaus and Tuolumne rivers declines by the time they discharge into the San Joaquin River. Comparatively, water quality declines more in the Tuolumne River than the Stanislaus River due to agricultural return flows and gas well wastes (Stanislaus County 2016b).

Table 12-2 shows CWA, Section 303(d) Category 5 (i.e., requiring a TMDL) listings for water body segments in the study area and downstream.

Table 12-2. Section 303(d), Category 5 Listings for Water Body Segments Potentially Affected by the Proposed Program

Water Body	Watershed CalWater / USGS HUC	Contaminant	Source	First Listed	TMDL Status[1]	Completion Date[2]
San Joaquin River (Stanislaus River to Delta Boundary)	54400000 / 18040002	Chlorpyrifos	Unknown	2006	5B	2007
		DDE (Dichlorodiphenyl-dichloroethylene)	Unknown	2010	5A	2011
		DDT (Dichlorodiphenyl-trichloroethane)	Unknown	2006	5A	2011
		Diuron	Unknown	2010	5A	2021
		Electrical Conductivity	Unknown	2006	5B	2007
		Escherichia coli (*E. coli*)	Unknown	2010	5A	2021
		Group A Pesticides	Unknown	2006	5A	2011
		Mercury	Unknown	2006	5A	2012
		Temperature, water	Unknown	2010	5A	2021
		Toxaphene	Unknown	2006	5A	2019
		Unknown Toxicity	Unknown	2006	5A	2019
San Joaquin River (Tuolumne River to Stanislaus River)	53530000 / 18040002	Chlorpyrifos	Unknown	2006	5B	2007
		DDT (Dichlorodiphenyl-trichloroethane)	Unknown	2006	5A	2011
		Diazinon	Unknown	2006	5B	2007
		Electrical Conductivity	Unknown	1998	5A	2021
		Group A Pesticides	Unknown	1994	5A	2011
		Mercury	Unknown	2006	5A	2012
		Temperature, water	Unknown	2010	5A	2021
		Unknown Toxicity	Unknown	1994	5A	2019
Stanislaus River, Lower	53530000 / 18040002	Chlorpyrifos	Unknown	2010	5A	2021
		Diazinon	Unknown	1998	5A	2008
		Group A Pesticides	Unknown	1998	5A	2011
		Mercury	Unknown	2002	5A	2020
		Temperature, water	Unknown	2010	5A	2021
		Unknown Toxicity	Unknown	1998	5A	2019

Water Body	Watershed CalWater / USGS HUC	Contaminant	Source	First Listed	TMDL Status[1]	Completion Date[2]
Tuolumne River, Lower (Don Pedro Reservoir to San Joaquin River)	53550000 / 18040002	Chlorpyrifos	Unknown	2012	5A	2021
		Diazinon	Unknown	2002	5A	2010
		Group A Pesticides	Unknown	2006	5A	2011
		Mercury	Unknown	2010	5A	2021
		Temperature, water	Unknown	2010	5A	2021
		Unknown Toxicity	Unknown	2006	5A	2022

Notes: TMDL = total maximum daily load.

[1] TMDL requirement status definitions: A = TMDL still required; B = being addressed by USEPA-approved TMDL. Category 5 = water body segments in which at least one beneficial use is not supported and a TMDL is needed.

[2] Completion date relates to the TMDL requirement status; a date for A = TMDL scheduled completion date; B = date USEPA approved TMDL.

Source: SWRCB 2012

12.3.4 Stormwater

The City's storm drainage system includes approximately 77 miles of storm drain lines and 25 storm pump stations. Stormwater discharges from Modesto drain to 24 drainage basins and approximately 12 major outfalls (greater than 24 inches in diameter) to receiving waters (Tuolumne River or Dry Creek), MID laterals/drains, or rockwells. According to the City's *Storm Drainage Master Plan* (City of Modesto 2008), surface water discharges generally occur in the older parts of Modesto or those areas immediately adjacent to the Tuolumne River, Dry Creek, or irrigation canals. Approximately 40 percent of stormwater gets discharged to detention/retention basins, 20 percent of stormwater gets directed to receiving waters, 10 percent is directed to MID laterals/drains, and 30 percent goes to rockwells.

Rockwells are designed to collect surface stormwater runoff and allow it to infiltrate to the groundwater. These are rock-lined holes that are typically 6 feet in diameter and up to 50 feet deep. There are approximately 10,500 rockwells in Modesto, serving approximately two-thirds of the City's area. As a large urban area, Modesto has large areas of impervious surface, which generate increased volumes of surface runoff compared to the natural ground surface. To the extent this runoff is not captured by rockwell structures and allowed to infiltrate to groundwater, it may ultimately be discharged to nearby water bodies via the City's positive gravity stormwater drainage systems. The Tuolumne River and Dry Creek receive a large fraction of stormwater runoff from the Modesto urban area.

12.3.5 Groundwater Levels, Flows, and Quality

The proposed components would primarily be located in the Modesto Subbasin of the San Joaquin Valley Groundwater Basin. This subbasin extends from the San Joaquin River east to the Sierra foothills, and from the Tuolumne River north to the Stanislaus River. Several components south of the Tuolumne River (e.g., Program components in East Modesto, Ceres, Empire, and Turlock) also would be located in the Turlock Subbasin. The proposed components in Grayson would be located in the Delta-Mendota Subbasin of the San Joaquin Valley Groundwater Basin.

The western portions of the Modesto and Turlock subbasins generally have two principal aquifers: one above and one below the Corcoran clay[1] (STRGBA 2005). East of the Corcoran clay, the aquifers are generally unconfined. Groundwater in the Delta-Mendota subbasin occurs in three water-bearing zones, including a lower zone, upper zone, and shallow zone. The Corcoran Clay also underlies this subbasin at depths ranging from 100 to 500 feet, which creates confining conditions (DWR 2006a). In the area of Modesto, groundwater flows from east to west-southwest following the topography of the land and differences in mean groundwater levels. Groundwater contours suggest that groundwater is discharged to the Tuolumne River along most reaches of the river.

Groundwater recharge in the region occurs primarily from percolation of applied irrigation water, as well as seepage from the Modesto Reservoir and irrigation canals (DWR 2004). Lesser recharge occurs from subsurface flows originating in the mountains and foothills along the east side of the subbasins and percolation of direct precipitation (DWR 2004). Groundwater recharge to the deeper aquifers can occur from seepage through unconfined aquifers or across the Corcoran clay, or from horizontal movement of water from the eastern portion of the subbasin (STRGBA 2005).

Groundwater levels in the Modesto area have declined over the past decades. The Modesto subbasin water level declined nearly 15 feet from 1970 through 2000 (DWR 2004), while average groundwater levels in the Turlock Subbasin declined nearly 7 feet from 1970 through 2000 (DWR 2006b). Groundwater levels in the Delta-Mendota Subbasin declined an average of 2.2 feet from 1970 through 2000 (DWR 2006a). Groundwater levels were locally depressed beneath and around the Modesto urban area, but completion of the Modesto Regional Water Treatment Plant in 1994 and subsequent importation of surface water supplies from the Modesto Irrigation District caused groundwater levels to rebound to some degree (STRGBA 2005). More recent data indicates that from 2007 to 2017 groundwater levels in the Modesto area decreased from 0 to 20 feet, with isolated areas of greater reductions (DWR 2017f). Some of this decrease may be attributable to the recent drought in California, which lasted in its most severe form from roughly 2013-2014, though moderate drought conditions continued for up to years afterwards in some areas of the state, including in the Modesto area through February 2017. In 2014 in the Central Valley, total groundwater pumping was increased by 5 million acre-feet to partially compensate for a reduction in surface water deliveries to farmers of 6.5 million acre-feet in that year (Stanislaus County 2014).

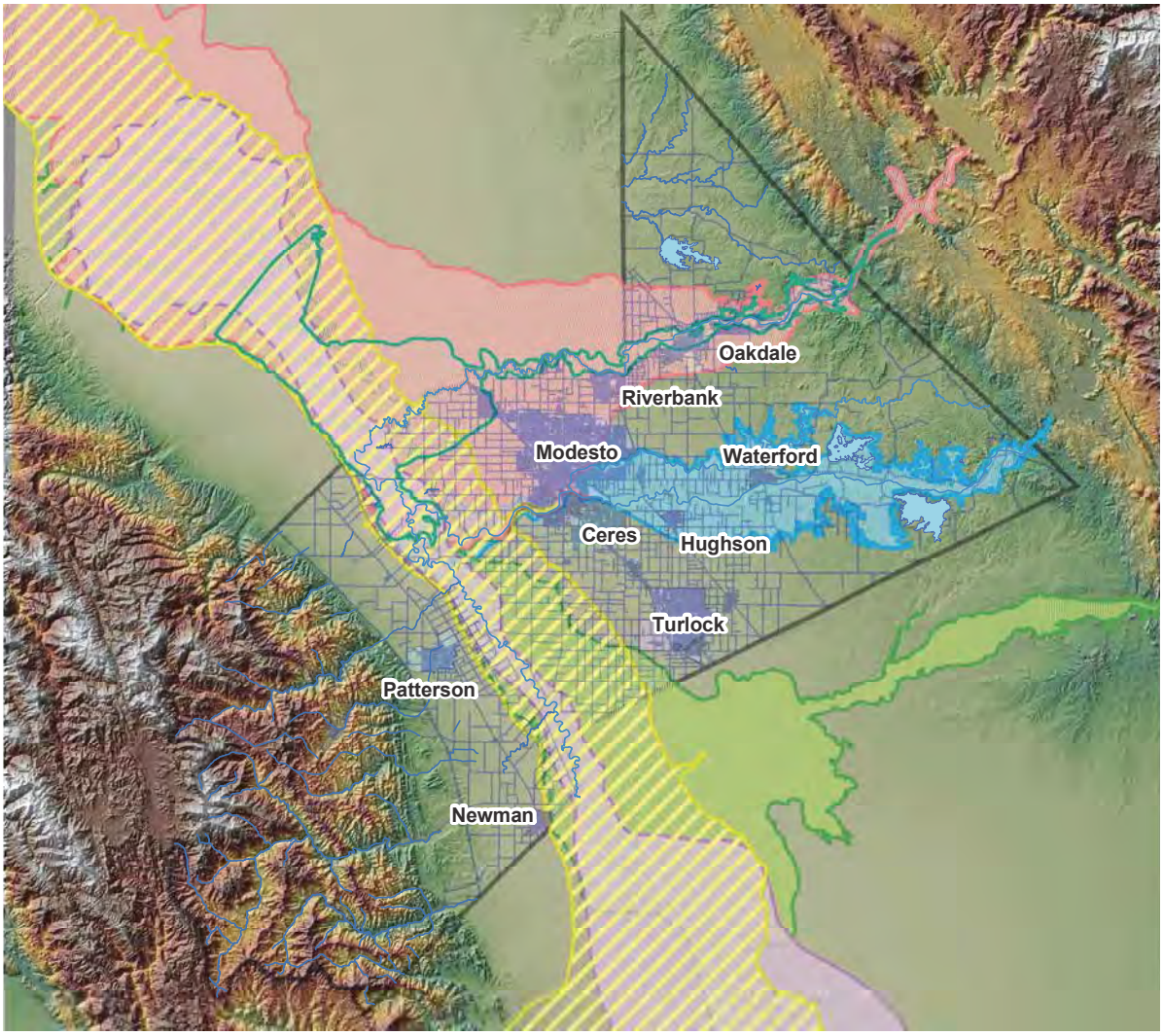
Groundwater quality throughout the San Joaquin Valley region is suitable for most urban and agricultural uses; however, localized areas of high total dissolved solids (TDS), nitrates, boron, chloride, arsenic, selenium, dibromochloropropane (DBCP), and radon exist (Stanislaus County 2016b). Elevated TDS concentrations may occur from recharge of streamflow originating from marine sediments or concentration of salts from agricultural practices due to evaporation and poor drainage. The major human sources of nitrates are disposal of human and animal waste products and fertilizers, but nitrates may also occur naturally. Agricultural pesticides (e.g., DBCP) and herbicides have been detected in groundwater through the region (Stanislaus County 2016b).

[1] The Corcoran clay is a clay layer underlying the western half of the Modesto and Turlock Subbasins. This clay layer is present at depths ranging between 50 and 200 feet below ground surface, and establishes an effective barrier to water movement between the confined and unconfined water bodies (DWR 2004, 2006b).

12.3.6 Floodplains and Dam Inundation Areas

Several Proposed Program improvements would be located within the 100-year (i.e., 1-percent annual chance flood) floodplain mapped by FEMA; however, all would be buried pipelines with no above-ground components. Mapped FEMA flood zones are depicted in Figure 12-1. The Proposed Program is located in the Central Valley of California, approximately 70 miles from the ocean. Therefore, it would be outside of any tsunami zone.

The Stanislaus County General Plan (Figure V-3) shows that much of Modesto, including the area of the Program improvements, is within the inundation area for multiple dams. The figure (reproduced as **Figure 12-5** here) shows that Modesto and potentially North Ceres are within the inundation area for New Melones and New Don Pedro Dams (Stanislaus County 2010).



Map Legend:

- Lakes
- Rivers
- Streams
- Roads

Dam Inundation Areas

Dam Name

- Don Pedro
- Exchequer
- New Melones
- San Luis
- Pine Flat
- Tulloch

N

0 10 20 30 Miles

Map displays Stanislaus County with Dam Inundation Areas of regional dams.

Source: Stanislaus County 2010

Figure 12-5. Stanislaus County Dam Inundation Hazards Map

Prepared by: Horizon

City of Modesto Water Master Plan EIR

12.4 Impact Analysis

12.4.1 Methodology

Impacts to hydrology and water quality were evaluated qualitatively based on consideration of ways in which construction and operation of the proposed components could trigger the CEQA significance criteria. As described throughout this DEIR, all impacts are evaluated at a program level of detail.

12.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

The Proposed Program would not include any new housing. Therefore, the eighth criterion above is dismissed from detailed consideration, as the Proposed Program would have no potential to place housing within the 100-year floodplain. Likewise, the Proposed Program area is generally

flat and located far from the ocean or any large standing bodies of water. Therefore, the Proposed Program would have no potential to be subjected to inundation by seiche, tsunami, or mudflow, and the last criterion is dismissed.

12.4.3 Environmental Impacts

Impact HYD/WQ-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Degrade Water Quality (*Less than Significant with Mitigation*)

Construction of the proposed components could result in discharges of poor-quality water to nearby water bodies, if adequate precautions are not taken. Trenching and other ground-disturbing activities could expose loose soils that could be eroded during precipitation events. Construction equipment also would use hazardous materials (e.g., fuel and diesel) that could spill during routine use, storage, transport, or disposal, and then potentially seep into groundwater or be washed into nearby water bodies. Use of trenchless construction methods (e.g., jack and bore, horizontal directional drilling [HDD] also could present hazards to water quality, such as from frac-out[2] accidents during boring activities below or near streams. Additionally, construction of Program components may require dewatering of excavations, particularly for those components adjacent to the Tuolumne River. Discharge of this water back to the river or other areas could result in adverse water quality effects if adequate precautions are not taken.

Testing, disinfection, and flushing of pipeline improvements prior to use also would require disposal of de-chlorinated flushing water to the storm drainage system or sanitary sewer system. As described in Chapter 2, *Program Description,* one of the prescribed disinfection methods in the City's standard specifications, which comply with American Water Works Association (AWWA) standard methods, would be used to disinfect all new water mains and appurtenances. After completion of the disinfection process, the heavily chlorinated water would be de-chlorinated and flushed from the new pipelines/water system facilities until the residual chlorine concentration meets the City's established requirements, which are protective of water quality in receiving waters. Discharges of this water would not substantially affect receiving waters or result in a violation of water quality standards or waste discharge requirements; refer to Chapter 17, *Utilities and Service Systems* for additional discussion of impacts on the stormwater and sewer system from discharge of testing, disinfection and flushing water.

As described in Chapter 11, *Hazards and Hazardous Materials,* many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. All components with a footprint greater than one acre of disturbance area would be subject to this permit, which requires preparation and implementation of a SWPPP. As described in Section 12.2, the SWPPP must, among other things, present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. The

[2] "Frac-out" is the inadvertent return and release to the environment of drilling lubricant during HDD. This is a potential concern when HDD is used under sensitive habitats, waterways, and areas of concern for cultural resources. The HDD procedure uses bentonite slurry, which is a fine clay material that is used as a drilling lubricant. Bentonite is non-toxic and is commonly used farming practices, but benthic invertebrates, aquatic plants, and fish and their eggs can be smothered by the fine particles if bentonite is discharged to waterways (California Public Utilities Commission [CPUC] 2003).

SWPPP also would include spill prevention and response procedures for any hazardous materials used during construction. Compliance with this permit would minimize any impacts of Proposed Program construction activities on water quality, but construction water quality impacts of individual program components could nevertheless be significant.

For Program components whose construction would disturb less than one acre, the City of Modesto's Standard Specifications require that all projects less than one acre develop a Local SWPPP or Erosion Control Plan and implement stormwater BMPs during construction. The Local SWPPP must be submitted to the City of Modesto Land Development Engineering Division for review prior to obtaining a Grading or Encroachment Permit for the project. Erosion control BMPs are described in Chapter 15 of the Standard Specifications. Implementation of these requirements included in the City's Standard Specifications would ensure that impacts on water quality related to erosion for Program components that disturb less than one acre would be less than significant.

As described in Chapter 11, *Hazards and Hazardous Materials,* the City would maintain compliance with all local, state, and federal regulations concerning hazardous materials which would prevent substantial water quality impacts (e.g., due to accidental spills of hazardous materials) during construction activities and ensure water quality impacts would be less than significant.

To ensure that the Proposed Program would not adversely impact water quality from proposed trenchless pipeline installation methods (e.g., new water distribution pipelines underneath the Tuolumne River or Dry Creek), the City would implement **Mitigation Measure HYD/WQ-1 (Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods)**. This measure would require the City's drilling contractor to prepare and implement a frac-out contingency plan for trenchless construction methods. The plan would be designed to minimize the potential for frac-out, provide for the timely detection of frac-outs, and ensure a timely and effective response in the event a frac-out occurs (CPUC 2003). Implementation of this mitigation measure would reduce adverse water quality impacts from frac-out associated with trenchless activities to a level that is less than significant.

Operation of the Proposed Program improvements would not be likely to have significant adverse impacts on water quality. Operational activities would be very similar to existing maintenance, operation, and repair activities for the existing water system. The proposed aquifer storage and recovery (ASR) program would use water treated to drinking water standards to recharge groundwater, and therefore would not present an opportunity for groundwater quality contamination. Operational water quality impacts would be less than significant.

Overall, compliance with NPDES permit requirements and the City's Standard Specifications, and implementation of Mitigation Measure HYD/WQ-1would minimize adverse effects on water quality. In conclusion, the Proposed Program's overall impact would be **less than significant with mitigation**.

Mitigation Measure HYD/WQ-1: Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.

The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling or microtunneling) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving

these methods. At a minimum, the frac-out contingency plan shall include the following components/measures:

- Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions.

- Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route.

- Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below.

- Maintain necessary response equipment on-site or at a readily accessible location and in good working order.

- Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003):

    - For a terrestrial frac-out:

        - Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud.

        - Based on consultation with CDFW (see below), either:

            - Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or

            - Leave the drilling mud in place to avoid potential damage from vehicles entering the area.

        - Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

    - For an aquatic frac-out:

        - Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location).

        - Based on consultation with CDFW (see below), either:

            - If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column.

- If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain).

- If the fracture becomes excessively large, call in a spill response team to contain and clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site.

– If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation.

- Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.

Impact HYD/WQ-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would Be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level (*Significant and Unavoidable*)

The Proposed Program involves the construction and operation of impervious features such as storage tanks, buildings to house booster pump stations and groundwater wells, and a corporation yard. These features are expected to result in only a small incremental increase in impervious surfaces and would not substantially affect percolation of rainfall or groundwater recharge.

The City of Modesto's Proposed Program includes new and replacement groundwater wells within the contiguous and outlying Modesto water service areas. Typically, the wells would have a pumping capacity between 750 and 2,000 gallons per minute (gpm). Although it cannot be determined how much groundwater pumping may increase under the Proposed Program, as it is not known how frequently and at what capacity the new wells would operate, it can be assumed that groundwater pumping would increase over time in accordance with the City's growth and development. **Table 12-3** below shows projected increases in water demand and groundwater extraction in the City's service area.

Table 12-3. City of Modesto – Projected Retail Water Supplies

Water Supply	Projected Water Supply (Acre-feet)				
	2020	2025	2030	2035	2040
Purchased or Imported Water[1]	44,800	48,533	52,267	56,000	59,733
Groundwater	24,664	26,369	28,073	29,778	31,483
Total:	69,464	74,902	80,340	85,778	91,216

Notes: [1]Purchases from Modesto Irrigation District.

Source: City of Modesto 2016

As described in Chapter 4 of the WMP, a model was developed to analyze the system and determine the existing and future water system needs. To determine the water supply needs in

the outlying communities where groundwater is the primary or only source of water, the maximum operating yield of the Modesto and Turlock groundwater sub-basins was incorporated into the model.

The Proposed Program was developed in consideration of the operating yield of the Modesto and Turlock groundwater sub-basins. This operating yield was calculated to better manage the groundwater basin in consideration of estimates of annual recharge and pumping activities, and to prevent lowering of the groundwater table. Therefore, by design, operation of existing and proposed wells in the study area should not substantially lower the overall basin-wide level of water or the capacity of the groundwater basins. Individual wells would also be designed and operated to avoid localized reductions in groundwater levels that could substantially affect nearby wells and groundwater beneficial uses.

The City is a participant in the Groundwater Sustainability Agencies that have been formed for the Modesto and Turlock subbasins. Both GSAs are currently developing Groundwater Sustainability Plans per the requirements of SGMA. The City, along with other agencies or private entities, will implement the recommendations of the GSP, when available, in accordance with SGMA.

That said, groundwater development in the Modesto, Turlock, and/or Delta-Mendota subbasins by other agencies or private entities could, in combination with the City's use of groundwater, result in overall groundwater pumping which exceeds the sustainable yield of the aquifer(s). Pumping by other entities is outside of the City's control. SGMA requires users of groundwater in a basin to develop a GSP which will define the sustainable yield of the aquifer and allocate pumping amounts to individual users (or identify other measures) which will ensure that overall pumping is sustainable. The City will be a participant in development of the GSPs. However, because the GSP has not been developed, and the measures or allocations it will contain are currently unknown and would not be entirely within the City's control, the GSP cannot be relied upon as the basis for concluding that the City's use of groundwater (in combination with other users) would not exceed the sustainable yield of the basin(s); this would be improperly deferred mitigation under CEQA.

While the City fully expects that the SGMA process and the planning surrounding the WMP will prevent overdraft, due to the stage of the SGMA planning process, the City has conservatively concluded that impacts are potentially significant. The City has not identified feasible mitigation beyond that which would be identified in the future pursuant to SGMA, and such measures would be outside of the City's control, to the extent they would need to be implemented by other entities (e.g., other users of groundwater in the basin(s). For these reasons, this impact is considered **significant and unavoidable.**

Impact HYD/WQ-3: Substantially Alter the Existing Drainage Pattern of the Site or Area Such as to Result in Substantial Erosion, Siltation, or Flooding On- or Off-Site (*Less than Significant*)

The Proposed Program would not alter the course of any stream or river and would not substantially affect the drainage patterns at individual project sites over the long term. Many of the proposed components would be buried underground within existing streets (e.g., new water pipelines) and would have no potential to alter drainage patterns. The Proposed Program would include construction of several new pipelines crossing the Tuolumne River and Dry Creek; these

would be installed using trenchless methods beneath the water bodies, or be incorporated into pedestrian or vehicular bridges, and would not affect the existing drainage patterns.

Certain Program components would include new impervious surface areas, which would alter existing drainage patterns on-site to some degree (impervious surfaces generally increase volume and velocity of surface runoff), but these changes would not be substantial and would not result in substantial siltation, erosion, or flooding on- or off-site.

During construction of individual Program improvements, the Proposed Program could temporarily alter the drainage patterns of individual project sites. Trenching for installation of water lines, excavation and foundation work for installation of new storage tanks and associated facilities, and related activities could temporarily change the ground surface and expose loose soils to erosive forces (e.g., water, wind). These changes could result in substantial erosion on-site, a significant impact.

For CIP projects that exceed one acre in size, compliance with the NPDES General Construction Permit would minimize erosion during construction activities. In general, the change in runoff patterns that could occur during construction would not be sufficient to result in substantial flooding on- or off-site. In addition, for CIP projects in close proximity to Designated Floodways along the Tuolumne River, Dry Creek, and San Joaquin River, the City would apply for appropriate encroachment permits from the CVFPB and State Reclamation Board prior to construction. For CIP projects with less than one acre in size, the City would implement requirements in its Standard Specifications for a Local SWPPP, which would prevent substantial impacts related to erosion and siltation. Therefore, this impact would be **less than significant.**

Impact HYD/WQ-4: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff (*Less than Significant*)

The Proposed Program would include limited areas of new impervious surface area, which could marginally increase the volume and velocity of surface water runoff at the location of certain Program improvements. Most improvements would route any stormwater generated on-site to the City's system of rockwells and positive stormwater collection features. The City would comply with its Phase I municipal stormwater permit (Order R5-2015-0025), which requires industrial/ commercial development projects greater than 1 acre to incorporate storm water measures into the design plan. Given the small amount of additional stormwater runoff that may be generated by the Proposed Program improvements (many of the improvements would be buried underground and would have no potential to generate stormwater), the Proposed Program would not exceed the capacity of existing or planned stormwater drainage systems.

Given the nature of the Proposed Program components, these facilities would not provide additional sources of polluted runoff. It is possible that small amounts of fuel or solvents used in pump station generators or facility maintenance could be spilled and washed into the storm drain system, but this occurrence would be unlikely and any amount of polluted runoff generated by the Proposed Program would be small.

Therefore, this impact would be **less than significant.**

Impact HYD/WQ-5: Place Within a 100-year Flood Hazard Area Structures Which Would Impede or Redirect Flood Flows (*Less than Significant*)

Several proposed components would be located within the 100-year flood hazard area (i.e., 1-percent annual chance flood zone), as shown on Figure 12-1; however, all of these would be buried pipelines with no above-ground components. Therefore, these proposed components would not impede or redirect flood flows and would not increase flood hazards for other nearby structures. As a result, this impact would be **less than significant.**

Impact HYD/WQ-6: Expose People or Structures to a Significant Risk of Loss, Injury or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam (*Less than Significant*)

As discussed in Section 12.3, virtually the entire City of Modesto, including most if not all of the proposed components, are located within the zone of potential inundation in the event of dam failure of several reservoirs (e.g., New Melones, Don Pedro, Exchequer, San Luis, or Pine Flat Dams). These dams are routinely evaluated for seismic stability by the California Division of Safety of Dams to ensure the integrity of the structures (DWR 2017g). Because the probability of dam failure is extremely low, impacts related to flooding due to failure of a dam would be **less than significant**.

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Chapter 13
LAND USE AND PLANNING

13.1 Overview

Existing land uses in the study area and applicable land use policies and regulations for the City of Modesto, City of Turlock, City of Ceres, and Stanislaus County are presented. This chapter also evaluates land use compatibility impacts that would result from the implementation of the Proposed Program and considers mitigation measures to reduce Program-related impacts.

The regulatory and environmental settings and impact analysis for land use and planning were developed through a review of:

- the *Stanislaus County General Plan* (2016),
- the *City of Modesto Urban Area General Plan* (2019),
- the *Ceres General Plan 2035* (2018),
- the *City of Turlock General Plan* (2012), and
- the *Tuolumne River Regional Park Master Plan* (EDAW 2001).

13.2 Regulatory Setting

No federal or state laws, regulations, or policies pertaining to land use and planning are applicable to the Proposed Program.

13.2.1 Local Laws, Regulations, and Policies

Stanislaus County General Plan

The *Stanislaus County General Plan* (2016) applies to unincorporated lands surrounding the City of Modesto, including unincorporated lands within the City's sphere of influence (SOI) (e.g., Empire, Salida, Grayson, and Del Rio). The water storage tank and groundwater well site located northwest of Modesto, and two groundwater well sites located west of Modesto are designated for agricultural uses. The Agriculture designation recognizes the value and importance of agriculture by acting to preclude incompatible urban development within agricultural areas. The designation is intended for areas of land which are presently or potentially desirable for agricultural usage. While the designation establishes agriculture as the primary use in land, it also allows dwelling units, limited agriculturally related commercial services, agriculturally related light industrial uses, and other uses which by their unique nature are not compatible with urban uses, provided they do not conflict with the primary use (Stanislaus County 2016).

The groundwater well site near Charity Way and Bitritto Way is designated as Planned Industrial (PI), and the well site near Coffee Road and Claratina Avenue is designated as Planned Development. The Planned Development designation is intended for land which, because of its unique characteristics, may be suitable for a variety of uses without detrimental effects on other property (Stanislaus County 2016).

The three well sites located northeast of Modesto (one at the Oakdale Road and Claribel Road intersection, one located west of Roselle Avenue, and the third located near the intersection of Plainview Road and Litt Road) are designated as Urban Transition. The water storage tank site near Gomes Road is also designated as Urban Transition. The purpose of the Urban Transition designation is to ensure that land remains in agricultural use until urban development consistent with a city's (or unincorporated community's) general plan designation is approved. In general, urban development on these lands would only occur upon annexation to a city but such development may be appropriate prior to annexation provided the development is not inconsistent with the land use designation of the general plan of the affected city (Stanislaus County 2016).

The Land Use Element contains the following policies:

> **Policy 1.** Land will be designated and zoned for agricultural, residential, commercial, industrial, or historical uses when such designations are consistent with other adopted goals and policies of the general plan.
>
> **Policy 2.** Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation and enjoyment of scenic beauty.
>
> **Policy 4.** Urban development shall be discouraged in areas with growth-limiting factors such as high water table or poor soil percolation, and prohibited in geological fault and hazard areas, flood plains, riparian areas, and airport hazard areas unless measures to mitigate the problems are included as part of the application.
>
> **Policy 5.** Residential densities as defined in the General Plan shall be the maximum based upon environmental constraints, the availability of public services, and acceptable service levels. The densities reflected may not always be achievable and shall not be approved unless there is proper site planning and provision of suitable open space and recreational areas consistent with the supportive goals and policies of the General Plan.
>
> **Policy 6.** Preserve and encourage upgrading of existing unincorporated urban communities.
>
> **Policy 7**. Riparian habitat along the rivers and natural waterways of Stanislaus County shall to the extent possible be protected.
>
> **Policy 10.** New areas for urban development (as opposed to expansion of existing areas) shall be limited to less productive agricultural areas.

Policy 11. Development of residential areas shall be adjacent to existing compatible unincorporated urban development or, in the case of remote development, included as part of a specific plan.

Policy 12. The expansion of urban boundaries of unincorporated communities shall attempt to minimize conflict between various land uses.

Policy 13. Expansion of urban boundaries of unincorporated communities should be based on infilling and elimination of existing "islands" and should not permit leapfrog development or create new "islands."

Policy 14. Uses shall not be permitted to intrude into or be located adjacent to an agricultural area if they are detrimental to continued agricultural usage of the surrounding area.

Policy 16. Outdoor lighting shall be designed to be compatible with other uses.

Policy 17. Agriculture, as the primary industry of the County, shall be promoted and protected.

Policy 18. Promote diversification and growth of the local economy.

Policy 19. Accommodate the siting of industries with unique requirements.

Policy 20. Nonconforming uses are an integral part of the County's economy and, as such, should be allowed to continue.

Policy 21. Facilitate retention and expansion of existing businesses.

Policy 22. Support and facilitate efforts to develop and promote economic development and job creation centers throughout the County.

Policy 24. Future growth shall not exceed the capabilities/capacity of the provider of services such as sewer, water, public safety, solid waste management, road systems, schools, health care facilities, etc.

Policy 26. Development, other than agricultural uses and churches, which requires discretionary approval and is within the sphere of influence of cities or in areas of specific designation created by agreement (e.g., Sperry Avenue and East Las Palmas Corridors), shall not be approved unless first approved by the city within whose sphere of influence it lies or by the city for which areas of specific designation were agreed. Development requests within the spheres of influence or areas of specific designation of any incorporated city shall not be approved unless the development is consistent with agreements with the cities which are in effect at the time of project consideration. Such development must meet the applicable development standards of the affected city as well as any public facilities fee collection agreement in effect at the time of project consideration.

Del Rio Community Plan

Stanislaus County prepared the *Del Rio Community Plan*, which was adopted by the Stanislaus County Board of Supervisors in 1992. The community plan designates land uses in two development areas. The northern portion (Area I) of Del Rio is designated as low-intensity residential and agriculture, while the southern portion (Area II) is designated as agriculture and future-specific planning. The Community Plan proposed to develop Del Rio as a mixed residential, recreational, and agricultural community with natural open space/recreational uses. Goals of the Del Rio Community Plan that relate to land use and planning for the Proposed Program include the following:

Goal 1: Future development should occur in an orderly manner to meet the needs of existing and future residents.

Policy A: Until the plan is updated, future development for Del Rio shall be in accordance with the Community Plan.

Goal 2: Prime agricultural land in the Del Rio vicinity should be preserved in areas where incompatibility impacts between agricultural and residential uses can be minimized.

Goal 3: Further development in the Del Rio area should be planned to ensure that adverse impacts on services and utilities, schools, transportation and circulation, agriculture, water and air quality are appropriately mitigated.

Policy A: All future developments in Del Rio shall be Planned Developments and, in Area II, approved only after specific plan and EIR are prepared for Area II which address cumulative development impacts on the entire Del Rio area, Community Plan conformance, and methods of plan implementation.

Goal 5: Future development shall be served by adequate public infrastructure.

Policy A: All future development in Del Rio shall require underground utilities and facilities for community-wide secondary sewage treatment and water supply systems.

Salida Community Plan

Stanislaus County prepared the *Salida Community Plan, which* was adopted by the Stanislaus County Board of Supervisors in August 2007. The Salida Community Plan provides land use planning and guidance for development of approximately 4,600 acres in the Salida area. Land uses included in the planning area include Business Park, Low-Density Residential, Medium Density Residential, High-Density Residential, Commercial, Planned Industrial, and Agriculture. The majority of planned land uses include Planned Industrial (1,259 acres or 37.2 percent of the Amendment Area). Most of these lands are in the northeastern portion of Salida. Collectively, the land uses, goals, and policies of this document are intended to promote job creation, retail opportunities, tax generation, expanded recreational amenities, expanded housing opportunities, preservation of open space, and effective transitions between urban and agricultural environments. The *Salida Community Plan* acknowledges that new public utilities such as an adequate water supply must be secured and demonstrated for new development.

Stanislaus County Zoning Ordinance

According to the Stanislaus County Zoning Ordinance, public utilities including underground pipelines, are permitted in all zoning districts.

Two new water storage tanks (one east of Dale Road near Salida, one in eastern Modesto south of Gomes Road) and seven groundwater wells would be installed on lands zoned A-2 General Agriculture (Stanislaus County 2017). **Figure 13-1** shows the locations of WMP elements relative to the County's zoning districts throughout the WMP study area. Permitted uses for A-2 districts include agricultural uses, single-family dwelling; mobile homes; buildings, appurtenances, and uses such as custom contract harvesting or land preparation; home occupations; garage sales; and other uses related to agriculture. According to Section 21.20.030 of the Stanislaus County Code, this district allows development of certain uses that are not directly related to agriculture but may be necessary to serve the A-2 district. For example, development of facilities for public utilities qualifies as a "Tier Three" use that may be allowed if the Stanislaus County Planning Commission concludes that the use would not be substantially detrimental to or conflict with agricultural use of other property in the vicinity, and the parcel on which such use is requested is not located in one of the county's "most productive agricultural areas," as this term is used in the general plan; or if the character of the use that is requested is such that the land may reasonably be returned to agricultural use in the future.

The proposed groundwater well site near Charity Way and Bitritto Way (northern Modesto) is zoned as Planned Industrial (PI). Permitted uses for PI districts include public utilities, public and quasi-public buildings, and mini-warehouses.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (2019) serves as the City's "blueprint for future growth" and is intended to guide the physical development of the overall Modesto community. The General Plan identifies three distinct planning areas:

the Downtown Area, which generally includes the City's historic downtown; the Baseline Developed area, which generally includes areas that are already developed with urban uses; and the Planned Urbanizing Area, which forms the perimeter of Modesto's General Plan Urban Area. Land use designations for Modesto lands are shown in Figure III-1, Adopted Land Use Diagram, of the *City of Modesto Urban Area General Plan* and include the following land use designations: Residential (R), Mixed Use (MU), Commercial (C), Industrial (I), Redevelopment Planning District (RPD), Village Residential (VR), Regional Commercial (RC), Business Park (BP), Open Space (OS), and land use designations of the *Salida Community Plan* (SCP). The following land uses are permitted for each of these designations:

- Open Space – Planned land uses shall include low-impact recreational facilities, public ownership, low density residential, and agriculture.

- Residential – Land uses include single-family detached housing, single-family attached housing, multi-family housing, and mobile homes. Compatible uses may include schools, parks, and religious or community facilities.

- Mixed Use – Single-family residential, multi-family residential, commercial, office, and institutional uses are allowed in close proximity to each other. The guiding land use intensity is 0.35 square feet of building area per square foot of gross acreage of the site.

- Business Park – Business parks consist of light industrial and employment intensive uses. In general, these areas will have a campus-like setting, with a guiding intensity of 0.40 square feet of building area per square foot of gross area of the site.

- Regional Commercial – Land uses include but are not limited to business, medical, and professional offices other than large office campuses, neighborhood retail centers, convenience retail, highway-oriented commerce, Regional Commercial uses, and the downtown commercial districts.

- Village Residential – Villages are mixed-use, compact, pedestrian- and transit-oriented development that are intended to accommodate a variety of residential product types such as detached houses on small lots and multi-family and senior housing, in addition to village-serving (i.e., non-residential) units. The residential density within a Comprehensive Planning District is typically 6.6 to 7.5 dwelling units per gross acre. Approximately 4 percent of land designated as VR shall be devoted to commercial uses with a guiding intensity of 0.35 square feet of building per square foot of gross area of the site.

- Redevelopment Planning District – The Modesto RPD area is intended to consist of development that "will be the focal point of community life and the social, cultural, business, governmental and entertainment center of the northern San Joaquin Valley." Acceptable development will consist of housing, modern transportation systems, and vertical mixed-use development.

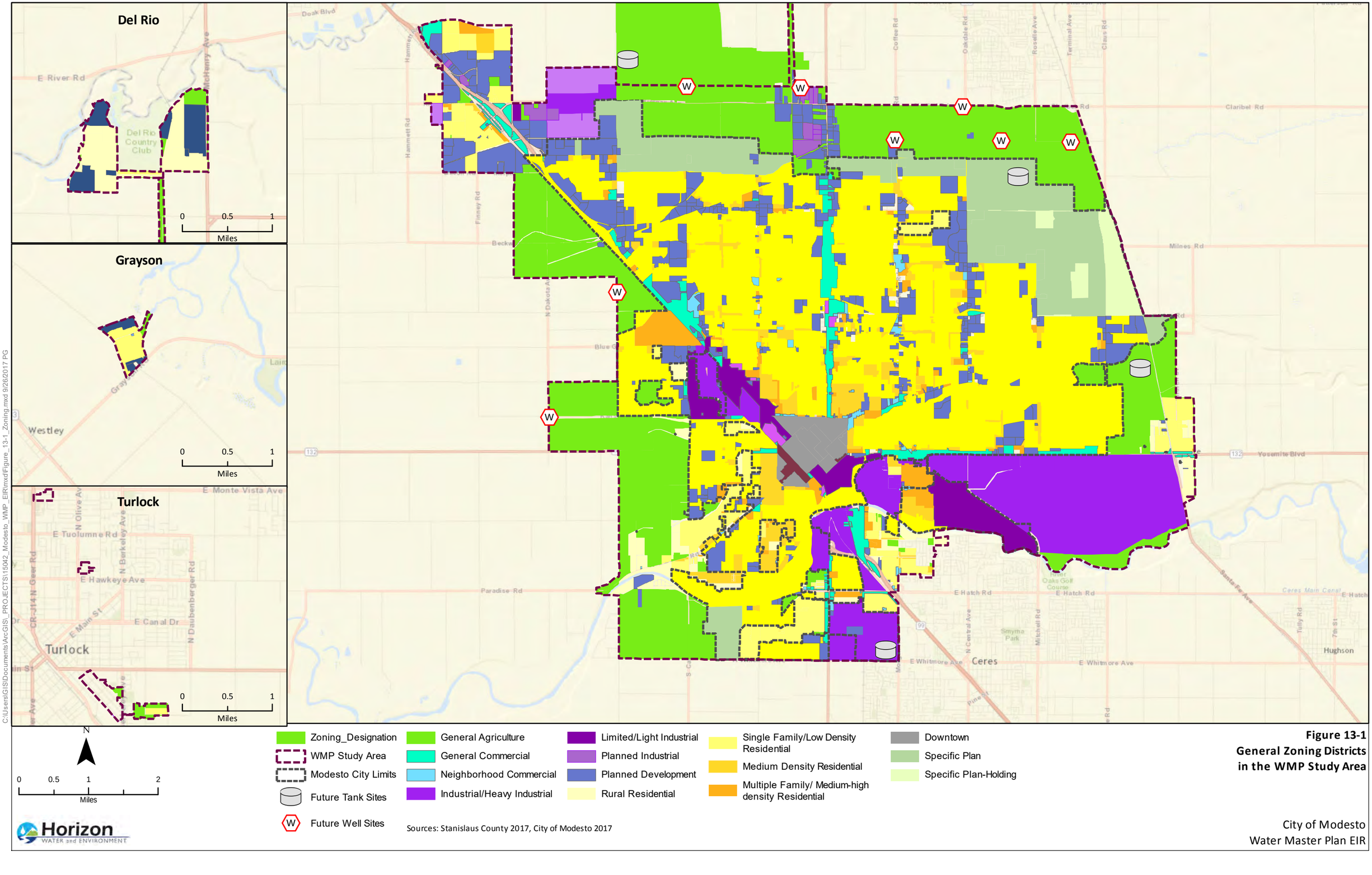
- Industrial – This designation provides for the full range of industrial uses, including but not limited to manufacturing, food processing, trucking, packing, and recycling. The guiding land use intensity for this designation is 0.50 square feet per square foot of gross area on an area-wide basis.

The *City of Modesto Urban Area General Plan* (2019) provides the following goals and policies related to land use and planning.

Chapter II – Community Growth Strategy

Policy II.B.1. Priority Development Areas. Support new development with infrastructure developed in accordance with the established Capital Improvement Program priority areas of Downtown, Kiernan Business Park, the Tivoli Specific Plan area and the South Modesto Industrial Park (north of Whitmore Ave. between Crows Landing Rd. and Morgan Rd.).

Policy II.B.3. Funding Capital Improvements. Increase and improve capital projects over time through maintaining or enhancing existing funding sources, maximizing joint-use efficiencies, and strategically prioritizing capital investments.



Sources: Stanislaus County 2017, City of Modesto 2017

Figure 13-1
General Zoning Districts in the WMP Study Area

City of Modesto
Water Master Plan EIR

Horizon WATER and ENVIRONMENT

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Chapter III – Community Development Policies

Goal III.A. Zoning Consistency. Maintain and enhance consistency between General Plan (land use designations and policies) and zoning.

Policy III.A.1. Parcel-Specific Zoning. Zoning within the incorporated City limits should be, and generally is, consistent with the General Plan Land Use Designations as presented on the Land Use Diagram. However, because these designations are broad in nature, there may be minor instances in which the existing zoning for a particular property is not consistent with the Land Use Designation for the property. These situations are still considered to be consistent with the overall goals and policies of the General Plan, and development of these properties may occur consistent with zoning. Chapter VII – Environmental Resources, Open Space and Conservation.

Policy VIII-B. Local Open Space Plan. Open space needs are broadly identified by the state legislature. It is within this scope that local jurisdictions must identify specific areas and targets of preservation, development, and/or production. Government Code Section 65560 lists six broad categories to be designated on a local open space plan: Open space for 1) the preservation of natural resources, 2) public health and safety, 3) managed production of resources, 4) outdoor recreation, 5) buffer zones to military activities, and 6) protection of places, features, and objects. These categories will be discussed in detail as they relate to the Modesto Urban Area.

Open Space Policies – River Greenway Program

Policy VII-B.7[a]. Visual corridors of the river will be protected and enhanced.

Policy VII-B.7[b]. Visual corridors and access points on the riverfront will be recreated through redevelopment.

Policy VII-B.7[c]. Identifiable park entrances will be created. A comprehensive program of park signage and graphics will be developed.

Policy VII-B.7[d]. Adequate circulation throughout the park will be provided in order to accommodate pedestrians, bicyclists, and vehicles, as well as equestrians and boaters, if appropriate. Opportunities for park access via public transportation will be provided.

Policy VII-B.7[e]. Active and passive recreational areas with universal access will be created.

Modesto Code of Ordinances

Title 10 of the Modesto Code of Ordinances establishes zoning regulations for land within the City of Modesto's jurisdictional boundary.

The storage tank site proposed in northern Modesto (east of Mable Avenue and north of McReynolds Avenue) is zoned as Specific Plan (SP), which is intended to permit various land uses including residential, industrial, and commercial development through Specific Plans. This particular tank site is addressed under the City of Modesto's Village One Specific Plan, which envisions a future school in the near vicinity. The water storage tank site in southern Modesto (northeast of East Whitmore Avenue and Morgan Road intersection) is zoned as Heavy Industrial

(M-2). No other aboveground Program elements would be within the City's jurisdictional boundary.

According to the City of Modesto Code of Ordinances Title 10, Chapter 3 – Land Use Regulations, land uses for all minor public facilities (e.g., pumps and wells) are permitted for all zoning districts. Public buildings and grounds are permitted in commercial-industrial and industrial districts and conditionally permitted in residential, professional office, and commercial districts.

Ceres General Plan 2035

The *Ceres General Plan 2035* (2018) establishes land use designations in the following categories: Residential, Mixed Use, Commercial, Industrial, and Other. The following policies are applicable to the Proposed Program:

> **2.D.1 Promote Infill.** Promote infill development and reuse of underutilized parcels in the city to reduce pressure to develop on farmland or other "greenfield" sites on the periphery.
>
> **2.I.2 Area-wide Plans.** Use area-wide plans (i.e., master plans or specific plans) to comprehensively plan for new neighborhood developments. Each residential area-wide plan should at minimum address the following:
>
> - Provisions for development phasing to ensure orderly and contiguous development consistent with infrastructure expansions and anticipated market demand.
> - Provisions for minimizing conflicts between new development and adjacent agricultural uses.

City of Turlock General Plan

The *Turlock General Plan* (2012) establishes the following land use designations: Residential (Very Low Density, Low and Medium Density, and High Density), Agriculture, Vacant, Industrial, Commercial and Mixed Use, Public/Semi-Public/Community Facility, Park and Open Space, and Office. The primary land uses include Low and Medium Density Residential (37 percent) followed by Agriculture (16 percent), Vacant (12 percent), and Industrial (11 percent). The following policies are applicable to the Proposed Program:

> **2.9-b.** Urban land uses belong in incorporated areas. Work with Stanislaus County to direct growth to incorporated areas and established unincorporated communities.
>
> A key policy of the General Plan is the limited and orderly expansion of the City. This policy would be undermined by approval of urban activities in unincorporated areas.
>
> **2.9-f.** Work with County on mitigating impacts of growth. Work with Stanislaus County to implement financing mechanisms to ensure that development within the Planning Area pays its fair share of both City and County improvements required to mitigate the impacts of growth.

2.11-c. Facilitate new development. Define clear development standards and process development applications expeditiously.

3.1-a. Proactively manage growth. Proactively manage and plan for growth in an orderly, sequential and contiguous fashion.

3.1-b. Minimize negative effects through use of fiscal and infrastructure tools. Plan and implement growth so as to minimize negative effects on existing homes and businesses within and outside the City. This shall include working with the County to establish fiscal and infrastructure tools to ensure that improvements to County roads and other infrastructure are being made as new development proceeds.

3.1-f. Provide adequate public services. Ensure the adequacy and quality of public services and facilities for all residents.

3.1-j. Capital improvement program review. Continue to annually review the City's Capital Improvement Program in order to increase capacity of needed public services in response to City growth.

Tuolumne River Regional Park Master Plan

The TRRP Master Plan is a long-range plan for a riverfront park in southern Modesto (EDAW 2001). The plan encompasses over 500 acres including lands along a 7-mile stretch of the Tuolumne River, generally bounded by Mitchell Road to the east and Carpenter Road to the west. The TRRP Master Plan provides a long-range vision for establishing recreational facilities such as the Riverwalk, boat and fishing piers, vista points, a sports complex near the Sutter Plant, an interpretive center, trails, roadways and parking areas, all of which are intended to enhance the natural environment and create both recreational educational opportunities along the river. The TRRP Master Plan also has a riparian restoration component that calls for creating improved riparian habitat along the Tuolumne River and Dry Creek. The Proposed Program does not have improvements directly within this planning area but does have proposed CIPs nearby.

13.3 Environmental Setting

Proposed components would occur within Modesto and unincorporated areas of Stanislaus County. The following sections generally describe land uses within the City of Modesto's contiguous service area (Modesto and its SOI including Salida, North Ceres, and Empire) and outlying service areas (Del Rio, Ceres, Grayson, and portions of Turlock).

13.3.1 Modesto

The City of Modesto is located in central Stanislaus County, in the northern section of California's San Joaquin Valley. The Tuolumne River runs along the southern edge of the city. State Route (SR) 99 intersects the city along the north–south axis, and SR 132 intersects the city along the east–west axis. Nearby cities include Riverbank, Ripon, and Manteca to the north and Ceres, Turlock, and Merced to the south.

Before 1960, most of Stanislaus County's population lived in unincorporated areas. Today, the population of the nine incorporated cities substantially exceeds that of the unincorporated area.

While the county's economic base remains predominantly agricultural, the regional economy is diversifying. Housing development has significantly increased the urbanized land area within Modesto. Because many of these new residents continue to work in the Bay Area, traffic along SR 99, SR 132, and Interstate 5 has increased noticeably.

The vast majority of land in Modesto is considered urban/built-up land. Urbanized areas of Modesto including commercial uses are concentrated along SR 99, the Southern Pacific Railroad corridor, and major arterial roadways; industrial uses south of Yosemite Boulevard, adjacent to the Modesto City-County Airport; and mixed residential uses which occur throughout the city. Land along the portion of the Tuolumne River that is adjacent to Modesto City-County Airport and along portions of Dry Creek that are adjacent to Central Valley Specialty Hospital and Creekside Golf Course, respectively, are classified as nonagricultural and natural vegetation lands (CDOC 2017). Throughout the City, the majority of the land is designated for a combination of residential, mixed use, and commercial (City of Modesto 2017).

13.3.2 Ceres

The city of Ceres is located along SR 99, south of Modesto and the Tuolumne River, and north of Turlock in Stanislaus County. Ceres encompasses approximately 7 square miles and the majority of the city is designated for low-to-medium density residential uses.

13.3.3 Del Rio

Del Rio is an unincorporated census-designated place (CDP) in central Stanislaus County and is located approximately 2.5 miles north of Modesto. Del Rio encompasses 2.1 square miles, with approximately 1.8 square miles being residential and the remaining space being utilized as a golf course, open space, and water (U.S. Census Bureau 2010). The Stanislaus River runs along the northern edge of Del Rio, and the community is bounded by McHenry Avenue to the east, Ladd Road to the south, and Carver Road to the west. State Route 99 is approximately 5.8 miles west of Del Rio. Nearby cities include Escalon, Manteca, Modesto, and Riverbank. Del Rio is a predominantly residential community that began with the development of a golf course and country club.

13.3.4 Empire

The community of Empire is in unincorporated Stanislaus County, located immediately east of Modesto. Empire is south of Dry Creek and north of the Tuolumne River. The community encompasses approximately 1.6 square miles, and the majority of Empire is designated as residential land use.

13.3.5 Grayson

The community of Grayson is also in unincorporated Stanislaus County and located approximately 11 miles southwest of Modesto and 6.5 miles northwest of the city of Patterson. Grayson is a small rural residential and agricultural community that occupies roughly 2.7 square miles. The community is situated on the west bank of an old channel of the San Joaquin River.

13.3.6 Salida

Salida is located northwest of Modesto, along SR 99 and south of Ripon. The community encompasses approximately 5.2 square miles and like other "islands" of Stanislaus County, comprises mostly residential development. Other land uses in Salida include agricultural uses, open space, and industrial development.

13.3.7 Turlock

The City of Turlock is the second largest city in Stanislaus County and is located about 14 miles south of Modesto. The City of Turlock's planning area extends beyond their city limits and includes unincorporated communities of Keyes and Denair. Commercial uses are concentrated along SR 99, Golden State Boulevard, and other major arterials. The community is largely shaped by the California State University, Stanislaus and agricultural industry.

13.4 Impact Analysis

13.4.1 Methodology

The analysis of land use and planning is generally qualitative and pursuant to CEQA Guidelines Section 15125, describes potential inconsistencies between the Proposed Program and applicable land use policies, plans, and programs described in Section 13.2 above. Inconsistencies with land use policies are considered a significant impact only if those inconsistencies would result in significant adverse effects on the physical environment. Physical impacts on the environment that could result from inconsistency with land use plans or policies are addressed in the other resource chapters (Chapters 4 through 12 and Chapters 14 through 17), not in this land use analysis. Specifically, potential conflicts with SJVAPCD's air quality plans are discussed in Chapter 6, *Air Quality;* inconsistencies with the *Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region* are discussed in Chapter 12, *Hydrology and Water Quality;* and inconsistencies with the *Congestion Management Process for the Stanislaus County Region* are addressed in Chapter 16, *Transportation and Traffic.* General consistency of the Proposed Program with the laws, regulations, and policies identified in Section 13.2, above, is discussed in Impact LU-2.

13.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on land use and planning if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The third criterion is addressed in Chapter 7, *Biological Resources,* and not discussed in the following impact analysis.

13.4.3 Environmental Impacts

Impact LU-1: Divide an Established Community (*Less than Significant*)

The Proposed Program would occur within the city of Modesto, a portion of the city of Turlock, a portion of the city of Ceres, and unincorporated areas of Stanislaus County. Proposed CIPs would involve various components to the City's water supply system including storage tanks and booster pump stations, groundwater wells, pipelines, new emergency generators for booster pump stations, water security enhancements, SCADA system upgrades, replacement pumps, and other water quality and groundwater management studies.

Pipeline replacement projects would occur in areas where such facilities already exist. New groundwater wells, storage tanks, pipelines, and new water mains would generally be constructed on the outskirts of Modesto and would facilitate redevelopment or new urban development. For all components, construction activity would be temporary and any disturbed land would be returned to pre-construction conditions except for where new aboveground structures would be built. While construction of these components could result in temporary construction impacts to neighborhood land uses, such as temporary impacts on community traffic, air emissions, public safety, or noise, construction of these CIPs would be short-term and phased through 2050. These temporary impacts are addressed in Chapter 6, *Air Quality;* Chapter 14, *Noise and Vibration;* and Chapter 16, *Transportation and Traffic*. Operation of proposed facilities would be consistent with and, for the most part, located adjacent to existing utility operations and would not impede access to neighboring communities. For these reasons, the Program's overall impact regarding division of an established community would be **less than significant**.

Impact LU-2: Conflict with Land Use Plans, Policies, or Regulations Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect (*Less than Significant*)

The Proposed Program would include a series of CIPs that involve construction and operation of new storage tanks, groundwater wells, emergency generators, booster pump stations, water supply pipelines, and repair and replacement of aging water mains. These CIPs would be implemented to address existing deficiencies and capacity needs for the City's water distribution and supply system through 2040. These components are also expected to provide sufficient water service for new growth projected in the City's Urban Area General Plan, other areas in the City's contiguous service area (e.g., Salida, Empire, and North Ceres), and the City's outlying service areas (e.g., Del Rio, Ceres, Grayson, and portions of Turlock). Because water supply pipelines and water mains would be installed belowground, these CIPs would not pose any conflicts with Stanislaus County or City of Modesto zoning ordinances; therefore, consistency with local zoning regulations for these WMP components are not discussed further.

Consistency with Stanislaus County Zoning and General Plan Designations. In Salida, a new storage tank would be constructed northeast of the Dale Road and Pirrone Road intersection. This land is currently zoned and designated for agricultural uses in unincorporated Stanislaus County.

As discussed in Section 13.2.1, in the northern portion of Modesto, one new groundwater well north of Kiernan Avenue would be constructed on unincorporated Stanislaus County lands designated and zoned for agricultural uses (A-2). The two groundwater wells located west of Modesto would be installed on lands designated and zoned for agricultural uses. The future well planned near Charity Way and Bitritto Court would be constructed on County lands zoned and designated as Planned Industrial (PI). The future groundwater wells proposed at the Coffee Road and Claribel Road intersection, west of Roselle Avenue, and Plainview Road and Litt Road intersection would be constructed on lands zoned for agricultural uses but designated as either Planned Development (PD) or Urban Transition (UT) in the County's General Plan. In addition, the 5 MG tank site near Gomes Road is zoned for agricultural uses and designated as Urban Transition in the County's General Plan. This zoning and General Plan designation discussion is based on the most current available information; however, it should be noted that at least some of the Proposed Program's new well sites are conceptual and their locations may change in the future.

Based on the above, various Program components would be constructed on lands zoned and designated for various types of uses. Proposed water storage tanks and other water infrastructure on County lands zoned for agricultural uses would constitute facilities for public utilities, and, therefore, qualify as a "Tier Three" use that is allowed within the A-2 district, subject to the approval of the Stanislaus County Planning Commission. Proposed Program components constructed on land zoned as PI would be consistent with the industrial zoning district as all new facilities are considered public facilities. Therefore, no conflicts with County zoning would occur under the Proposed Program. Some tank and well sites have General Plan land use designations including Agriculture, Urban Transition, and Planned Development. Since the General Plan includes policies requiring that utility infrastructure (e.g., water supply) be reasonably available for planned and future development areas, the Proposed Program would generally be consistent with the County's General Plan designations.

Consistency with City of Modesto Zoning and General Plan Designations. The new 2.9 MG storage tank proposed east of Mable Avenue is designated as Village Residential and zoned as Specific Plan (SP). As described in Section 13.2, the tank would serve a future school planned for in the Village One Specific Plan. The proposed 2.6 MG tank in southern Modesto (north of East Whitmore Avenue and west of Morgan Road) would be installed on land zoned as Heavy Industrial and designated as Industrial.

As mentioned in Section 13.3, "Environmental Setting," above, minor public facilities such as pumps and wells would be permitted in all zoning districts according the City of Modesto Code of Ordinances Title 10, Chapter 3 – Land Use Regulations. Public buildings and grounds are permitted in industrial districts and conditionally permitted in residential, professional office, and commercial districts. Thus, the above-described water storage tank and groundwater well, and associated infrastructure would be permitted in all Modesto zoning districts. A conditional use permit may need to be submitted to the City of Modesto's Planning Department prior to development of the two new water storage tanks planned in the northeastern and southern areas of Modesto.

Consistency with the TRRP. The Proposed Program does not have improvements directly within the TRRP Master Plan's planning area but does have proposed CIPs nearby. No major Program components involve work along the Tuolumne River such that a potential conflict with the TRRP

Master Plan goals and actions for riparian restoration or planned recreational linkages between park planning districts would occur.

Conclusion. The Proposed Program would generally support general plan policies that call for safe and reliable water supply services and would not conflict with the Stanislaus County General Plan, local community plans, the City of Modesto Urban Area General Plan, the City of Turlock General Plan, the Ceres General Plan 2035, or local zoning districts. Proposed construction would occur within the planned urbanizing areas of each of the communities included in the Program, as analyzed by the County, Modesto, Ceres, and Turlock general plan EIRs. Temporary and/or permanent easement acquisitions may be required to ensure the City has adequate right-of-way and access to the various CIP sites. For example, some easements may need to be acquired from Modesto Irrigation District and Turlock Irrigation District prior to constructing some pipeline components. Based on the above analysis, there would be no conflicts with applicable land use plans, policies, or regulations, and this impact would therefore be **less than significant.**

Chapter 14
NOISE AND VIBRATION

14.1 Overview

This chapter describes the existing noise environment in the vicinity of the project sites, presents relevant noise and vibration regulations, identifies sensitive noise and vibration receptors that could be affected by the Proposed Program, and evaluates the noise and vibration impacts of the Proposed Program. Mitigation measures are prescribed to reduce significant noise and vibration impacts.

14.2 Noise and Vibration Concepts and Terminology

14.2.1 Noise

In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

- **Decibel (dB)** is a measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude.
- **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Maximum sound level (L_{max})** is the maximum sound level measured during a given measurement period.
- **Minimum sound level (L_{min})** is the minimum sound level measured during a given measurement period.
- **Equivalent sound level (L_{eq})** is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound level during that same period.

- **Day-night sound level (L_{dn})** is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.

- **Community noise equivalent level (CNEL)** is the energy average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels between 10:00 p.m. and 7:00 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. **Table 14-1** presents approximate noise levels for common noise sources, measured adjacent to the source.

Table 14-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Notes: Caltrans = California Department of Transportation; dBA = A-weighted decibel.

Source: Caltrans 2009

14.2.2 Vibration

Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies. The normal frequency range of most groundborne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations attenuate much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough groundborne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

14.3 Regulatory Setting

14.3.1 Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Program. However, the Federal Transit Administration (FTA) *Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment* state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA L_{eq} should be used for residential areas (FTA 2006).

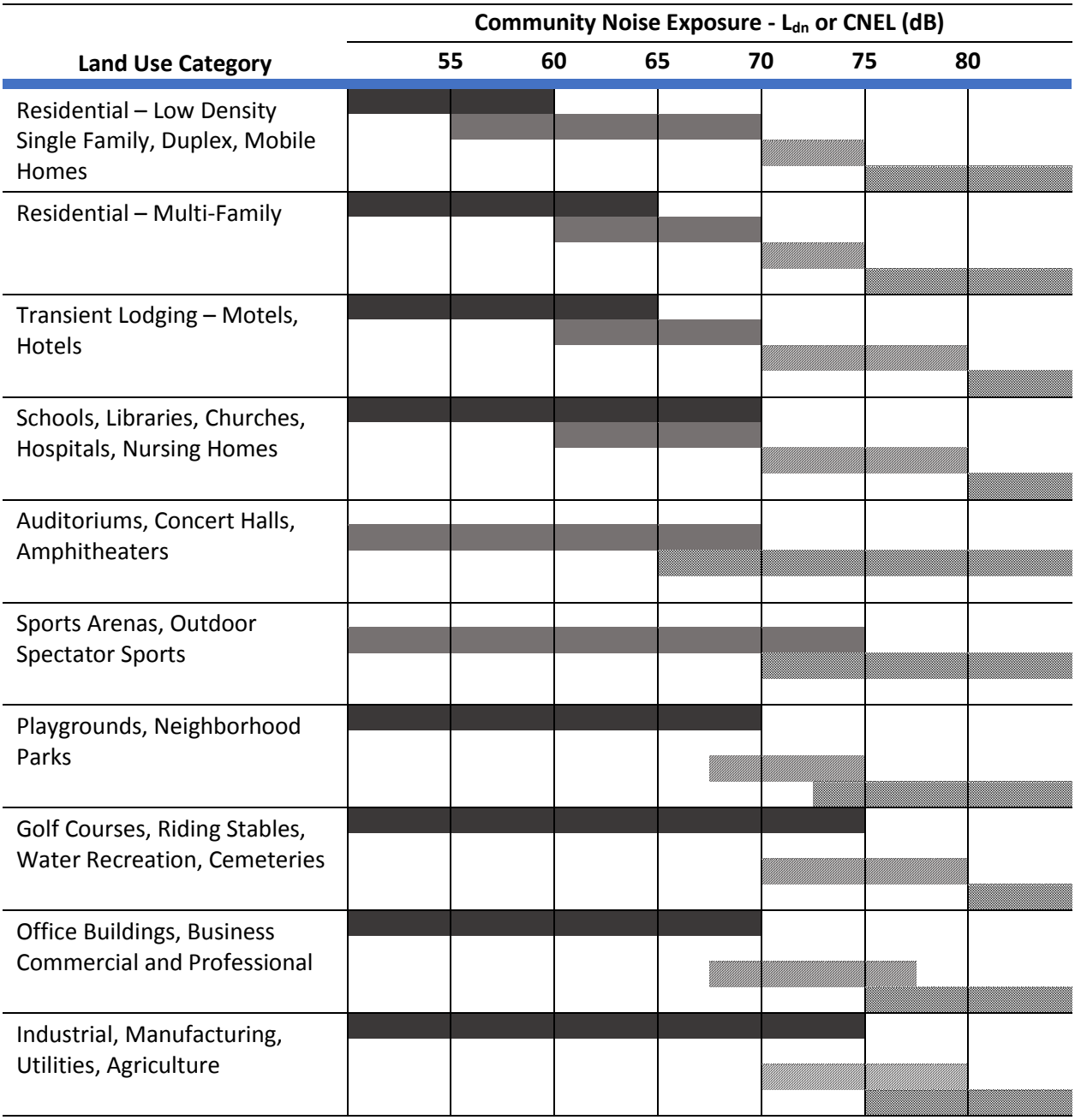
For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings extremely susceptible to vibration damage (FTA 2006). The groundborne vibration annoyance level is 65 VdB for buildings where vibration would interfere with interior operations, 72 VdB for residences, and 75 VdB for institutional land uses with primarily daytime uses.

14.3.2 State Laws, Regulations, and Policies

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table 14-2**.

For the protection of fragile, historic, and residential structures, Caltrans recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2013).

Table 14-2. State Land Use Compatibility Standards for Community Noise Environment



	Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
	Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable	New construction or development generally should not be undertaken.

Notes: CNEL = community noise equivalent level; dB = decibel; Ldn = day-night sound level.

Source: California Governor's Office of Planning and Research 2017

14.3.3 Local Laws, Regulations, and Policies

Stanislaus County General Plan 2015

Stanislaus County addresses noise impacts through its General Plan and Municipal Code. The Noise Element of the *Stanislaus County General Plan 2015* (Stanislaus County 2016a) utilizes noise exposure information to identify existing and potential noise conflicts through the Land Use Planning and Project Review processes. The Noise Element establishes exterior noise level standards and maximum allowable noise exposure from stationary noise sources at noise-sensitive land uses.

Goal Two: Protect the citizens of Stanislaus County from the harmful effects of exposure to excessive noise.

Policy Two: It is the policy of Stanislaus County to develop and implement effective measures to abate and avoid excessive noise exposure in the unincorporated areas of the County by requiring that effective noise mitigation measures be incorporated into the design of new noise generating and new noise sensitive land uses.

Implementation Measure 1: New development of noise-sensitive land uses will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels to the following levels:

(a) For transportation noise sources such as traffic on public roadways, railroads, and airports, 60 [dBA] Ldn (or CNEL) or less in outdoor activity areas of single family residences, 65 [dBA] Ldn (or CNEL) or less in community outdoor space for multi-family residences, and 45 [dBA] Ldn (or CNEL) or less within noise sensitive interior spaces. Where it is not possible to reduce exterior noise due to these sources to the prescribed level using a practical application of the best available noise-reduction technology, an exterior noise level of up to 65 Ldn (or CNEL) will be allowed. Under no circumstances will interior noise levels be allowed to exceed 45 Ldn (or CNEL) with the windows and doors closed in residential uses.

(b) For other noise sources such as local industries or other stationary noise sources, noise levels shall not exceed the performance standards contained within Table IV-24 [reprinted as Table 14-3 below].

Implementation Measure 2: New development of industrial, commercial or other noise generating land uses will not be permitted if resulting noise levels will exceed 60 [dBA] Ldn (or CNEL) in noise-sensitive areas. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will not be permitted if resulting noise levels will exceed the performance standards contained within Table IV-24 [**Table 14-3** below] in areas containing residential or other noise sensitive land uses.

Table 14-3. Maximum Allowable Noise Exposure from Stationary Noise Sources

	Daytime 7a.m. to 10 p.m.	Nighttime 10 p.m. to 7 a.m.
Hourly L_{eq}, dBA	55	45
Maximum level, dBA	75	65

Note: Each of the noise level standards specified in Table IV-24 shall be reduced by five (5) dBA for pure tone noises, noise consisting primarily of speech or music, or for recurring impulsive noises. The standards in Table IV-24 should be applied at a residential or other noise-sensitive land use and not on the property of a noise-generating land use. Where measured ambient noise levels exceed the standards, the standards shall be increased to the ambient levels.

Source: Stanislaus County General Plan, Noise Element, Table IV-24 (2016a)

Policy Three: It is the objective of Stanislaus County to protect areas of the County where noise-sensitive land uses are located.

Implementation Measure 1: Require the evaluation of mitigation measures for projects that would cause the Ldn at noise-sensitive uses to increase by 3 dBA or more and exceed the "normally acceptable" level, cause the Ldn at noise-sensitive uses to increase 5 dBA or more and remain normally acceptable, or cause new noise levels to exceed the noise ordinance limits (after adoption).

Stanislaus County Municipal Code

Noise generating sources in Stanislaus County are also regulated under the Municipal Code, Chapter 10.46 (Noise Control) (Stanislaus County 2017). Property line and construction noise limits are established in this ordinance. Property line noise limits apply to noise generation from one property to an adjacent property with the existence of a sensitive receptor (if no receptor, an exception or variance to the standards may be appropriate). These standards do not apply to construction noise that occurs between 7 a.m. and 7 p.m. The following are the applicable portions of the Stanislaus County Noise Control Ordinance, and **Table 14-4** and **Table 14-5** (reprinting Tables A and B of the ordinance) highlight the applicable noise limits.

Table 14-4. Exterior Noise Level Standards

Land Use Zone	Maximum A-Weighted Sound Level as Measured on a Sound Level Meter (L_{max})	
	7:00 a.m. to 9:59 p.m.	10:00 p.m. to 6:59 a.m.
Noise Sensitive	45	45
Residential	50	45
Commercial	60	55
Industrial	75	75

Source: Stanislaus County Code, Chapter 10, Table A.

Table 14-5. Cumulative Duration Allowance Standards

Cumulative Duration	Allowance Decibels
Equal to or greater than 30 minutes per hour	Table 6 plus 0 dBA
Equal to or greater than 15 minutes per hour	Table 6 plus 5 dBA
Equal to or greater than 5 minutes per hour	Table 6 plus 10 dBA
Equal to or greater than 1 minute per hour	Table 6 plus 15 dBA
Less than 1 minute per hour	Table 6 plus 20 dBA

Source: Stanislaus County Code, Chapter 10, Table B.

Section 10.46.050 Exterior Noise Level Standards

A. It is unlawful for any person at any location within the unincorporated area of the county to create any noise or to allow the creation of any noise which causes the exterior noise level when measured at any property situated in either the incorporated or unincorporated area of the county to exceed the noise level standards as set forth below:

1. Unless otherwise provided herein, the following exterior noise level standards shall apply to all properties within the designated noise zone:

2. Exterior noise levels shall not exceed the following cumulative duration allowance standards:

3. Pure Tone Noise, Speech and Music. The exterior noise level standards set forth in Table A [Table 14-4 of this DEIR] shall be reduced by five dB(A) for pure tone noises, noises consisting primarily of speech or music, or reoccurring impulsive noise.

4. In the event the measured ambient noise level exceeds the applicable noise level standard above, the ambient noise level shall become the applicable exterior noise level standard.

Section 10.46.060 Specific Noise Source Standards

E. Construction Equipment. No person shall operate any construction equipment so as to cause at or beyond the property line of any property upon which a dwelling unit is located an average sound level greater than seventy-five decibels between the hours of seven p.m. and seven a.m.

Section 10.46.070 Vibration. Operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at one hundred fifty feet from the source if on a public space or public right-of-way is prohibited. For the purpose of this section, "vibration perception threshold" means the minimum groundborne or structure-borne vibration motion necessary to cause a reasonable person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects, or a measured motion velocity of 0.01 in/sec over the range of one to one hundred Hertz.

Section 10.46.080 Exemptions. The following sources are exempt from the provisions of this chapter:

> **J. Public Entity or Public Utility Activity.** This chapter [Section 10.46 of the Municipal Code] shall not apply to construction or maintenance activities performed by or at the direction of any public entity or public utility.

Stanislaus County Airport Land Use Compatibility Plan

The Stanislaus County Airport Land Use Compatibility Plan (ALUCP) contains airport compatibility policy maps of three airports in Stanislaus County, including the Modesto City-County Airport. The ALUCP document provides planning area boundary maps and noise contours, presents airport land use background information, and discusses existing and potential noise conflicts in the area (Stanislaus County Airport Land Use Commission 2016). Figure 11-3 in Chapter 11, *Hazards and Hazardous Materials,* of this DEIR provides a copy of the Modesto City-County Airport Planning Area Boundary Map.

City of Modesto Urban Area General Plan

The following policies of Chapter VII, Environmental Resources, Open Spaces and Conservation, of the *City of Modesto Urban Area General Plan* (City of Modesto 2019a) are applicable to the Proposed Program:

Noise Mitigation Policies – Baseline Developed Area

All development projects located within the Baseline Developed Area (and Redevelopment Area) shall be required to incorporate the following measures into the Program.

Policy VII-G.3[g]. At noise-sensitive land uses, increases in noise should not exceed 3 dBA where any other noise threshold or standard would be exceeded, and/or 5 dBA where

noise levels would otherwise fall within acceptable limits, for the existing conditions scenario as compared to the buildout scenario.

Policy VII-G.3[h]. Additional study and/or mitigation for outdoor recreation areas will be required if: ◦ For single-family dwellings, noise exceeds 65 dBA Ldn in one or more backyards; ◦ For multi-family dwellings, noise exceeds 65 dBA Ldn at common recreation areas, such as swimming pools or play areas or at private patios and balconies; or, ◦ For other uses, noise exceeds the level considered "conditionally acceptable" as shown on [General Plan] Table VII-2.

Policy VII-G.3[i]. Limit trucking to specific routes, times, and speeds that minimize adverse effects on sensitive receptors.

Policy VII-G.3[n]. For construction activities involving high-powered vibratory tools or pile driving within 200 feet of an existing structure, demonstrate that project construction would not exceed the Caltrans construction vibration thresholds to ensure that no damage to sensitive structures would occur.

Modesto Municipal Code

The following sections of the Modesto Municipal Code in Title 4, Chapter 9, "Noise Regulations," (City of Modesto 2017) are applicable to the Proposed Program:

Section 4-9.103 – Enumeration. The following specific acts, subject to the exemptions provided in Section 4-9.104, are declared to be public nuisances in violation of Section 4-9.102, namely:

(a) The loud and raucous discharge into the open air of the steam of any steam equipment or exhaust from any stationary internal-combustion engine.

(b) The loud and raucous operation or use of any of the following before 7:00 a.m. or after 9:00 p.m. daily (except Saturday and Sunday and State or federal holidays, when the prohibited time shall be before 9:00 a.m. and after 9:00 p.m.):

(1) A hammer, or any other device or implement used to pound or strike an object.

(2) An impact wrench, or other tool or equipment powered by compressed air.

(3) A hand-powered saw.

(4) Any tool or piece of equipment powered by an internal-combustion engine such as, but not limited to, chain saw, backpack blower, and lawn mower. Except as included in subsection (a)(6) below, motor vehicles, powered by an internal-combustion engine and subject to the California Vehicle Code, are excluded from this prohibition.

(5) Any electrically powered (whether by alternating current electricity or by direct current electricity) tool or piece of equipment used for cutting, drilling,

or shaping wood, plastic, metal, or other materials or objects, such as, but not limited to, a saw, drill, lathe, or router.

(6) Any of the following: heavy equipment (such as but not limited to bulldozer, steam shovel, road grader, back hoe), ground drilling and boring equipment (such as but not limited to derrick or dredge), hydraulic crane and boom equipment, portable power generator or pump, pavement equipment (such as but not limited to pneumatic hammer, pavement breaker, tamper, compacting equipment), pile-driving equipment, vibrating roller, sand blaster, gunite machine, trencher, concrete truck, and hot kettle pump.

(7) Any construction, demolition, excavation, erection, alteration, or repair activity.

In the case of urgent necessity and in the interest of public health and safety, the Chief Building Official may issue a permit for exemption from the requirements within subsection (b) of this section. Such period shall not exceed three (3) working days in length while the emergency continues but may be renewed for successive periods of three (3) days or less while the emergency continues. The Chief Building Official may limit such permit as to time of use and/or permitted action, depending upon the nature of the emergency and the type of action requested.

(c) The loud and raucous use or operation of any radio, amplifier, phonograph, stereo, compact disc or tape player, loudspeaker, bullhorn, megaphone, or other device for the producing or reproducing of sound.

(d) Loud and raucous yelling, shouting, talking, whistling, or singing between the hours of 10:00 p.m. and 7:00 a.m. on any day.

(f) The loud and raucous use of any drum, guitar, horn, or other musical instrument or device.

Section 4-9.104 – Exemptions. The term "loud and raucous noise" as used in this chapter does not include noise or sound generated by the following:

(d) Activities on or in publicly owned property and facilities, or by public employees while in the authorized discharge of their responsibilities, are exempt provided that such activities have been authorized by the owner of such property or facilities or its agent or by the employing authority.

Ceres General Plan 2035

The following policies from Chapter 5, "Health and Safety," of the *Ceres General Plan 2035* (City of Ceres 2018) relate to noise:

5.L.3 Performance Standards. Use performance standards established in Table 5-5: Performance Standards for Stationary Sources to regulate operational noise associated with new non-residential development or changes of non-residential use.

Require, prior to approval of a project, that noise generated by the project be mitigated so as not to exceed the performance standards of Table 5-5 [provided below]. Standards apply to the noise sources themselves, as measured at the edge of the property line of residential or other sensitive uses; noise caused by motor vehicles traveling to and from the site is exempt from these standards.

Table 5-5. Performance Standards for Stationary Noise Sources

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Leq, dB	55	45
Maximum sound level, dB	60	45

Sound level measurements shall be made at a point on the receiving property nearest where the sound source at issue generates the highest sound level. Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

5.L.6 Acoustical Analysis. Require an acoustical analysis as part of the environmental review process for proposed non-residential land uses that are likely to produce noise levels exceeding the performance standards of Table 5-4: Maximum Allowable Noise Exposure for Transportation Noise Sources for existing or planned noise-sensitive uses to ensure that mitigation is included in the project design. The acoustical analysis shall meet the following requirements:

- It shall be the financial responsibility of the applicant;
- It shall be prepared by a qualified person, selected by the City, who is licensed through the State of California in the fields of environmental noise assessment and architectural acoustics;
- It shall include representative noise measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources;
- It shall include estimates of existing and projected cumulative (20 years) noise levels in terms of DNL or CNEL and/or the standards of Table 5-4: Maximum Allowable Noise Exposure for Transportation Noise Sources, and compare those levels to the adopted policies of the General Plan;
- It shall recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the noise section of the General Plan, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance;

- It shall include estimates of noise exposure after the prescribed mitigation measures have been implemented; and

- It shall describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures, when deemed necessary by the City.

The following policies from Chapter 9.36, "Noise," of the *City of Ceres Code of Ordinances* (City of Ceres 2017) are applicable to the Proposed Program:

> **E. Construction or Repairing of Buildings:** The erection (including excavating), demolition, alteration or repair of any building other than between the hours of seven o'clock (7:00) A.M. and eight o'clock (8:00) P.M., except that, by special permit issued by the Building Inspector or City Engineer, as the case may be, upon a determination that the public health and safety will not be impaired thereby, the erection, demolition, alteration or repair of any building or the excavation of streets and highways may be permitted within the hours of eight o'clock (8:00) P.M. and seven o'clock (7:00) A.M.

City of Turlock General Plan

The following policies from Chapter 9, "Noise" of the Turlock General Plan (City of Turlock 2012a) relate to noise:

> **9.4-d Required Noise Analysis.** Use the noise and land use compatibility matrix (Table 9-1) and Future Noise Contours map (Figure 9-2) as review criteria for all new development. For proposed development located where projected noise exposure would be other than "normally acceptable," and which require discretionary review, require that a noise analysis be conducted.
>
> A required noise analysis should:
>
> - Be prepared by a certified noise consultant or acoustical engineer;
>
> - Be funded by the applicant;
>
> - Include a representative, on-site day and night sound level measurement;
>
> - Include a delineation of current (measured) and projected (10 years) noise contours with and without the proposed project, ranging from 55 to 75 dBA (L_{dn}) within the proposed development site; and
>
> - Include a description of adequate and appropriate noise abatement measures where sound measurements exceed Table 9-2 standards for the proposed use.
>
> **9.4-h Non-Transportation Noise Sources—Required Mitigation.** Require mitigation of noise created by new proposed non-transportation noise sources so that it does not exceed the noise level standards of Table 9-3 as measured immediately within

the property line of lands designated for noise-sensitive uses. Appropriate mitigation measures include:

- Dampen or actively cancel noise sources;
- Increase setbacks for noise sources from adjacent dwellings;
- Use soundproofing materials and double-glazed windows;
- Screen and control noise sources, such as parking and loading facilities, outdoor activities, and mechanical equipment;
- Use open space, building orientation and design, landscaping and running water to mask sounds; and
- Control hours of operation, including deliveries and trash pickup.

This policy does not apply to noise sources associated with agricultural operations on lands zoned for agricultural uses.

The following policies from Chapter 5-28, "Noise Standards," of the *Turlock Municipal Code* (City of Turlock 2017) are applicable to the Proposed Program:

5-28-110 Prohibited acts.

The following acts are hereby prohibited:

(g). **Construction or demolition.**

(1) **Hours of operation.** Operation or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m. (or 8:00 p.m. and 9:00 a.m. on weekends or holidays) such that the sound therefrom creates a *noise* disturbance across a residential or commercial real property line, except for emergency work or public service utilities or by variance issued by the Noise Control Officer; and

(2) **Noise restrictions at affected properties.** Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum sound levels at affected properties will not exceed those listed in the following schedule:

(i) **Mobile equipment.** Maximum sound levels for nonscheduled, intermittent, short term operation (less than ten (10) days per month) of mobile equipment:

Mobile Construction Equipment			
Time Interval	**One- and Two-Family Residential (dBA)**	**Multiple-Family Residential (dBA)**	**Commercial and Industrial (dBA)**
Daily 7:00 a.m. – 7:00 p.m.	75	75	85
Weekends/Holidays 9:00 a.m. – 8:00 p.m.	70	70	85

(ii) **Stationary equipment.** Maximum sound levels for repetitively scheduled and relatively long-term operation (periods of ten (10) days or more per month) of stationary equipment:

Stationary Construction Equipment			
Time Interval	**One- and Two-Family Residential (dBA)**	**Multiple-Family Residential (dBA)**	**Commercial and Industrial (dBA)**
Daily 7:00 a.m. – 7:00 p.m.	70	70	85
Weekends/Holidays 9:00 a.m. – 8:00 p.m.	60	65	85

(h) **Vibration.** Operating or permitting the operation of any device which creates a vibration which annoys or disturbs at least two (2) or more reasonable persons of normal sensitivity who reside in separate residences (including apartments and condominiums) at or beyond the property boundary of the noise source. When the noise source is located on a public space or in the public right-of-way, the affected residence shall be located at least one hundred fifty (150') feet (forty-six (46) meters) from the *noise* source.

(i) **Motor vehicle noise limits.**

(1) **Motor vehicles.** It shall be the policy of the City to enforce those sections of the Vehicle Code of the State of California regarding motor vehicle noise limits and equipment violations which create noise problems, motor vehicle horns, sound levels emitted from off-highway vehicles operating off the public right-of-way, and successors thereof. Commercial maintenance equipment and machinery shall be equipped with proper mufflers and air-intake silencers in good working order.

5-28-114 Special variances.

(a) The Planning Commission is authorized to grant variances for exceptions from any provision of this chapter, subject to limitations as to area, noise levels, time limits, and other terms and conditions as the Planning Commission determines are appropriate to protect the public health, safety, and welfare from the noise emanating therefrom. This section shall in no way affect the duty to obtain any permit or license required by law for such activities.

(b) Any person seeking a variance pursuant to this section shall file an application with the Planning Commission. The application shall contain information which demonstrates that bringing the source of sound or activity for which the variance is sought into compliance with this chapter would constitute an unreasonable hardship on the applicant, on the community, or on other persons. The application shall be accompanied by a fee established by resolution of the City Council. A separate application shall be filed for each noise source; provided, however, several mobile sources under common ownership, or several fixed sources on a single property, may be combined into one (1) application. Notice of an application for a variance shall be published according to this Code. Any individual who claims to be adversely affected by the allowance of the variance may file a statement with the Planning Commission containing any information to support his claim. If at any time the Planning Commission finds that a sufficient controversy exists regarding an application, a public hearing will be held.

(c) In determining whether to grant or deny the application the Planning Commission shall balance the hardship of not granting the variance on the applicant, the community, and other persons against the adverse impact on the health, safety, and welfare of persons affected, the adverse impact on property affected, and any other adverse impacts of granting the variance. Applicants for variances and persons contesting variances may be required to submit such information as the Planning Commission may reasonably require. In granting or denying an application, the Planning Commission shall keep on public file a copy of the decision and the reasons for denying or granting the variance.

(d) Variances shall be granted by notice to the applicant containing all necessary conditions, including a time limit on the permitted activity. The variance shall not become effective until all conditions are agreed to by the applicant. Noncompliance with any condition of the variance shall terminate the variance and subject the person holding it to those provisions of this chapter for which the variance was granted.

(e) A variance shall not exceed three hundred sixty-five (365) days after the date in which it was granted. Applications for the extension of the time limits specified in variances or for the modification of other substantial conditions shall be treated like applications for initial variances under subsection (b) of this section.

14.4 Environmental Setting

14.4.1 Noise-Sensitive Land Uses

Sensitive land uses generally include those that where exposure to noise and vibration would be a nuisance, as well as uses where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both noise levels (interior and exterior) and vibration levels. Other sensitive land uses include schools, hospitals, convalescent facilities, parks, hotels, places of worship, libraries, and other uses where low noise and vibration levels are essential. Many, if not all, of these sensitive land uses can be found in the immediate vicinity of Proposed Program components throughout Modesto, the outlying service areas, and unincorporated Stanislaus County. While specific sensitive receptors may change or move over the life of the Proposed Program, Figure 11-3 in Chapter 11*, Hazards and Hazardous Materials,* shows the locations of schools, an existing sensitive receptor category, with respect to Proposed Program components.

14.4.2 Existing Noise and Vibration Sources

The Program study area covers a large area and dominant noise sources vary depending on location. In general, noise sources include industrial facilities (e.g., canneries), agricultural activities, railroads, air traffic (near the Modesto City-County Airport), and vehicular traffic, in particular near highways and major transportation corridors. Railroad lines operated by multiple companies and SR 99, 132, 108, and 219 create elevated ambient noise levels and pass through large portions of the study area. The Modesto City-County Airport's planning area boundary and noise contours overlap sections of the study area (Stanislaus County 2016b).

The Proposed Program components include new and/or improvements to storage tanks, groundwater wells and treatment, pipelines to replace and extend water mains, pumps, emergency generators, security enhancements, water meters, and other water related programs and studies. The noise environment varies across the study area and is described generally in the City's 2019 Final Master Environmental Impact Report for the Modesto General Plan Update (City of Modesto 2019b) referred to here as 2019 General Plan EIR), the noise section of which is incorporated by reference and summarized here. Table V-3-8 and Figure V-3-3 in the 2019 General Plan EIR show the projected traffic noise levels at General Plan buildout in 2040 generated by traffic, the airport, and the railroads. Stationary sources, such as industries, are discussed qualitatively.

As the City's 2019 General Plan EIR discusses, substantial noise increases (3 dBA Ldn or greater) would occur along multiple roadways under 2040 General Plan buildout conditions. Existing residential land uses are located within the projected 65 dBA Ldn noise contours under 2040 General Plan buildout conditions along most of these existing roadways. In addition to projected traffic noise increases along existing roadway segments, traffic noise levels would increase in areas adjacent to proposed future roadways and roadway extensions.

The specific Proposed Program components, in particular the water pipelines, would be located in almost all areas of the City and would be within the range of all noise levels indicated in the 2019 General Plan EIR.

Areas outside of the City's 2019 General Plan EIR scope (i.e., the Proposed Program's outlying water service areas), would have similar noise contour trends as described for the City, and as supported in the noise sections from the City of Turlock's General Plan EIR (City of Turlock 2012b) and the Stanislaus County General Plan EIR (Stanislaus County Airport Land Use Commission 2016). Elevated noise levels greater than 70 dBA Ldn occur along SR 99 and various arterial streets in both Turlock and unincorporated areas of Stanislaus County. Primary noise generators in these outlying service areas are related to roadways and vehicle traffic.

14.5 Impact Analysis

14.5.1 Methodology

Construction and operation impacts of all Program components were determined using a qualitative approach. The qualitative analysis uses distances to sensitive receptors, project information and design, and information provided by City of Modesto staff.

14.5.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on noise and vibration if it would:

- Expose persons to or generate a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Substantially permanently increase ambient noise levels in the project vicinity above levels existing without the project;
- Substantially temporarily or periodically increase ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

The last criterion has been dismissed from this analysis because the Proposed Program does not include any components within the vicinity of a private airstrip; therefore, no impact would occur and this topic is not discussed further.

For the Proposed Program, the significance of noise effects is based on a comparison between predicted noise levels and noise criteria defined by Stanislaus County, the City of Modesto, the City of Ceres, and the City of Turlock. For the Proposed Program, noise impacts would be significant if existing or proposed noise-sensitive land uses would be exposed to noise levels in excess of the County of Stanislaus General Plan Noise Element (Stanislaus County 2016a),

Stanislaus County Municipal Code standards, City of Modesto General Plan Noise Element (City of Modesto 2019a), the City of Modesto Noise Ordinance, the Ceres General Plan 2035 Noise Element, the City of Ceres Noise Ordinance, the City of Turlock Municipal Code Noise Standards, or the City of Turlock General Plan Noise Element described in Section 14.3, "Regulatory Setting," or if implementing the Proposed Program would increase ambient noise levels at noise-sensitive land uses in excess of those described above.

The following considerations apply to the first four significance criteria:

- **Noise impacts from operation of Proposed Program facilities:** For all affected noise-sensitive uses, noise that would be generated by operation of proposed facilities would be significant if it would cause the overall exterior noise level to exceed the "normally acceptable" noise standard compatible with exterior land uses or if it would result in an increase of ambient noise levels by 10 dBA.

- **Noise impacts from increased daily traffic:** For all affected noise-sensitive uses, noise generated by an increase in daily traffic volumes caused by the Proposed Program would be significant if it would cause the overall exterior noise level to exceed the "normally acceptable" noise standard compatible with exterior land uses, exceed the interior noise standard, or result in an increase of ambient noise levels by 10 dBA.

- **Exposure of sensitive receptors to, or generation of, excessive vibration levels:** Short- and long-term vibration impacts would be significant if project construction or operation would result in the exposure of sensitive receptors to, or would generate, vibration levels that exceed Caltrans' recommended standard of 0.2-0.3 in/sec PPV for the prevention of structural damage to non-engineered timber and masonry or engineered concrete and masonry buildings or the FTA's vibration standards of 72 VdB regarding human response for residential uses (i.e., annoyance), or 65 VdB for human perception, at any nearby existing sensitive land uses.

- **Temporary, short-term noise impacts from construction:** Temporary, short-term noise impacts caused by construction are exempt from noise ordinances described in the Stanislaus County Municipal Code Specific Noise Source Standards Subsection E (Section 10.46.060, "Construction Equipment"), the City of Modesto Code Ordinances (Section 4-9.103, "Enumeration"), and the City of Turlock Municipal Code Noise Standards (Chapter 5-28, "Noise Standards"), since they will be conducted by a public agency and public utility. Program-related construction noise levels greater than the FTA significance threshold of 90 dBA at residential and noise-sensitive land uses would be considered to result in a temporary noise impact.

14.5.3 Environmental Impacts

Impact NOI-1: Expose Persons to Noise Levels in Excess of Standards Established in a Local General Plan or Noise Ordinance or in the Applicable Standards of Other Agencies (*Less than Significant with Mitigation*)

As described in Chapter 2, *Program Description,* construction activities would generally occur Monday through Friday between 7:00 a.m. and 5:00 p.m. excluding City-observed holidays. Nonetheless, since the construction timeframes and schedules for each individual CIP have not

yet been determined, future construction activities have potential to expose people (particularly residential receptors) to noise levels exceeding the above-listed timeframe and other standards in the local general plan and noise ordinances. This impact is considered significant. Construction of all WMP components would be required to follow applicable local laws and the City's contractor(s) would be required to adjust the times of construction accordingly. Stanislaus County and the City of Modesto, City of Turlock, and City of Ceres municipal codes contain some exemptions for noise from construction and maintenance activities performed by, or for, public utilities and facilities (e.g., a special exemption permit allowed by Modesto Municipal Code Section 4-9.103[b][6]).

With implementation of **Mitigation Measure NOI-1 (Employ Noise-Reducing Construction Practices)** and **Mitigation Measure NOI-2 (Limit Nighttime Construction Noise)**, the City's contractor(s) would be required to ensure that construction activities occur in a manner consistent with local noise standards when operating during allowable daytime hours outlined above. Therefore, this impact would be less than significant with mitigation.

Once construction is complete, WMP components involving new, upgraded, or replacement pipelines would not generate excess noise levels. However, operation of proposed tanks, wells, water pump stations, and emergency generators would generate ongoing noise levels in areas that could expose people to noise levels in excess of established noise levels without mitigation. The Proposed Program includes wells, emergency generators, and booster pump station components in residential areas of Modesto and the outlying service areas, and the operation of these facilities would generate noise. For the purpose of this analysis, it is assumed that a single pump with an engine rating of up to 100 horsepower (hp) would be used at each new wellhead. Based on the current Proposed Program description, all pumps would be powered by electric engines. Data provided by U.S. Electrical Motors for a 100-hp electric motor running under no load (Roughton pers. comm. 2000) indicate that the motor would produce a sound level of 56 dBA at 50 feet. To approximate the sound level produced under a load, 3 dB were added to the no-load condition for a resulting source level of 59 dBA at 50 feet. The distance needed for a source of this level to attenuate to the lowest County noise-level standards is 250 feet for 45 dBA (nighttime standard). Noise at sensitive receptors located closer than 250 feet to proposed well locations or pumps could exceed the threshold of significance.

In the event that propane- or natural gas–powered engines are used at some of the proposed CIP locations, the sound level of a similarly-sized pump operated by a propane-fueled reciprocating engine was calculated using the equations for reciprocating engines from Noise Control for Buildings, Manufacturing Plants, Equipment and Products (Hoover and Keith 1996). Based on these calculations, a 100-hp, propane-fueled engine would produce a sound level of 75 dBA at 50 feet. This sound level would represent the highest potential noise level from well pumping activities, or the worst-case scenario at the proposed well locations. The distances needed for a source of this level to attenuate to the lowest County noise-level standards is 1,250 feet for 45 dBA (nighttime standard).

Currently, the level of design detail for all proposed CIPs is not sufficient to conduct a quantitative noise analysis; thus, operational noise impacts for these components are conservatively considered to be significant. The preliminary analysis indicates that there is the potential for noise from engines at proposed facilities with the maximum horsepower rating to exceed County nighttime noise standards at residences located within 250 feet of electric engines, or within

1,250 feet of a propane powered engine. For sensitive receptors within Modesto, the noise standard allows a higher exposure level, and the residences could be located closer than 250 feet. This impact is considered potentially significant. With implementation of **Mitigation Measure NOI-3 (Employ Noise-Reducing Methods during Operations)** this impact would be reduced to a less-than-significant level.

Overall Conclusion

Considering the WMP components as a whole, while construction-related noise impacts would be reduced to a less-than-significant level with implementation of Mitigation Measures NOI-1 and NOI-2. Design details and specific locations for some components (e.g., wells, emergency generators, booster pump stations) have not yet been developed such that a quantitative operational noise analysis can be conducted at this time. Implementation of Mitigation Measure NOI-3 would ensure that noise-reducing design measures are incorporated into the design of these components. In conclusion, implementation of Mitigation Measures NOI-1, NOI-2, and NOI-3 would reduce noise levels associated with the Proposed Program's construction and operation, and noise levels would not be in excess of standards established in the relevant noise ordinances and policies. Therefore, this impact would be **less than significant with mitigation**.

Mitigation Measure NOI-1: Employ Noise-Reducing Construction and Maintenance Practices.

The following measures will be implemented by the City or its contractor to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected:

- locating stationary equipment as far as practical from noise-sensitive land uses,
- using electrified or otherwise quieter equipment when practical,
- using sound-control devices on equipment that are more effective than devices originally provided on the equipment,
- using noise-reducing enclosures around noise-generating equipment, and
- installing temporary barriers between noise sources and noise sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission.

When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.

Mitigation Measure NOI-2: Limit Nighttime Construction Noise.

The City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays or that the project has received a variance or special permit following procedures outlined in the applicable noise ordinance to operate outside of these hours.

Mitigation Measure NOI-3: Employ Noise-Reducing Methods During Operations.

The City will implement noise-reducing methods so that noise from well operations and emergency generators does not exceed County noise-level standards at adjacent residences. Example measures may include but are not limited to:

- using sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available.
- locating stationary equipment as far as practical from noise-sensitive land uses,
- using electrified or otherwise quieter equipment when practical,
- using sound-control devices on equipment that are more effective than devices originally provided on the equipment,
- installing permanent barriers between noise sources and noise-sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission, and
- limiting operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas.

Impact NOI-2: Expose Persons to Excessive Groundborne Vibration or Groundborne Noise Levels (*Less than Significant with Mitigation*)

Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receptor. Impact construction activity, including the use of compactors, jackhammers, and similar equipment, may be perceived hundreds of feet away and can cause damage to susceptible buildings located over 100 feet away. Loaded trucks, a substantial source of construction-related vibration, would likely be used during construction of Proposed Program-level components, which would involve travel along residential roads in Modesto and the outlying service areas. These trucks can generate vibration above the annoyance and human perception thresholds at distances up to 73 and 125 feet respectively.

As a result, vibration effects on sensitive receptors would be significant. Implementation of **Mitigation Measure NOI-4 (Implement Vibration Reduction Measures)** would reduce construction-related impacts from vibration to a less-than-significant level.

Operational noise would be generated from mechanical equipment such as pumps, emergency generators, and maintenance vehicle trips. This type of activity would generate vibration levels that are much lower than the levels generated during construction. Because of the distance between the operating equipment and nearby sensitive receivers, vibration levels would result in a less-than-significant noise impact during operation.

Given the temporary nature of vibration resulting from construction activities and the implementation of Mitigation Measures NOI-4, this impact would be **less than significant with mitigation.**

Mitigation Measure NOI-4: Implement Vibration Reduction Measures.

The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:

- Ensure proper tuning of vibration-causing equipment.
- Use vibration damping devices to the extent feasible.
- Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings.
- Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- Use electric stationary equipment (e.g., generators) where feasible.
- Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.

Impact NOI-3: Substantial Temporary, Periodic, or Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing Without the Proposed Program (*Less than Significant with Mitigation*)

Temporary and periodic increases in noise levels associated with the Proposed Program's construction activities, periodic maintenance activities, and associated periodic truck traffic, would increase ambient noise levels above the ambient noise levels existing without the Proposed Program. However, implementation of Mitigation Measure NOI-1, which includes several construction noise-reducing measures, would reduce short-term noise impacts to a less-than-significant level.

Operation of proposed tanks, wells, pipelines, water pump stations, and emergency generators would generate ongoing noise levels in areas that could expose people to substantial permanent increases in noise levels. The Proposed Program's components would be located near or in residential areas of Modesto, Ceres, Del Rio, and Turlock. As indicated in Impact NOI-1, implementation of Mitigation Measure NOI-3 would reduce potential operation-related noise levels such that the proposed components would not result in noise levels exceeding the relevant thresholds (a CNEL exterior noise levels shown in Table 14-4 or 3-dB increase if existing levels are above the ambient noise level), and thereby ensure that operation of new and upgraded facilities would not result in substantial permanent increases in noise levels. In conclusion, the Proposed Program's effects on ambient noise levels would be **less than significant with mitigation**.

Impact NOI-4: Expose People Residing or Working in the Study Area to Excessive Noise Levels Associated with a Public Airport (*Less than Significant*)

The Modesto City-County Airport's planning area boundary and noise contours overlap sections of the Program study area (Stanislaus County Airport Land Use Commission 2016). However, the Program components within areas affected by airport-related noise (i.e., the CNEL noise zones policy areas shown in the Noise Zones Policy Map for Modesto City-County Airport [Stanislaus County Airport Land Use Commission 2016]), would be limited to upgraded or replaced tanks, well sites, emergency generators, booster pump stations, and pipelines. These types of components would not require workers to be onsite during operation, and thus would only result in temporary exposure of City employees or contractors to airport-related noise exclusively during temporary construction and maintenance activities. Therefore, since no sensitive receptors would be located in the airport noise impact zones once any construction activities are complete, this impact would be **less than significant.**

Chapter 15
POPULATION AND HOUSING

15.1 Overview

This section describes the Proposed Program's impacts related to population and housing. The environmental setting and impact analysis for population and housing were developed through a review of:

- *Stanislaus County General Plan* (2016a) and Housing Element (2016b);
- City of Modesto Urban Area General Plan (2019) and Housing Element (2017);
- *Turlock General Plan* (2012) and Housing Element (2016);
- Del Rio Community Plan (1992) and Salida Community Plan (2007);
- California Department of Finance's (DOF's) City and Unincorporated Areas Estimates documents (DOF 2016, 2017); and
- U.S. Census Bureau American Fact Finder (2010a–c, 2015a–f, and 2016).

15.2 Regulatory Setting

There are no federal or state laws, regulations, and/or policies that are applicable to the Proposed Program. The following section describes local population and housing laws, regulations and/or policies that would be applicable to the Proposed Program.

15.2.1 Local Laws, Regulations, and Policies

Stanislaus County General Plan

The *Stanislaus County General Plan* (Stanislaus County 2016a) contains the following goals and policies related to population and housing.

Land Use Element

Goal One. Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.

Policy Five. Residential densities, as defined in the General Plan, shall be the maximum based upon environmental constraints, the availability of public services, and acceptable service levels. The densities reflected may not always be achievable and shall not be approved unless there is proper site planning and provision of

suitable open space and recreational areas consistent with the supportive goals and policies of the General Plan.

Implementation Measure

1. Residential development shall not be approved at the maximum density if: (1) it threatens riparian habitat; (2) growth-limiting factors such as high water table, poor soil percolation, geological fault areas, and airport hazard areas exist; (3) development is in a designated floodway or does not meet the requirements of Chapter 16.50 of the County Code; (4) it conflicts with the Airport Land Use Compatibility Plan; (5) there is lack of, or inadequate, sanitary sewer or public water service; or (6) environmental impacts, including traffic, cannot be mitigated.

Policy Six. Preserve and encourage upgrading of existing unincorporated urban communities.

Housing Element

Goal Four. Designate sufficient sites for all types of residential development required to meet projected housing needs.

Policies

The County shall identify unincorporated areas with adequate infrastructure and limited environmental concerns that are most suited for housing, especially lower-cost and higher-density housing.

The County shall identify specific methods and provide assistance to improve infrastructure in residential areas (Stanislaus County 2016b).

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (2019) implements a community growth strategy that emphasizes policies regulating the quality, quantity, and direction of urban growth. These policies have resulted in a compact urban form, with few infill parcels remaining, neighborhoods offering a diversity of housing types and higher-than-average densities, and a geographic balance with new growth occurring on all sides of the community. The Urban Area General Plan recognizes that, while significant public facility deficiencies may result from these policies in the short term, their resolution is still deemed manageable over the long term.

Policy II.A.3. Development Follows Annexation

Annex residential growth and development within the Modesto Urban Area General Plan boundary before development occurs.

Policy II.A.4. Direct Growth Inward

Direct urban growth to areas currently served with City services.

Goal II.B. Development Priorities and Financing

Establish priority areas for new development and identify reasonable and certain financing for capital projects consistent with applicable City policies and standard operating procedures.

Policy II.B.1. Priority Development Areas

Support new development with infrastructure developed in accordance with the established Capital Improvement Program priority areas of Downtown, Kiernan Business Park, the Tivoli Specific Plan area and the South Modesto Industrial Park (north of Whitmore Ave. between Crows Landing Rd. and Morgan Rd.).

Policy II.B.3 Funding Capital Improvements

Increase and improve capital projects over time through maintaining or enhancing existing funding sources, maximizing joint-use efficiencies, and strategically prioritizing capital investments.

Policy II.C.3 Unincorporated "Island" Annexations

Annex unincorporated County islands, generally located in the south and west areas of Modesto, into the City limits only after a Public Improvement Agreement (PIA) is established between the City and County. Certain conditions contained within the PIA, such as those regarding funding and construction of infrastructure systems, must be satisfied prior to annexation.

The PIA establishes the infrastructure systems that must be constructed, which typically include water, wastewater, storm drainage, fire hydrants, streets and streetlights. Other infrastructure components may be necessary on an area-by-area basis. The PIA also documents the applicable tax-share agreement between the City and County, and certain other project-specific details.

Housing Element 2015-2023

The *City of Modesto Housing Element 2015-2023* (City of Modesto 2017a) is an element of the General Plan that aims to develop a coordinated and comprehensive housing strategy that promotes the production of safe, decent, and affordable housing within the community. The Housing Element identifies strategies and programs that focus on matching housing supply with need, maximizing housing choice throughout the community, assisting in the provision of affordable housing, removing governmental and other constraints to housing investment, and promoting fair and equal housing opportunities. Chapter 2, *Program Description,* of this document provides an analysis of the City's demographics, housing characteristics, and existing and future housing needs.

City of Ceres General Plan

The following policies from the *City of Ceres General Plan* (1997) related to population and housing are listed below.

Goal 1.B. To grow in an orderly pattern consistent with economic, social and environmental needs, maintaining Ceres' small-town character and preserving surrounding agricultural lands.

Policy 1.B.1. The City shall ensure that land is designated for development consistent with needs of the community and to maintain a positive fiscal balance for the City.

Policy 1.B.3. The City shall ensure that future development occurs in an orderly sequence based on the logical extension of public facilities and services.

2014-2023 Housing Element

The City of Ceres 2014-2023 Housing Element (City of Ceres 2016) does not identify specific policies or regulations related to population and housing.

Del Rio and Salida Community Plan

The Del Rio Community Plan (Stanislaus County 1992) and Salida Community Plan (Stanislaus County 2007), which were both incorporated into the *Stanislaus County General Plan*, do not identify specific policies or regulations related to population and housing.

City of Turlock 2012 General Plan

The Turlock General Plan (City of Turlock 2012) identifies the following policies related to population and housing:

Policy 2.5-c: Infill and existing neighborhoods. Preserve the scale and character of existing neighborhoods while allowing and encouraging appropriate infill development.

Policy 2.5-e: "No net loss" of housing. Do not allow development at less than the minimum density prescribed by each residential land use category, without rebalancing the overall plan to comply with the "no net loss" provisions of State housing law.

2015-2023 Housing Element

The City of Turlock 2015-2023 Housing Element (City of Turlock 2016) identifies the following objective and policy related to population and housing.

Objective 5-2: Reduce the incidence of displacement.

Policy 5-2-1: In development of public projects, require an analysis of potential displacement of existing residences with an emphasis on minimizing both temporary displacement and relocation.

15.3 Environmental Setting

15.3.1 Population

Stanislaus County

In 2010, Stanislaus County had a population of approximately 514,453 (Stanislaus County 2016a as cited in Stanislaus County 2016b). As of January 1, 2015, the total County population rose to 532,297, of which the unincorporated areas accounted for 113,772 persons (Stanislaus County 2016b). Population growth by 2025 is projected to reach over 637,000 according to the Stanislaus Council of Governments (StanCOG), which represents an approximately 20 percent increase from the County's 2015 population estimate with the majority of growth projected to occur in incorporated cities (City of Modesto 2017a). **Table 15-1** provides a breakdown of past population estimates and future projections from 2015 through 2050 for Modesto, Del Rio, Salida, Empire, Grayson, Turlock, and the total unincorporated Stanislaus County.

Modesto

Modesto is the largest city in Stanislaus County. Since 1990, the City has grown by an estimated 21.6 percent from 164,730 in 1990 to 210,341 as of 2015 (California Department of Finance 2015 as cited in City of Modesto 2017a; StanCOG 2016). Between 2000 and 2010, the population growth rate declined as the City's population grew at an average annual rate of 0.6 percent from about 188,900 to 201,165. More recent projections estimate that the City's population was at 211,903 in 2016, which represents a 0.9 percent increase from 2015 (California Department of Finance 2016).

Del Rio

The community of Del Rio had a population of approximately 1,925 persons in 2015, which is an increase from a population of 1,186 in 2010 (U.S. Census Bureau 2015a, 2010a). The community's largest population by age group are people ranging from 55 to 59 years. This group accounted for approximately 20.7 percent of the total population in 2015 (U.S. Census Bureau 2015a). Del Rio is within the jurisdiction of unincorporated Stanislaus County.

Salida

The community of Salida, within unincorporated Stanislaus County, is located along the northwestern border of the City of Modesto and in the northern/central part of the County. The Salida community had an estimated population of 14,625 in 2010 and declined to 13,501 persons in 2015 (U.S. Census 2015b, 2010b). The largest population age groups for the community are adolescents from 10 to 14 years of age (11.1 percent) and 15 to 19 years of age (10.3 percent). In 2007, the County's general plan included a new Salida Community Plan, which projected a residential buildout of a total of 5,000 new dwelling units. The construction of these units would result in the projected local population to increase by an additional 15,063 persons. However, future development within the Community was placed on hold due to the economic crisis (Stanislaus County 2016b). Therefore, it is unknown how many of these new dwelling units have been completed and how much the population may have altered from the 2015 estimates.

Table 15-1. Population Growth Trends for the Cities of Modesto, Ceres, Turlock, and Unincorporated Stanislaus County Communities and Areas

Jurisdiction	2015	2020	2025	2030	2035	2040	2045	2050	Change (2015–2050)	
									Number	Percent Change
Modesto	210,341	220,865	232,622	244,662	256,545	268,176	279,460	290,555	+80,214	27.6
Del Rio	1,329	1,396	1,471	1,549	1,625	1,699	1,771	1,842	+513	27.8
Salida	14,764	15,978	17,335	18,724	20,095	21,437	22,739	24,019	+9,255	38.5
Empire	4,394	4,630	4,893	5,163	5,429	5,689	5,942	6,190	+1,796	29.0
Grayson	983	1,019	1,059	1,099	1,139	1,179	1,217	1,254	+271	21.6
Turlock	72,229	76,475	81,219	86,077	90,872	95,564	100,117	104,594	+32,365	30.9
Ceres	48,029	51,049	54,424	57,879	61,290	64,628	67,866	71,050	+23,021	32.4
Unincorporated Stanislaus County*	N/A	117,807	N/A	125,879	N/A	141,627	N/A	N/A	+23,820	16.8
Totals	**N/A**	**489,219**	**N/A**	**541,032**	**N/A**	**599,999**	**N/A**	**N/A**	**--**	**--**

*Source: StanCOG 2016; *Stanislaus County 2016b*

Empire

The community of Empire is located adjacent to Modesto's eastern boundary and is an unincorporated community of Stanislaus County (Stanislaus County 2016b). The Community had an estimated population of 4,394 in 2015 and is projected to grow by 1,796 persons into 2050 (StanCOG 2016). Empire's most common age group in 2015 was 25 to 34 years, which accounted for an estimated 15.4 percent of the entire population. People from ages 35 to 44 years accounted for the second largest percentage of the population at an estimated 12.5 percent (U.S. Census Bureau 2015c).

Grayson

Grayson is an unincorporated community in Stanislaus County (Stanislaus County 2016b). Grayson had an estimated population of 983 in 2015, and is projected to increase by approximately 271 persons by 2050 (StanCOG 2016). The most populous age group within this community was people from 25 to 34 years of age in 2015, accounting for an estimated 25.3 percent of the total population. (U.S. Census Bureau 2015d).

Turlock

The total population in the City of Turlock was estimated at 72,229 persons in 2015, an increase from an estimated population of 68,549 in 2010 (Stanislaus County 2016b). In 2015, the most populous age group within the City was people between 25 and 34 years of age (14.3 percent). The second most populous group was people between 35 and 44 years of age (13.3 percent) (U.S. Census Bureau 2015e). Population counts as of 2016 were estimated at 72,796 (U.S. Census Bureau 2016).

Ceres

The City of Ceres had an estimated population of 47,754 as of January 2017 (DOF 2017). The City's projected population for the year 2050 is projected to increase from the current population by an estimated 23,021 persons (StanCOG 2016).

15.3.2 Housing

Housing availability within the unincorporated portions of Stanislaus County is limited for the number of employed persons that work in the county. Based on 2010 estimates, the housing to jobs ratio was 0.54, with 68,086 employed jobs to just 36,684 housing units available. The housing to jobs ratio is projected to decrease steadily through 2030, and is projected to decline to 0.47 by then (StanCOG 2040 Demographic Forecast, as cited in Stanislaus County 2016b). However, the number of new homes permitted is increasing steadily, with 420 new homes being permitted in 2014 compared to 244 in 2010. **Table 15-2** shows housing unit growth trends for following cities and/or communities from 2015 to 2050: Modesto, Del Rio, Salida, Empire, Turlock, Grayson, and Ceres.

Table 15-2. Housing Unit Growth in Modesto, Ceres, Turlock, and Unincorporated Stanislaus County Communities (2015–2050)

City	2015	2020	2025	2030	2035	2040	2045	2050	Change (2015–2050)		
									Numerical	Percent Change	Average Annual Percent Change
Modesto	72,897	77,383	81,861	86,253	90,184	94,105	97,742	101,314	+28,417	28.0	+0.8
Del Rio	512	544	576	607	635	663	689	714	+202	28.2	+0.8
Salida	4,298	4,730	5,161	5,584	5,962	6,340	6,690	7,034	+2736	38.9	+1.1
Empire	1,287	1,371	1,456	1,539	1,614	1,688	1,756	1,824	+537	29.4	+0.8
Grayson	260	271	283	294	304	314	324	333	+73	21.9	+0.6
Turlock	24,251	26,001	27,748	29,462	30,996	32,526	33,945	35,338	+11,087	31.3	+0.9
Ceres	13,577	14,624	15,670	16,695	17,613	18,528	19,377	20,211	+6,634	32.8	+0.9
Totals	**117,082**	**124,924**	**132,755**	**140,434**	**147,308**	**154,164**	**160,523**	**166,768**	--	--	--

* Housing unit estimates in 2015 by the U.S. Census Bureau and by the Stanislaus Council of Governments (StanCOG) (see table 15-2) differ slightly. However, the U.S. Census Bureau gives their estimate a margin of error of +/-84, which contains StanCOG's estimated count of 1,351 (U.S. Census Bureau 2015c; StanCOG 2016). 2015 housing unit estimates from StanCOG were used in Table 15-2 in order to maintain consistency with the document's projected forecast values.

Source: StanCOG 2016

Modesto

The City of Modesto makes up the largest portion of housing in the County with approximately 75,816 units as of 2017 (DOF 2017). As of 2016, the approximate housing vacancy rate was approximately 6.7 percent with about 70,613 units occupied of a total 75,715 units in the City. The average household size was 2.96 persons (DOF 2017).

Del Rio

The community of Del Rio is considered to be an upscale community within Stanislaus County. This community has a potential dwelling capacity of 156 units that can be built on the available vacant parcels (Stanislaus County 2016b). As of 2015, there were approximately 630 total housing units with a margin of error of +/-131 within the community, all of which are occupied (U.S. Census Bureau 2015f).

Salida

The community of Salida is considered to have a diverse mix of residential land uses and housing types with a wide range of prices (Stanislaus County 2016b). In 2007, the County's general plan included a new Salida Community Plan, which projected a residential buildout of a total of 5,000 new dwelling units. 2,754 of these units would be Low Density, while 1,306 would be Medium Density and 940 for Medium-High Density. Medium-Density lot sizes would be between 2,000 and 3,000 square-feet compared to the County's traditional minimum of 6,000 square-feet. This would allow the community to accommodate a greater capacity of small-lot single-family dwelling units (Stanislaus County 2016b). During the economic housing crisis, 1 in every 724 dwelling units was considered to be in an active state of foreclosure (Realtytrac 2014 as cited in Stanislaus County 2016b). This crisis particularly affected the implementation of the Salida Community Plan, resulting in a temporary hold on development until the economic climate improves (Stanislaus County 2016b).

Empire

The Community of Empire had an estimated housing unit count of 1,333 in 2015. 40 of these units were considered vacant, accounting for a vacancy rate of 3.0% (U.S. Census 2015g). This number is down by 5.4 percent from the vacancy rate in for the Community in 2010 (8.4 percent). However, the number of total housing units decreased by 14 units since then (U.S. Census 2010c).

Grayson

The Community of Grayson had a total of 260 housing units in 2015 with a projected growth of 73 additional units through 2050 (StanCOG 2016).

Turlock

The City of Turlock had a total of 24,896 housing units as of January, 2017. Out of these homes, 23,165 were occupied, resulting in a vacancy rate of 7.0 percent (DOF 2017). Housing growth projections estimate an 11,087-unit increase to 35,338 by 2050 (StanCOG 2016).

Ceres

For the City of Ceres, the total number of housing units compared to Modesto were significantly less, totaling 13,807 in 2017. This is a 134- unit increase from 2010 estimates, which determined the number of households to be 13,673 (DOF 2017). The vast majority of housing stock is single-family units, which comprised approximately 76 percent of the City of Ceres' stock in 2014 (City of Ceres 2016).

15.3.3 Workforce

Employment numbers in Stanislaus County were projected to reach 171,375 jobs by 2015 (Caltrans 2015). Similarly, projected job growth is projected to rise to 236,749 jobs by 2040. As of 2015, the unemployment rate was 10.4 percent, ranking 45th out of the state's 58 counties. This number is projected to decrease to 7.8 percent by 2020. **Table 15-3** presents a more in-depth projection of employment numbers for the County between 2015 and 2040.

Table 15-3. Economic Forecast for Stanislaus County (2015–2040)

	2015	2020	2025	2030	2035	2040
Population[1] (people)	534,605	559,097	585,812	612,925	637,626	658,010
Employment[2] Growth (jobs)	171,375	184,250	197,125	209,999	222,874	236,749
Unemployment[3] Rate (percent)	10.4	7.8	7.8	7.6	7.5	7.1

Sources: [1,3] Caltrans 2015, [2] City of Modesto 2016a

Unincorporated Stanislaus County

Total employment in the unincorporated portions of Stanislaus County, which includes the communities of Del Rio, Salida, Grayson and Empire, was approximately 68,086 employees in 2010. This number increased by 4,439 employees by 2015, reaching 72,525 total employees. Growth projections predict that employment numbers will continue to increase through 2040, reaching 94,721 total employees by 2040. Based on these projections, the projected annual percent increase in employment is 2.8, or approximately 634 employees per year, up to 2040 (City of Modesto 2017a).

Modesto

Employment numbers for the City of Modesto totaled approximately 56,000 in 2015. This number is projected to increase to approximately 59,250 by 2020 and 62,500 employees by 2025. From 2010 to 2040, the number of jobs within the City is projected to increase by 0.91 percent annually (StanCOG, 2014 RTP Appendix J, as cited in City of Modesto 2017a). In contrast, unemployment rates in 2015 dropped to 7.4 percent, compared to a 10.5 percent unemployment rate in 2014 (City of Modesto 2017a). The majority of jobs in the City are in the service industry (39.7 percent of the occupational distribution). The second highest ranking of jobs are in the sales and office

industry, comprising 22.3 percent of the City's jobs. The construction and extraction industry makes up 6.3 percent of jobs in the City, while production and transportation account for 15.5 percent (2013 U.S. Census as cited in City of Modesto 2017a).

Turlock

The City of Turlock's most recent total employment count was approximately 28,635 employed persons as of 2013, accounting for approximately 14.1 percent of employment within Stanislaus County. The City's major sectors of employment in 2013 were health care and social assistance, accounting for an estimated 15 percent of the City's workforce, manufacturing (13 percent), retail/trade (12 percent) and educational services (12 percent). In total, these sectors accounted for approximately 40 percent of the total jobs in Turlock (2013 American Community Survey, as cited in City of Turlock 2016). The City's unemployment rate reached a 10-year high in 2010 at 13.3 percent, but have slowly dropped off since then. In 2014, the unemployment rate was recorded at 10.1 percent (U.S. Bureau of Labor Statistics as cited in City of Turlock 2016).

15.4 Impact Analysis

15.4.1 Methodology

The methods for this analysis included a review of relevant documents, statistics, and policies about the City of Modesto, Turlock, Ceres and Stanislaus County's housing and employment data. The evaluation is based on the Proposed Program's effects on housing and population in Modesto, Turlock, Ceres, Grayson, Del Rio, and Stanislaus County.

15.4.2 Criteria for Determining Significance

Based on the State CEQA Guidelines Appendix G Environmental Checklist, the Proposed Program would result in a significant impact with regard to population and housing if it would:

- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

15.4.3 Environmental Impacts

Impact PH-1: Induce Substantial Population Growth, Both Directly and Indirectly, during Construction (*Less than Significant*)

WMP improvements would not directly or indirectly induce substantial population growth during construction. Construction of each improvement would be temporary and the overall implementation of the WMP would be phased over a period of 35 years. As described in Section 15.3, *Environmental Setting*, above, the construction/extraction industry in the City accounts for

roughly 6.3 percent of the City's work force (2013 U.S. Census, as cited in City of Modesto 2017a). Additional construction staff can also be obtained from neighboring cities throughout the County, the Central Valley, or the San Francisco Bay Area if needed. As such, there is sufficient availability of local existing construction companies and staff to support construction of proposed improvements. Construction crews would be capable of commuting to and from the project sites throughout the time that project construction activities would occur. Therefore, an increased demand for housing to accommodate these workers would not occur due to construction. As a result, this impact would be **less than significant.**

Impact PH-2: Displace Substantial Numbers of People or Existing Housing, Necessitating the Construction of Replacement Housing Elsewhere (*Less than Significant*)

The Proposed Program involves construction of various CIPs in the cities of Modesto, Turlock, and Ceres, and in communities and areas of unincorporated Stanislaus County. The locations of all wells, booster pump stations and storage tanks have not been finalized, but the City would generally avoid using sites with existing housing for its proposed CIPs. In addition, due to the relatively small number of proposed well or tank CIPs, the extended period over which these CIPs might be constructed, and the available vacant housing in the Program vicinity, even if removal of housing were required, construction of these facilities would not displace a substantial number of people or housing.

Proposed future or buildout pipelines and existing system pipeline improvements would occur within the limits of city or County right-of-way boundaries to the extent feasible. As such, these improvements would not displace existing homes or people. Any roadways that require trenching would be returned to pre-construction conditions after construction, and crews may close one lane of traffic temporarily during pipeline installation if needed. As a result, residents who use these roads to access their homes would not be displaced from their homes during construction; traffic-related impacts of construction are analyzed in Chapter 16, *Transportation and Traffic*.

For these reasons, it is unlikely that the construction of the Proposed Program's infrastructure would be built on lands with substantial housing units or result in the displacement of substantial numbers of people or houses. As a result, this impact would be **less than significant.**

Impact PH-3: Long-term Inducement of Substantial Population Growth, Both Directly and Indirectly (*Less than Significant with Mitigation*)

As noted above, the Proposed Program includes upgrading the City's groundwater treatment, and water storage and distribution systems to provide improved water service to the City's contiguous and outlying service areas. The Program would not directly induce growth as it does not entail construction of new housing. However, by upgrading the treated water distribution system to deliver more water, it would remove an obstacle to planned development that would support population growth. Although this growth would be consistent with projected growth evaluated in adopted general plans, such growth could not occur without the proposed water system improvements addressed in this EIR.

As summarized in Section 15.3, "Environmental Setting," above, between 2015 and 2050, the City's population is projected to grow from 210,341 to 290,555 at an annual average growth rate

of 0.8 percent (StanCOG 2016). Population growth is also projected in the cities of Turlock and Ceres as well as the unincorporated communities of Del Rio, Salida, Grayson, and Empire. The contiguous service area projections are presented in **Table 15-4** (City of Modesto 2017b).

Based on the estimates provided above, the total population increase within the total contiguous and outlying service areas is estimated to increase by 134,407 people between 2015 and 2050 (City of Modesto 2017b). This accounts for all growth within all of the cities and communities where the Proposed Program improvements will be made.

New growth facilitated by the Proposed Program would result in associated physical environmental impacts; this could include aesthetic effects, conversion of farmland, air pollutant and greenhouse gas emissions, conversion of habitat, impacts on cultural or tribal cultural resources, increased point source or nonpoint source water pollution, use and possible releases of hazardous materials, noise, traffic, additional demands for public services and utilities such as police protection, fire protection, schools, parks, wastewater treatment, solid waste disposal, and energy.

Growth-inducing and secondary impacts are addressed by the policies of general plans and community plans of Stanislaus County, Modesto, Del Rio, Salida, Empire, Turlock and Ceres. These policies ensure that development within the planned growth areas occur as demand arises and services are available, and that utilities are sized appropriately to serve such development. The general and community plans mitigate for impacts through advanced planning and the implementation of growth management strategies, the provision of adequate public services and utilities such as treated water distribution, wastewater collection, and the protection of open space and habitat areas.

In conclusion, proposed improvements to the City's water distribution and storage system would remove an obstacle to urban development and population growth within the Program area. This development would occur in accordance with general plans and thus would not result in unplanned or disorderly growth. Nevertheless, the Program would remain growth-inducing and the impacts of growth inducement, and the secondary environmental effects of induced growth, are considered significant.

The policies contained in general and community plans, in particular Policy No. V.C.4[b], as well as the mitigation measures contained in this DEIR, would reduce the secondary effects of growth to a level of insignificance. Individual development improvements would be required to comply with CEQA, which may result in additional mitigation for growth and its effects. For these reasons, this impact is considered **less than significant with mitigation**.

Table 15-4. Projected Population for the City's Water Service Area

Year	Contiguous Service Areas				Outlying Service Areas				Total Contiguous Service Area[1]	Total Contiguous and Outlying Service Areas[2]
	City of Modesto	Salida	Empire	North Ceres (Bystrom)	Del Rio	Ceres (Walnut Manor)	Grayson	Turlock (Portions)		
2015	218,375	13,750	4,189	4,008	1,021	154	960	1,146	255,906	259,187
2020	232,943	14,667	4,189	4,008	1,233	154	996	1,146	271,392	274,920
2025	248,483	15,646	4,189	4,008	1,444	154	1,032	1,146	287,910	291,686
2030	265,060	16,690	4,189	4,008	1,656	154	1,068	1,146	305,531	309,555
2035	282,743	17,803	4,189	4,008	1,868	154	1,104	1,146	324,327	328,599
2040	301,605	18,991	4,189	4,008	2,079	154	1,140	1,146	344,377	348,896
2045	321,726	20,258	4,189	4,008	2,291	154	1,176	1,146	365,765	370,352
2050	343,189	21,609	4,189	4,008	2,502	154	1,212	1,146	388,579	393,594

Notes:

[1] The Total Contiguous Service Area population includes the population of the contiguous communities shown above as well as the populations of Bret Harte, Shackelford, and West Modesto, which are county areas served by the City. The Bret Harte, Shackelford, and West Modesto communities are built out and have populations, respectively, of 5,152, 4,750, and 5,682.

[2] The Total Contiguous and Outlying Service Area populations includes the contiguous and outlying service area populations of the communities shown above as well as the additional communities Bret Harte, Shackelford, and West Modesto in the contiguous service area.

Source: City of Modesto 2017b.

Chapter 16
TRANSPORTATION

16.1 Overview

This chapter evaluates impacts of the Proposed Program on transportation and traffic. Impacts are evaluated in light of existing laws and regulations governing transportation and traffic, and in consideration of the goals and policies in applicable jurisdiction's general plans; the existing roadway system and transportation infrastructure are described; and the impacts of the Proposed Program are analyzed.

The following sources of information were used in preparing this chapter:

- Transportation Research Board's *Highway Capacity Manual* (HCM) (Transportation Research Board 2000, 2010);
- *City of Modesto Urban Area General Plan* (City of Modesto 2019a) and EIR (City of Modesto 2019b);
- *Stanislaus County General Plan* (Stanislaus County 2016);
- *Ceres General Plan 2035* (2018);
- *Turlock General Plan* (2012); and
- Congestion Management Process for the Stanislaus County Region (StanCOG 2010).

16.1.1 Transportation and Traffic Terminology

The following are definitions of key transportation and traffic terms used in this section, based on the HCM (Transportation Research Board 2000).

Level of Service. The level of service (LOS) is a qualitative measure describing operational conditions within a traffic stream, based on service measures, such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience.

Peak hour LOS for roadway segments in Modesto is evaluated by comparing the traffic volume with its vehicle capacity (the volume-to-capacity ratio) and correlating the result to a letter grade to represent the levels of congestion, as follows (Fehr & Peers, pers. comm., 2018):

1. LOS A: free flow, low traffic volumes, and drivers can maintain their desired speed with little to no delay. Volume-to-capacity ratio: 0.6 or less.
2. LOS B: stable flow, operating speeds beginning to be restricted by traffic conditions. Volume-to-capacity ratio: 0.61 to 0.7.
3. LOS C: stable flow, but speeds and maneuverability are more closely controlled by higher volumes. Volume-to-capacity ratio: 0.71 to 0.8.

4. LOS D: approaching unstable flow; tolerable operating speeds which are, however, considerably affected by operating conditions. Volume-to-capacity ratio: 0.81 to 0.9.
5. LOS E: unstable flow with yet lower operating speeds and stoppages of momentary duration. Volume-to-capacity ratio: 0.91 to 1.0.
6. LOS F: stopped flow, which may occur for short or long periods. These conditions usually result when vehicles are blocked by a restriction downstream. Volume-to-capacity ratio: greater than 1.0.

Daily levels of service are calculated based on the per-lane volume threshold for each level of service capacity as presented in **Table 16-1**.

Table 16-1. Per-Lane Roadway Segment Capacities

Type of Roadway Segment	Hourly Capacity[a,c]	Daily Volume Threshold[b,c]				
		LOS A	LOS B	LOS C	LOS D	LOS E
Freeway Mainline	2,000	8,000	12,750	18,750	23,130	25,000
Expressway – Class A	1,500	5,630	9,380	13,120	15,750	18,750
Expressway – Class B	1,250	4,690	7,820	10,940	13,130	15,630
Expressway – Class C	1,000	3,750	6,250	8,750	10,500	12,500
Principal Arterial (6 lanes)	850	3,190	5,320	7,440	8,930	10,630
Minor Arterial (4 lane facility with center left-turn lane)	925	810	2,190	3,930	6,820	11,560
Minor Arterial (4 lanes)	750	660	1,780	3,190	5,530	9,380
Minor Arterial (2 lane facility with center left-turn lane)	925	810	2,190	3,920	6,820	11,560
Major Collector (4 lane facility)	700	2,450	4,110	5,780	6,910	8,750
Downtown Collector	700	2,450	4,110	5,780	6,910	8,750
Minor Collector (2 lane facility with center left-turn lane)	925	810	2,1900	3,930	6,820	11,560
Minor Collector (2 lanes)	650	570	1,540	2,760	4,800	8,130
Local Roadway	500	440	1,190	2,130	3,690	6,250
Rural Road	900	790	2,140	3,830	6,640	11,250

a. Vehicles per through lane per hour.
b. Vehicles per lane per day. Peak hour capacity 8 percent of daily capacity based on a review of peak hour to daily counts on over 200 roadway segments in the City.
c. Hourly and daily calculated based on the method presented in the Highway Capacity Manual (HCM) (Transportation Research Board 2010). LOS is assessed based on the volume in relationship to the capacity threshold. For example, a freeway lane carrying 18,700 vehicles on a daily basis would be classified as LOS C as it is between the LOS B and LOS C threshold; if the volume was 19,000 vehicles a day, it would be classified as LOS D.

Source: Fehr & Peers, pers. comm., 2018.

16.2 Regulatory Setting

No federal laws, regulations, or policies relate to transportation and traffic and the Proposed Program.

16.2.1 State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. The state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance. Caltrans also issues encroachment permits for activities (e.g., installation of a pipeline or any structure) within the State highway rights of way.

16.2.2 Local Laws, Regulations, and Policies

Stanislaus County General Plan

The *Stanislaus County General Plan* (Stanislaus County 2016) guides land use and development in the unincorporated area of Stanislaus County. The General Plan contains the following policy:

Circulation Element

> **Policy Five.** Transportation requirements shall be considered during planning, design and construction of commercial and industrial development to address safety, mobility, and accessibility needs.

Additionally, the County General Plan states that as a matter of policy, the County strives to maintain LOS D or better for motorized vehicles on all roadway segments and a LOS of C or better for motorized vehicles at all roadway intersections.

City of Modesto Urban Area General Plan

The *City of Modesto Urban Area General Plan* (City of Modesto 2019a) guides land use and development in the City's incorporated area. The following policies are potentially relevant to the Proposed Program's traffic analysis.

> **Policy V.C.1. Transportation Study Thresholds.** Figure II-1 delineates the functional geographic areas (Downtown, Baseline Developed Area, Planned Urbanizing Area) of the city described below. For CEQA purposes, the following are Modesto's thresholds for performing transportation studies.
>
> Downtown Area: This area is exempt from automobile Level of Service (LOS) standards and no traffic impact analysis will be required for new development.
>
> Baseline Developed Area: If a proposal is consistent with the Urban Area General Plan, no traffic impact analysis will be required. If a general plan amendment is needed, a traffic impact analysis may be required if the proposal would result in at least 100 peak hour trips above and beyond what was assumed in the analysis for the Urban Area General Plan Master Environmental Impact Report, if determined to be necessary. LOS "D" is the significance threshold.
>
> Planned Urbanizing Area: In new specific plan areas that are outside city limits, a traffic study may be required if project-related traffic, as measured in Average Daily

Trips, is expected to be at least ten percent (10%) greater than anticipated to result from the General Plan land use designations. The purpose of such a study would be to determine the amount of feasible automobile-oriented and non-auto-oriented mitigation associated with the project. Once a specific plan has been approved and the area annexed to the city, traffic study policies for the Baseline Developed Area will apply. LOS "D" is the significance threshold.

Policy V.C.6. Prioritizing Transportation Investments. Strive to achieve quality of service, as depicted in Table V-2 (FDOT Figure 1-2, 2009) for each non-automobile travel mode appropriate to the location in the City. Downtown Area: Pedestrian and bus quality of service should be A/B. Bicycle quality of service should be C/D or better. (Air quality, public health, energy conservation, environmental justice) Baseline Developed Area: Pedestrian quality of service should be C/D on arterial streets and A/B on local and collector streets. Bicycle quality of service should be A/B on local and collector streets, C/D on arterial streets, and E/F on expressways. Bus quality of service should range from C/D to E/F, depending upon boardings. Consider improving accessibility along impacted routes by implementing Transportation Demand Management strategies. (Air quality, public health, energy conservation, environmental justice)

Del Rio Community Plan

The *Del Rio Community Plan* (Stanislaus County 1992) includes a goal (Goal 3) that further development in the Del Rio area should be planned to ensure that adverse effects on transportation and circulation are appropriately mitigated.

Salida Community Plan

The *Salida Community Plan* (Stanislaus County 2007) does not include any goals or policies related to transportation and traffic.

Ceres General Plan 2035

The *Ceres General Plan 2035* (2018) includes the following goals and policies related to transportation and traffic:

Goal 3.A Provide for the long-range planning, development, and maintenance of the city's roadway system to ensure the safe and efficient movement of people and goods through a variety of travel modes.

Policies

3.A.1 Multi-Modal Network. Provide for a comprehensive, integrated transportation network in accordance with the functional classification system described in this chapter and reflected in the Circulation Diagram with infrastructure and design that allows safe and convenient travel along and across streets for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility.

3.A.2 Level of Service. Develop and manage the roadway system to maintain Level-of-Service ("LOS") C or better on secondary collectors and local streets and "LOS" D or better on primary collectors, arterials, expressways, and freeways. One service

level deviation may be permitted at locations where land development or transportation improvement projects support other goals from the General Plan including transit, active transportation, and economic development. Exceptions may also be allowed in areas where the City finds that the improvements or other measures required to achieve the "LOS" standards are unacceptable because of right-of-way limitations, physical impacts on surrounding properties, adverse effects on other travel modes, and/or the visual aesthetics of the required improvement and its impact on community identity and character.

Goal 3.B Maintain acceptable multi-modal travel flow along Ceres' major corridors.

Goal 3.C Protect residential areas from high-volume and high-speed traffic and its effects and promote bicycling and walking on residential streets.

Goal 3.E Promote provision of safe and efficient transit service to reduce congestion, improve the environment, and provide viable non-automotive means of transportation within and connecting to Ceres.

Goal 3.F Provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

City of Turlock General Plan

The *City of Turlock General Plan* (2012) includes the following policies related to transportation and traffic.

Guiding Policies

5.2-a A safe and efficient roadway system. Promote a safe and efficient roadway system for the movement of both people and goods.

5.3-c Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.

5.4-a Promote safe, efficient, and convenient public transportation. Promote the use of public transportation for daily trips, including to schools and workplaces, as well as other purposes.

Congestion Management Process for the Stanislaus County Region

The 2009 *Congestion Management Process for the Stanislaus County Region* (CMP) provides a blueprint for transportation planning in Stanislaus County. The performance measures of the CMP support mobility, air quality, land use, and economic objectives, and are used to determine whether projects are to be included in the CMP's CIP for consideration for inclusion in the Regional Transportation Plan (RTP) (StanCOG 2010). Objectives and policies of potential relevance to the Proposed Program include the following:

Objective I. Improve Mobility for People and Freight

Policies:

Street and road improvements should be designed to optimize the use of existing facilities as a potential alternative to new construction.

All feasible Transportation System Management, Transportation Demand Management strategies and required Transportation Control Measures shall be implemented to reduce congestion and improve air quality.

Objective III. Preserve and Enhance Environmental Quality

Policies:

The environmental impacts, both short-term and long-term, of transportation decisions shall be appropriately analyzed and considered, and adverse impacts mitigated wherever possible.

Stanislaus Council of Governments Regional Transportation Plan/Sustainable Communities Strategy

The Stanislaus Council of Government's (StanCOG) *2014 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS)* is a regional transportation planning document that seeks to bridge the gap between land use and transportation planning, recognizing the significant connection between these two areas and its impact on the region's quality of life (StanCOG 2014). The plan also addresses recent requirements, such as Senate Bill 375, which calls for reductions in greenhouse gas emissions from the transportation sector, as well as new federal mandates under the Moving Ahead for Progress in the 21st Century Act (MAP-21). The RTP/SCS identifies the following goals:

Goal 1. **Mobility & Accessibility.** Improve the ability of people and goods to move between desired locations; and provide a variety of transportation choices.

Goal 2. **Social Equity.** Promote and provide equitable opportunities to access transportation services for all populations and ensure all populations share in the benefits of transportation improvements and provide a range of transportation and housing choices.

Goal 3. **Economic and Community Vitality.** Foster job creation and business attraction, retention, and expansion by improving the quality of life through new and revitalized communities.

Goal 4. **Sustainable Development Pattern.** Provide a mix of land uses and compact development patterns; and direct development toward existing infrastructure, which will preserve agricultural land, open space, and mature resources.

Goal 5. **Environmental Quality.** Consider the environmental impacts when making transportation investments and minimize direct and indirect impacts on clean air and the environment.

Goal 6. **Health & Safety.** Operate and maintain the transportation system to ensure public safety and security; and improve the health of residents by improving air quality and providing more transportation options.

Goal 7. **System Preservation.** Maintain the transportation system in a state of good repair, and protect the region's transportation investments by maximizing the use of existing facilities.

16.3 Environmental Setting

The proposed WMP components would occur within or along numerous roadways within Modesto and the outlying areas served by the City of Modesto, such as Del Rio, Grayson, and Turlock. Modesto is a densely developed urban area. Outlying areas are typically dominated by agricultural land uses. Regional transportation access is provided by Highway 99, which runs roughly northwest-southeast through the study area. Other major transportation routes include SR 132, SR 108, and SR 219. SR 132 runs east-west along Maze Boulevard, D Street and Yosemite Avenue, and connects with SR 99 and Interstate 580 to the west. SR 108 runs in a north-south fashion along McHenry Avenue, providing direct access to adjacent land uses. SR 219 runs east-west along Kiernan Avenue to the north of Modesto and connects with SR 108 to SR 99. **Figure 16-1** shows roads and highways in the study area.

Roadway capacities vary within the study area, from small residential streets to collectors to arterials. Program components would not be constructed within freeways. Several roadway segments in Modesto operate at congested LOS, as shown in **Table 16-2**.

Table 16-2. Roadway Segments with Existing (2014) Daily Level of Service of E or F

Roadway Segment	Cross Street	Classification	Lanes	Volume	Daily LOS
Claribel	McHenry to Coffee	Rural	2	16,300	E
Claribel	Coffee to Oakdale	Rural	2	13,800	E
Oakdale	Claribel to Claratina	Rural	2	17,900	E
Roselle	Claratina to Sylvan	Rural	2	13,800	E
Standiford	SR 99 to Prescott	Arterial	4	39,200	F
Standiford	Prescott to Carver	Arterial	4	34,700	E
Sylvan	McHenry to Coffee	Arterial	4	33,400	E
Claus	Sylvan to Floyd	Rural	2	18,900	E
Floyd	Coffee to Rose	Collector	2	13,300	E
Briggs-more	Prescott to SR 99	Arterial	6	66,700	F
Carpenter	SR 99 to Woodland	Arterial	4	37,200	E
El Vista	Scenic to Encina	Arterial	4	32,300	E
La Loma	Scenic to Yosemite	Collector	2	14,300	E
Maze	Carpenter to Emerald	Arterial	2	11,800	E
Crows Landing	7th Street to SR 99	Arterial	2	13,700	E
Carpenter	Paradise to Hatch	Collector	3*	19,200	E
Hatch	Crows Landing to Jim Way	Collector	3*	17,600	E

* Roadway has one travel lane in each direction, plus a center two-way left-turn lane. LOS is based on thresholds for Minor Collector (2 lane facility with center left-turn lane) with capacity threshold based on two lanes.

Source: City of Modesto 2019b

Existing transit service in the study area includes various bus and rail service providers in Modesto, Ceres, Empire and surrounding areas in Stanislaus County. Modesto Area Express (MAX) provides transit service to the Modesto Urban Area, Empire, and nearby areas of Stanislaus County (excluding Ceres) (MAX 2017). Ceres Area Transit serves the City of Ceres. Stanislaus Regional Transit (StaRT) is a regional public transit service that takes passengers from Modesto to surrounding cities and communities including Oakdale, Hughson, Turlock, and Patterson. The Greyhound provides intercity and long-distance public transit service; a Greyhound bus stop is located in downtown Modesto. Train service includes Amtrak and Altamont Commuter Express (ACE) connections.

Numerous bicycle paths and routes exist throughout the study area.

16.4 Impact Analysis

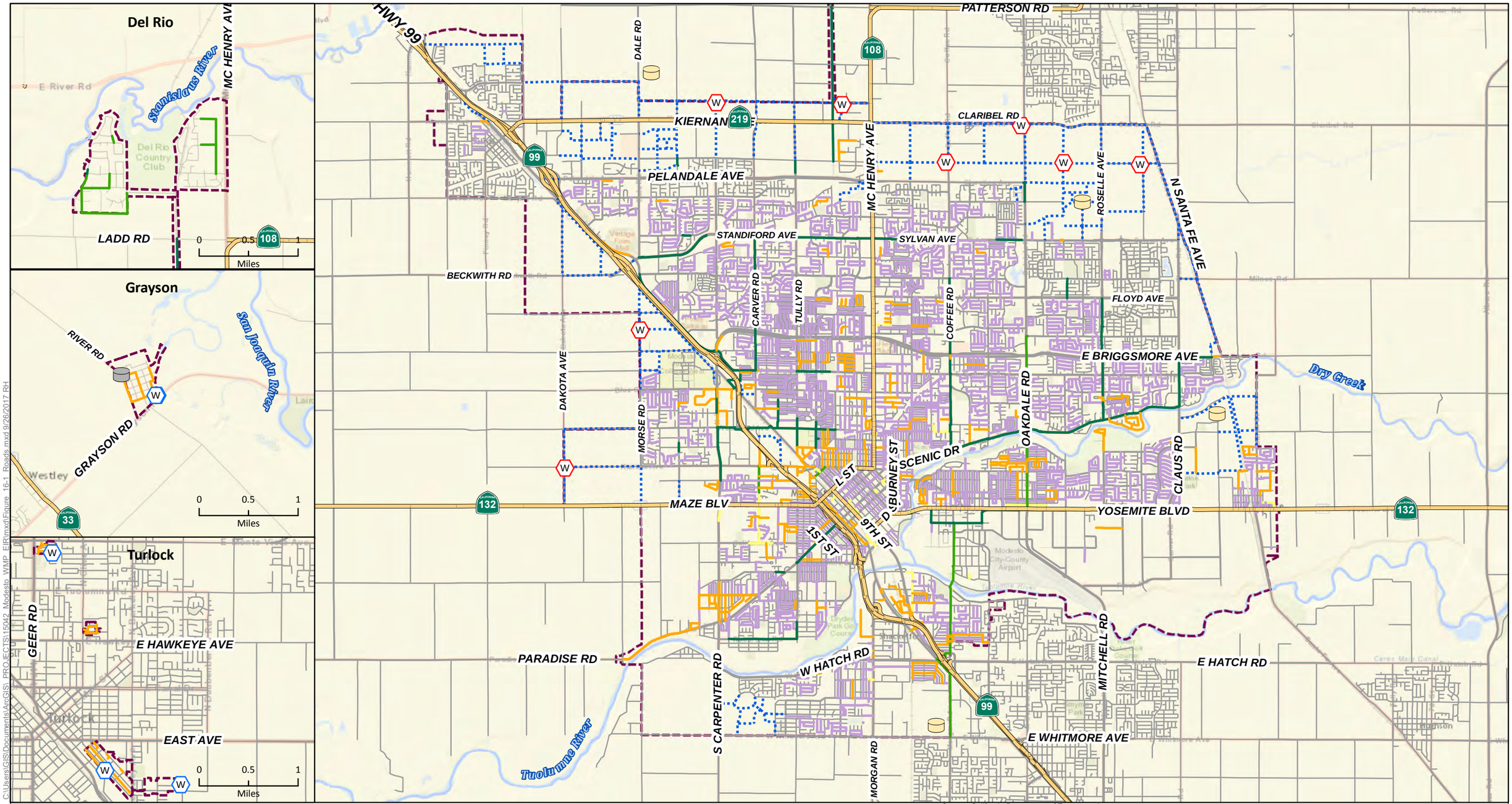
16.4.1 Methodology

Because specific construction details related to individual CIPs are not yet available, construction-related impacts to transportation and traffic were evaluated qualitatively based on consideration of ways in which construction of the Proposed Program components could affect existing roadway operations and LOS. The operation of the Proposed Program would have limited potential to generate trips over the long term, and a quantitative analysis was not conducted for Program operation. Secondary impacts related to traffic and transportation from new growth and development accommodated by the Proposed Program are discussed in Chapter 15, *Population and Housing*.

16.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on transportation and traffic if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such features.



Source: California Department of Transportation

Figure 16-1
Roads and Highways in the Proposed Program Vicinity

City of Modesto
Water Master Plan EIR

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The third criterion above is eliminated from detailed consideration because the Proposed Program would have no potential to affect air traffic patterns. Program components would be limited to capital upgrades to the City's water distribution and storage system. Therefore, the Program would not increase air traffic levels or change the location or routes of air travel.

16.4.3 Environmental Impacts

Impact TR-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System (*Less than Significant*)

The Proposed Program would not include any housing or commercial uses that would directly increase population or add vehicle trips. The Proposed Program would be limited to upgrades to existing water infrastructure, to address existing needs and accommodate future growth in the City and in outlying areas served by the City's water storage and distribution system. Please refer to Impact PH-3 in Chapter 15, *Population and Housing*, for a discussion regarding the Program's secondary traffic effects due to accommodating growth.

Trips generated by the Proposed Program during operation would be limited to routine maintenance and repair visits to facilities by City staff, and would not change substantially compared to existing conditions.

During construction of individual components, the Proposed Program would temporarily increase traffic and congestion in the immediate area of the construction. Construction of facilities would involve use of heavy equipment and transport of materials/hauling of debris, which could contribute to localized congestion. Construction of Program components also would involve trenching within the roadway, which could require temporary closure of up to one lane of traffic.

All projects would be required to follow the current version of the City of Modesto Standard Specifications. Section 12, Public Convenience and Safety, of Chapter 7, General Provisions, of the City's Standard Specifications includes Temporary Traffic Control requirements, including preparation of a traffic management plan (TMP) that must be incorporated into all projects. As part of the TMP, the public and appropriate fire and police departments would be notified in advance of temporary road closures. The TMP also would include implementation of appropriate traffic control measures (e.g., temporary barriers, use of flaggers) to allow for the safe passage of vehicular and pedestrian traffic through and within the Project site. In addition, the City requires that emergency vehicles would be provided access through any temporary construction work areas. These measures would reduce effects on vehicle movement and roadway LOS during construction activities. By complying with these standard specifications, the temporary congestion and traffic delays that could result from some Proposed Program construction activities would not substantially conflict with goals and policies in the City of Modesto General Plan, Stanislaus County General Plan, or CMP for the Stanislaus County Region. As such, this impact would be **less than significant**.

Impact TR-2: Conflict with an Applicable Congestion Management Program (*Less than Significant*)

As described in Impact TR-1, the Proposed Program itself would not generate substantial long-term vehicle trips. To the extent that the Proposed Program improvements would accommodate

growth, this growth would follow the respective jurisdiction's general plan (see Impact PH-3 in Chapter 15, *Population and Housing,* for further discussion).

Trips generated during operation of Program components would primarily be limited to routine operation and maintenance trips to facilities by City staff, and would be similar to existing conditions. As such, the Program components would not substantially affect existing LOS or conflict with objectives, policies, or performance standards in the CMP for Stanislaus County.

During construction of individual Program components and depending on their location and nature, some components could result in temporary congestion and traffic. Trenching within the roadway for new water pipelines may require temporary closure of up to one lane of traffic, which could create localized delays. Likewise, movement of construction equipment and materials for construction of new water storage tanks, groundwater wells, and other proposed facilities may marginally affect existing traffic conditions.

These construction-related traffic impacts would not be considered to conflict with the County CMP, because the effects would be temporary and would not affect the long-term performance of the roadway system. This impact would therefore be less-than-significant. Additionally, preparation and implementation of a TMP in accordance with the City's Standard Specifications regarding temporary traffic controls to ensure public convenience and safety would further reduce temporary construction impacts from the Program improvements. Therefore, this impact would be **less than significant.**

Impact TR-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses (*Less than Significant*)

The Proposed Program would not change the design or configuration of any public road. As described in Chapter 2, *Program Description,* proposed components would be limited to upgrades to the City's water system. Therefore, the Proposed Program would not result in an increase in hazards due to a design feature.

During construction of individual components (e.g., new fire flow and distribution pipelines), construction activities could temporarily create hazards from trenching within the roadway, which could result in a significant impact. As described in Impact TR-1, this potential impact would be minimized through implementation of a TMP, prepared pursuant to the City's Standard Specifications, which would require backfilling of trenches at the end of the work day and erection of temporary barriers to separate motorists from potential hazards. Temporary use of construction equipment in the roadway would not be considered an incompatible use, and would not pose a substantial hazard given adherence to the City's Standard Specifications. Over the long-term, the Proposed Program would not introduce any new land uses that could create potential for use of incompatible equipment on roadways. Therefore, this impact would be **less than significant**.

Impact TR-4: Result in Inadequate Emergency Access (*Less than Significant*)

The Proposed Program would not alter the permanent design or configuration of any public roadway. In accordance with the California Fire Code, the Proposed Program would provide for fire apparatus and emergency vehicle access to new proposed facilities (e.g., new water storage tanks), as appropriate. During construction of individual components, trenching and use of heavy equipment within roadways would reduce roadway capacity and potentially impede emergency vehicle movement and access if appropriate traffic controls are not implemented.

As described in Impact TR-1, the City would prepare and implement a TMP in accordance with its Standard Specifications. This plan would include comprehensive traffic control measures (e.g., lane closure procedures) and a requirement to notify public safety personnel in advance of construction activities. The TMP also would require advance notification of any owner of a private driveway whose access would be temporarily disrupted during Project construction activities, and to limit disruption of private driveways to no more than one hour, as feasible. With implementation of this measure, emergency vehicle access would be maintained during construction of proposed components. Therefore, this impact would be **less than significant**.

Impact TR-5: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Features (*Less than Significant*)

Program components would not permanently alter any roadways, bicycle lanes, sidewalks, or other non-motorized transportation facilities. Many of the Program improvements would be buried underground (e.g., water pipelines). Where features would be built above-ground, these features would be on parcels out of the road right-of-way.

Construction of Program improvements could temporarily interfere with bicycle, pedestrian, and transit vehicle movement (e.g., from trenching for installation of facilities) and cause transit delays due to pipeline installation work that occurs in public roads. Without adequate measures, such construction activities could thereby temporarily conflict with Policy V-B.6[f] in the City's Urban Area General Plan, which calls for maintaining high levels of service for all transportation modes (vehicle, transit, pedestrian, and bicycle). However, implementation of the TMP would minimize this impact and avoid substantial conflicts with this policy. In conclusion, this impact would be **less than significant**.

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Chapter 17
UTILITIES AND SERVICE SYSTEMS

17.1 Overview

This chapter describes the setting and impacts on utilities, services, and energy resources from the Proposed Program. Resources used to prepare this section include information and regulations from applicable local planning documents and from the various utility service providers, as referenced below:

- The Stanislaus County (2016), City of Modesto (2019), City of Ceres (2018), and City of Turlock (2012) General Plans;
- The Del Rio (Stanislaus County 1992) and Salida (Stanislaus County 2007) Community Plans;
- City of Modesto 2015 *Urban Water Management Plan* (City of Modesto 2016, prepared by West Yost Associates); and
- State and local regulations.

17.2 Regulatory Setting

17.2.1 Federal Laws, Regulations, and Policies

There are no federal laws, regulations, and policies regarding utilities and service systems that are relevant to the Proposed Program.

17.2.2 State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989 and AB 341

The California Integrated Waste Management Act of 1989 (Pub. Res. Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Pub. Res. Code Section 41780). In 2011, the Governor approved an even more ambitious goal of 75 percent recycling, composting, or source reduction of solid waste by 2020 called AB 341. The state, acting through the California Department of Resources Recycling and Recovery (CalRecycle), determines compliance with this mandate. Per capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act (CalRecycle 2017a).

SB 610

Senate Bill 610 amended state law in order to improve the link between water supply availability information and land use decisions made by cities and counties. Along with SB 221, this bill sought

to promote more collaborative planning between local water suppliers and cities and counties. Under SB 610, water assessments for certain projects, as defined in Water Code 10912[a] and subject to the CEQA, must be furnished to local governments for inclusion in any environmental documentation. The Proposed Program would not be considered a "project" under the applicable criteria for SB 610 (as defined in Water Code section 10912), which define residential, commercial, or industrial projects that would be required to comply with SB 610 based on their land use types, building sizes, areas of development, water use demands, and/or employee quantities (DWR 2003). Therefore, SB 610 would not be applicable to the Proposed Program, although it could be required for projects which use the water that would be provided by the Proposed Program.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Pub. Res. Code Sections 42900–42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

Urban Water Management Planning Act

California Water Code Section10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year, prepare an urban water management plan (UWMP). Urban water management plans must identify and quantify available water supplies and current and projected water use and demands, and plan for maintaining adequate water supply reliability during normal, dry, and multiple dry water years. UWMPs must be submitted to DWR for approval every five years.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act is described in Chapter 12, *Hydrology and Water Quality*, of this DEIR, and would be applicable to the Proposed Program.

Water Conservation Act of 2009

The Water Conservation Act of 2009 (SB X7-7 2009) requires all water suppliers to increase water use efficiency by reducing per capita urban water use by 20 percent by December 31, 2020. In order to achieve this goal, the state established an incremental benchmark goal of reducing water use by 10 percent by December 31, 2015. Based on this goal, each urban retail water supplier would be required to develop long-term and interim urban water use targets. Agricultural water suppliers would be required to implement efficient water management practices. Under this bill, the DWR, in consultation with other state agencies, developed a single standardized water use reporting form for use by urban and agricultural water agencies. As a response to a multi-year drought that affected California between 2012 to 2017, a series of Executive Orders were enacted to further limit water usage. Executive Order B-40-17 was enacted on April 7, 2017 and is the latest of such orders (DWR 2017). This order effectively ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. For these counties, emergency drinking water projects would continue to help address diminished groundwater supplies. Water reporting requirements and prohibitions on wasteful practices would continue to be enforced as well (DWR 2017).

17.2.3 Local Laws, Regulations, and Policies

City of Modesto Urban Area General Plan

Chapter V, Community Services and Facilities, of the *City of Modesto Urban Area General Plan* (2019) discusses the City's applicable planning goals and policies related to water supplies, water use, water management planning programs and documents, and the City's water distribution and treatment system infrastructure management are provided below. In addition, the City's policies relevant to other utilities, such as wastewater, storm drainage, and solid waste include the following:

Water Policies

Goal VI.A. Ensure a consistent, reliable, high-quality water supply for the City of Modesto's residents and businesses.

> **Policy VI.A.3.** All new connections to the public water system are to have meters installed. In addition, on or before January 1, 2025, all existing municipal and industrial service connections are to have water meters installed.
>
> **Policy VI.B.2.** Prepare and maintain a Water Master Plan. Update the Water Master Plan, as needed, to incorporate changes in growth projections, water supplies, and demands.
>
> **Policy VI.B.3.** Encourage the optimum beneficial use of water resources within the City. Strive to maintain an adequate supply of high-quality water for urban uses. At a minimum, potable water supplies delivered to water customers shall conform to the primary maximum contaminant levels as defined in State law.
>
> **Policy VI.B.5**. Construct, operate, maintain, and replace water infra-structure facilities in a manner that will provide the best possible service to the public. Ensure that infrastructure is installed before or concurrently with development. Take a comprehensive approach to financing, using a blend of special taxes, benefit assessments, and other methods to ensure that infrastructure installation occurs in a timely manner.

Wastewater Policies

Goal VI.D. Strive to meet increasingly strict wastewater regulations in a cost-effective manner. The City's wastewater treatment facilities will conform to standards for wastewater and biosolids treatment and disposal, as established by the Central Valley Regional Water Quality Control Board, in compliance with applicable federal and state laws.

> **Policy VI.D.1.** Consider reclaiming wastewater as a means to optimize the region's water resources, reduce discharge from the treatment plant, reduce the risk of fines and reduce costs associated with producing water from new / additional sources.
>
> **Policy VI.D.2.** Comply with the Central Valley Regional Water Quality Control Board requirement to cease all discharge of wastewater that is treated at less than tertiary levels by May 1, 2018.

Policy VI.D.3. Consider reuse of wastewater treatment byproducts, such as biosolids and digester gas, which can reduce costs associated with treatment plant operations.

Policy VI.D.4. Pursue the near-term expansion of the wastewater treatment and disposal capacity of the Jennings Road Treatment Plant.

Policy VI.D.5. Pursue the long-term relocation of the Sutter Avenue Primary Treatment Plant, to the Jennings Road site, in order to consolidate operations and reduce treatment plant flooding risks.

Policy VI.D.6. Construct, operate, maintain, and replace wastewater facilities in a manner that will provide the best possible service to the public. In developing implementation plans, consider rehabilitation of essential existing facilities, expansion to meet current excess demand, and the timely expansion for future demand.

Policy VI.E.1. Allocate the City's wastewater system capacity to existing and future residential, commercial, and industrial customers. Discharges from environmental cleanup sites may be issued conditional discharge permits subject to the availability of excess treatment capacity. In accordance with federal and state regulations, discharges to the wastewater system may not, or may not threaten to, upset or interfere with, the wastewater system.

Policy VI.E.2. Require wastewater infrastructure master plans for the specific public infrastructure or when otherwise pertinent to provision of service at adopted service levels for the specific plan areas or other projects depending on site issues and location.

Policy VI.E.9. Strive to use land application of biosolids as the most environmentally beneficial reuse of this resource, rather than the disposal options of landfilling or incineration.

Policy VI.E.10. Develop methods to discontinue use of the sanitary system to temporarily drain stormwater runoff, and eliminate cross-connections between the wastewater and stormwater infrastructure systems.

Policy VI.E.16. Prepare and implement an update to the City's Wastewater Master Plan (WWMP), and complete an EIR for the updated WWMP. The updated WWMP should account for the UAGP, zoning revisions, updated growth projections, updated sewer demand information, regulatory requirements, and identify new capital improvement projects. The WWMP should involve several improvements to the City's collection system and upgrades to the Sutter and Jennings treatment plants. The objectives of the updated WWMP may include the following:

- Implement the City's economic goals and Urban Area General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.

- Continue the City's policy of providing affordable and attractive wastewater rates.
- Repair and replace aging wastewater infrastructure.
- Ensure adequate wastewater infrastructure and services are available to serve new growth within the General Plan and City's Sphere of Influence.
- Provide an adequate funding mechanism to pay for necessary improvements.
- Require new development to pay for infrastructure necessary to serve it.
- Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

For collection system improvements, the objectives of the updated WWMP may include:

- To increase sewer capacity to convey peak wet weather flows for a 10-year storm event, and where required, to serve future customers.
- To reduce wet weather flow volumes by removing cross connections with stormwater sewers.
- To extend service to new customers.
- To replace, repair, or rehabilitate existing trunk sewers, and to reduce infiltration and inflow of stormwater into the sanitary sewers.
- To improve sewer collection reliability by providing new and redundant infrastructure improvements, including sewer trunk lines and lift stations, in known deficient areas at critical areas within the existing system.

For treatment plant improvements, the objectives may include the following:

- To reduce flooding impacts at the Sutter Plant site and increase treatment process operational flexibility and efficiencies by constructing new primary treatment and solids handling facilities at the Jennings Plant and remove primary treatment and handling facilities from the Sutter Plant.
- To increase the capacity of the outfall connecting the primary and secondary treatment plants, and to provide increased reliability for the existing outfall.
- To increase treatment systems efficiency, reliability, and functionality for both domestic and cannery process stream flows.
- To increase treatment operational opportunities through new systems or system alterations to remain in compliance with existing Central Valley RWQCB's NPDES requirements and plan for potential future permitting regulations.

Storm Drainage Policies

Goal VI.F. Establish and maintain an operating storm drainage system that protects people and property from flood damage.

Policy VI.G.2. Construct, operate, maintain, and replace storm water drainage facilities in a manner that will provide the best possible service to the public, as required by federal and state laws and regulations. In developing implementation plans, consideration shall be given to rehabilitation of existing facilities, remediation of developed areas with inadequate levels of drainage service, and timely system expansion for future development.

Solid Waste Policies

Policy VI.L.1. Continue to comply with all requirements of Assembly Bill 939, which mandates the diversion of solid waste of 50% by 2000, by way of source reduction, recycling, composting, and transformation.

Policy VI.L.3. Continue to comply with Stanislaus County's Hazardous Waste Management Plan.

Policy VI.L.5. To meet the waste disposal demands of the growing population, continue to seek alternative waste disposal methods for solid waste, including transformation, composting, and alternative energy conversion technologies.

Policy VI.L.6. In addition to the Solid Waste Disposal policies in place [as outlined above], consider implementing local land use incentives and zoning/building code modifications to encourage source reduction, recycling, and composting, and to provide adequate space for containers. Such measures to be considered include a Construction and Demolition Recycling Ordinance, an ordinance and incentive program for Green Building Projects, and mandatory recycling for commercial/industrial waste and organics recycling per AB 341 and AB 1826.

City of Modesto Rebate Programs

Currently, the City of Modesto Utilities Department offers a number of water rebate programs for its customers. Among these programs are the following (City of Modesto N.D.):

- **Drip Irrigation Rebate Program** – customers may be eligible for a rebate when they convert their existing overhead spray system to Drip Irrigation or install a Drip Irrigation system in an existing garden bed.

- **High-Efficiency Clothes Washer Rebate** – customers in single and multi-family homes may be eligible for a rebate when they replace their old clothes washer with a new high efficiency clothes washer.

- **High-Efficiency Toilet Rebate** – customers in single and multi-family homes may be eligible for a rebate when they replace their old high-water use toilets.

- **Turf Replacement Program** – customers may be eligible for a rebate when they replace their grass with polyethylene/nylon artificial turf products or any qualifying drought tolerant landscape products.

- **High Efficiency Sprinkler Nozzles Rebate Program** – customers may be eligible for a rebate when they upgrade from their old conventional spray head sprinklers to the High Efficiency Sprinkler Nozzles.

- **Rain Barrel Rebate Program** – customers may be eligible for a rebate when they purchase and install an approved Rain Barrel.

- **Smart Irrigation Controller Rebate Program** – customers may be eligible for a rebate when they upgrade or purchase a new smart irrigation controller.

Del Rio Community Plan

The Del Rio Community Plan (Stanislaus County 1992) provides goals, policies, and recommendations for future development. The plan is considered part of the Stanislaus County General Plan. Areas of development such as drainage/flood control, water, sewer, utilities, and other services throughout the community are addressed in this Community Plan. The following regulations would apply to the Proposed Program:

Drainage/Flood Control

"It is desired that all future development within the Del Rio Community Plan (DRCP) area include curb and gutters that connect to adequate development wide drainage systems."

Sewer

"No future developments within the DRCP area shall use septic systems for treatment of sewage."

Utilities

"All further development in the DRCP area shall incorporate below ground utilities exclusively."

Salida Community Plan

The Salida Community Plan (Stanislaus County 2007), which was incorporated in the *Stanislaus County Plan,* identifies the following requirement related to utilities:

Water Supply

"An adequate water supply must be secured and demonstrated for development in accordance with applicable law."

Ceres General Plan 2035

The *Ceres General Plan 2035* (City of Ceres 2018) establishes the following goals and policies related to utilities:

Stormwater Drainage

Goal 6.F: Collect and dispose of stormwater in a manner that minimizes inconvenience to the public, reduces burden on existing stormwater facilities, encourages groundwater recharge, minimizes potential water-related damage, and enhances the environment.

> **6.F.4 New Development Stormwater Mitigation.** Require new development to mitigate increases in stormwater peak flows and/or volume. Mitigation measures, such as low impact development (LID) strategies, should take into consideration impacts on adjoining lands in the city and immediately adjacent to the city in unincorporated Stanislaus County.
>
> **6.F.5 Drainage System Design.** Design all drainage systems to be in accordance with the accepted principles of civil engineering, the adopted Storm Drainage Master Plan, and adopted storm drainage design standards and specifications.
>
> **6.F.7 Grading.** Require appropriate mitigation, such as temporary mulch or revegetation, for grading activities during the rainy season to avoid sedimentation of storm drainage facilities.
>
> *See Municipal Code Chapter 13.18.120.*

Solid Waste Collection and Disposal

Goal 6.G: Ensure the safe and efficient disposal, composting, or recycling of solid waste generated in Ceres.

> **6.G.1 Waste and Recycling for New Development.** Require waste and recycling collection in all new development, and require that all new development complies with applicable provisions of the City of Ceres Source Reduction and Recycling Element and the Stanislaus County Integrated Waste Management Plan.

City of Turlock General Plan

The *City of Turlock General Plan* (City of Turlock 2012) does not identify any goals or policies related to utilities for the Proposed Program.

17.3 Environmental Setting

17.3.1 Water

Water Supply

The City of Modesto is the primary domestic water purveyor in Stanislaus County, serving not only the City of Modesto, but also Salida; Ceres (Walnut Manor); Grayson; Del Rio (Hillcrest); and

North, South, and Central Turlock. The City of Modesto currently distributes treated surface water supplied by MID through the Modesto Regional Water Treatment Plant (MRWTP), and groundwater pumped from City owned and operated wells, to serve the water demands of its customers. The City, in conjunction with MID, expanded its water supply when the MRWTP Phase 2 Expansion became operational (May 2016) with an additional 30 mgd of capacity to help meet demand north of the Tuolumne River. The MRWTP has a total capacity of 60 mgd, or 67,200 acre-feet per year (MID 2017a). In addition, there are a limited number of private wells operating within the City limits that provide water for parks, golf courses, industry, and agricultural uses (City of Modesto 2016). Water supply needs include residential, agricultural, industrial uses, as well as emergency (fire) and drought supplies.

From the MRWTP, treated surface water is supplied to municipal customers within the City limits north of the Tuolumne River, including the communities of Empire and Salida. The treated surface water place of use is defined by the overlap of the MID water service boundary with the City of Modesto Municipal Water System service area north of the Tuolumne River. Areas served by the City of Modesto that lie outside the MID water service boundary (i.e., south of the Tuolumne River), including the community of Grayson, parts of Ceres and Turlock, and the portion of the Modesto system south of the Tuolumne River, are served exclusively by groundwater. The recently completed MRWTP expansion is intended to help reduce the City's reliance on groundwater pumping and help meet demand north of the Tuolumne River.

While the areas south of the Tuolumne River are within the TID service area, TID currently serves only agricultural customers with surface water, and does not supply water for municipal uses. However, TID is working with the Stanislaus Regional Water Authority (SRWA) on the proposed Surface Water Supply Project (SWSP), described in more detail in Chapter 18, *Other Statutory Considerations,* Section 18.4, "Cumulative Impacts," which (if approved) would supply treated Tuolumne River water as an additional source of potable water for the cities of Turlock and Ceres (City of Turlock 2012).

In 2015, total water supply for the City was 47,459 acre-feet (AF), with 15,401 AF of Tuolumne River surface water purchased from MID and 32,058 AF pumped from groundwater. **Table 17-1**, below, summarizes projected water supplies for 2020-2040. These projections are based on normal water years (City of Modesto 2016).

Table 17-1. Projected Water Supplies

Source	Projected Water Supply (af/yr)				
	2020	**2025**	**2030**	**2035**	**2040**
Surface water (from MID)	44,800	48,533	52,267	56,000	59,733
Groundwater	24,664	26,369	28,073	29,778	31,483
Total	**69,464**	**74,902**	**80,340**	**85,778**	**91,216**

Notes: AF = acre-feet; af/yr = acre-feet per year; MID = Modesto Irrigation District.
All groundwater volumes are reasonably available volumes. Total right or safe yield of groundwater is 53,500 AF for all years.

Source: City of Modesto 2016 (Table 6-20)

Sources of Surface Water

MID and TID obtain surface water supplies from the Tuolumne River, stored in the Don Pedro Reservoir, which they jointly own. This water is obtained under TID and MID's pre-1914 water rights. From Don Pedro Reservoir, MID releases water through its power generation facilities directly into the river. From MID's Upper Main Canal at La Grange, water is delivered to Modesto Reservoir, then flows to the canal system, where the water is diverted to several locations that drain into the San Joaquin, Stanislaus, and Tuolumne Rivers (MID 2017b). From Modesto Reservoir, MID may release water to its Lower Main Canal for irrigation purposes or to the MRWTP for municipal and industrial purposes. Currently, MID manages 208 miles of gravity flow–operated canals and pipelines and provides irrigation water to approximately 3,100 agricultural customers.

Following treatment at the MRWTP, water is conveyed to the City's distribution system. In October 2005, MID and the City approved the Amended and Restated Water Treatment and Delivery Agreement between MID and the City of Modesto. With the expansion of the MRWTP with an additional 30 mgd of capacity to help meet demand north of the Tuolumne River, available surface water supply provided by MID increased to 67,204 af/yr (60 mgd) and became the primary water supply for the City of Modesto. By 2035, the surface water supply purchased from MID is projected to reach 67,200 af/yr (MID 2011).

Groundwater

Groundwater conditions are described in detail in Section 12.3.5 of Chapter 12, *Hydrology and Water Quality*, and are summarized here, The Proposed Program components would primarily overlie the Modesto Subbasin of the San Joaquin Valley Groundwater Basin but some components would also be located in the Turlock Subbasin, and the Delta-Mendota Subbasin. Prior to the operation of the MRWTP, the City conducted extensive pumping of groundwater in and near the City's service area that resulted in localized overdrafting conditions (i.e., extraction of groundwater in excess of its long-term average rate of natural recharge) All three subbasins had declining groundwater levels between 1970 and 2000. Since 1995, groundwater levels increased as surface water supplies were available from the MRWTP's operation and then declined again as drought conditions affected surface water supplies. A 2007 evaluation conducted by the City determined that, if the total, long-term average groundwater pumpage quantity is held at or below 53,500 af/yr, groundwater levels would stabilize at approximately 40 feet msl (City of Modesto 2016).

Groundwater management requirements of state regulations, specifically the Sustainable Groundwater Management Act, are discussed in Chapter 12, *Hydrology and Water Quality*.

Water Demand

City of Modesto 2015 Urban Water Management Plan

The *2015 Urban Water Management Plan* (City of Modesto 2016) describes the City's and MID's past, current and projected water use and demand by sector up to the year 2040. **Table 17-2**. below summarizes the projected water demand by water source from 2020 to 2040. The City does not use recycled water to offset potable water use, nor does it anticipate doing so in the future.

Table 17-2. Projected Water Demand for the City of Modesto, 2020-2040

Source	Projected Water Demand (AF)				
	2020	**2025**	**2030**	**2035**	**2040**
Potable and raw water	69,464	74,902	80,340	85,778	91,216
Recycled water	0	0	0	0	0
Total	**69,464**	**74,902**	**80,340**	**85,778**	**91,216**

Notes: AF = acre-feet

Source: City of Modesto 2016 (Table 4-4)

A more detailed summary of the City's projected water demands by sector type is summarized in **Table 17-3**.

Table 17-3. Projected Water Demands by Use Type in the City of Modesto, 2020-2040

Use Type	Projected Water Demand (AF)				
	2020	**2025**	**2030**	**2035**	**2040**
Single Family	35,872	38,680	41,488	44,296	47,105
Multi-Family	6,894	7,434	7,974	8,513	9,053
Commercial	11,031	11,895	12,758	13,622	14,486
Industrial	3,993	4,305	4,618	4,931	5,243
Institutional/Governmental	2,175	2,345	2,515	2,685	2,855
Landscape	2,553	2,753	2,953	3,153	3,352
Other (unmetered water uses)	0	0	0	0	0
Losses	6,946	7,490	8,034	8,578	9,122
TOTAL	**69,464**	**74,902**	**80,340**	**85,778**	**91,216**

Note: AF = acre-feet.

Source: City of Modesto 2016

City of Modesto Water Master Plan

The City's WMP estimates projected water demands for the contiguous and outlying water service areas at buildout and with consideration of assumed per capita water use targets in compliance with Senate Bill SB X7-7. Based on updated population estimates, the projected water demand for the contiguous service area is 99,240 af/yr (City of Modesto 2016).

Water Treatment Facilities

The water treatment facility that operates within the City of Modesto is the MRWTP owned and operated by the Modesto Irrigation District. Water is supplied to the plant through the Modesto Reservoir, which receives its water from the Tuolumne River. In 2016, MID completed Phase II of

this plant, which expanded the existing facility with an additional 30 million gallons per day (mgd) for a total annual average of up to 60 mgd (MID 2017c).

17.3.2 Wastewater

Modesto's wastewater collection system conveys wastewater from residential, commercial, and industrial customers in its service area to treatment plants. The City's wastewater collection system consists of approximately 40 sewer lift stations, more than 600 miles of sanitary lines ranging from 6 to 66 inches in diameter, 69 miles of trunk lines (pipelines greater than 15 inches in diameter), and an additional 15 miles of trunk lines connecting cannery food processors directly to land disposal (application) areas. Wastewater flowing into the collection system flows by gravity, or is pumped, to the Sutter Plant and the Jennings Plant for further treatment.

The majority of the influent received at the City's wastewater treatment facilities consists of domestic, commercial, industrial, food processing, and winery waste. The Sutter Plant provides primary treatment as well as screening, sedimentation and grit removal services. From there, the wastewater gets transferred via two 6.5-mile-long effluent outfall pipelines to the Jennings Plant. Currently, the Jennings plant disposes of secondary treated effluent in two ways: (1) through irrigation of approximately 2,500 acres of ranch lands owned by the City, and (2) through seasonal discharge to the San Joaquin River. According to the City's NPDES surface water discharge permit (Order R5-2012-0031, NPDES No. CA0079103), discharge of secondary treated wastewater to the San Joaquin River is only allowable between October and May until the year 2018. The City is in the process of constructing tertiary treatment facilities at the Jennings Plant. Once completed, secondary treated wastewater would undergo tertiary treatment and could be used to provide recycled water demands off-site.

As of 2015, the City's wastewater treatment system had a capacity of 81 mgd, including 40.2 mgd of capacity for cannery wastewater. In 2014, average non-canning-season domestic wastewater flows (exclusive of cannery segregated flow) was 18.5 mgd. During the 2014 dry season, the sewer system received an average of approximately 20 mgd of wastewater, with a peak of 36.3 mgd. The peak wet weather wastewater flow was approximately 72.8 mgd (Carollo Engineers 2016). In June and July 2019, the City circulated a Draft Environmental Impact Report for its Wastewater Master Plan, which defines the City's long-term wastewater collection and treatment needs and guides management of its wastewater collection and treatment system through proposed improvement projects for the City's wastewater systems.

Additional wastewater utility providers in the study area include:

- Salida Sanitary District serves the Salida area, with a wastewater treatment plant capacity of 2.4 mgd.
- City of Ceres operates and maintains the City's 2.7+ mgd Wastewater Treatment Plant and Wastewater Collection System, including 190+ acres of percolation - evaporation basins and grounds, 14 lift stations and 133 miles of pipeline within the collection system.
- Grayson Community Services District was formed in 1969, and provides street lighting and sewer services to the residents.

- The Turlock Regional Water Quality Control Facility provides tertiary treatment of wastewater from the City of Turlock, Ceres and the community service districts of Keyes and Denair.

17.3.3 Stormwater

The City's stormwater drainage system consists of approximately 77 miles of drainage lines and 20 pump stations. As the stormwater drains through this system, it discharges into four major locations. Based on the City's *2015 Urban Water Management Plan*, approximately 40 percent of the stormwater discharges to detention/retention basins, 20 percent to receiving waters (Tuolumne River or Dry Creek), 10 percent to MID laterals/drains, and 30 percent to rockwells. The City currently utilizes these rock wells (approximately 11,000), along with infiltration basins and underground storage and recharge facilities, to recharge the groundwater aquifer with some of the stormwater for beneficial reuse as a water supply source to meet local water demands (City of Modesto 2016).

The outlying service areas' stormwater systems vary in size and complexity based on the various communities' needs. The Del Rio stormwater system consists of a retention pond, curbs, and gutters (Stanislaus County 2007). The retention pond does not discharge to the Stanislaus River (Stanislaus County 2007). Stormwater needs in the small Grayson community is primarily provided by roadside percolation but some areas include storm drainage pipes and a detention basin that discharges to the San Joaquin River (Stanislaus County 2007). The condition of these facilities is good (Stanislaus County 2007). The Turlock stormwater system is owned and operated solely by the City of Turlock and comprised of 28 active storm lift stations, 66 storm ponds (which total 140 acres), 1,300 storm water catch basins and a total of 102 miles of storm drain pipe (City of Turlock 2003). Ultimately, storm water percolates down to recharge the groundwater or flows to the San Joaquin River.

17.3.4 Solid Waste

In 2015, the City disposed of 104,468 tons of solid waste (CalRecycle 2015). The City of Modesto has an annual per capita disposal rate target of 5 pounds per resident per day, and an annual per capita disposal rate target of 13.8 pounds per employee per day. In 2015, the most recent year for which disposal rate data were available for the city of Modesto, the City's annual per capita disposal rates were 4.5 pounds per resident per day and 12.6 pounds per employee per day (CalRecycle 2015).

There are currently two major firms that are responsible for the collection and transport of solid waste in Modesto. Gilton Solid Waste Management and Bertolotti Disposal both provide hauling and interim transfer stations for the City's waste disposal, transformation, and diversion streams. Bertolotti Disposal also manages the solid waste and recycling programs for the City of Ceres.

The City of Modesto Public Works Department manages garbage and recycling collection services throughout the City. In addition to standard waste, the department also manages hazardous waste cleanup, bulk item pick-up, composting, and street sweeping (City of Modesto 2017).

Solid waste is managed by Turlock Scavenger for the Program outlying service areas located in the City of Turlock. Turlock Scavenger provides residential, commercial, and industrial solid waste,

recycling, and green waste collection services to the City of Turlock and adjacent portions of Stanislaus County. They also operate a public recycling buyback and processing facility.

The Fink Road Sanitary Landfill is the primary landfill within Stanislaus County. This approximately 200-acre landfill is owned by Stanislaus County and operated by the County Department of Environmental Resources. It is located west of I-5 near the town of Crown Landing, where it receives solid waste from all of the cities and unincorporated areas within the county.

Categorized as a Class II and III landfill for nonhazardous municipal solid waste, its maximum permitted throughput is 2,400 tons per day. It had a remaining capacity of 8,240,435 cubic yards as of January 5, 2012 with a maximum permitted capacity of 14,640,000 cubic yards. Most industrial, commercial, and residential waste (e.g., household and commercial garbage, construction debris) is accepted here, while waste such as car bodies, septic tank waste, and liquid waste are not. As of 2012, it had a remaining capacity of over 8 million cubic yards and an estimated closure date of 2022 (CalRecycle 2017b). The landfill is currently considering alternatives for facility expansion, which would extend the closure date to approximately 2030.

As noted above, the solid waste programs operated by Modesto and Turlock include recycling programs; Stanislaus County operates a similar program. These include curb-side recycling and operation of recycling centers throughout their various jurisdictions within the Program area. There are also several private recycling companies that are not affiliated with those who have specific contracts with the cities or counties.

17.3.5 Communications

A number of communications companies serve the Modesto area, including Comcast, AT&T, and Charter Communications. Many of the streets within which the Proposed Program components would be installed include underground or overhead communications lines.

17.4 Impact Analysis

17.4.1 Methodology

This section describes the impacts of the Proposed Program related to utilities and services systems. This evaluation considers the extent to which the Proposed Program would require entirely new or altered existing facilities to address immediate or foreseeable needs associated with Proposed Program operations. Effects are evaluated qualitatively based on available information on existing facilities and current demand in the Proposed Program area.

17.4.2 Criteria for Determining Significance

The Proposed Program would result in a significant impact on utilities and service systems and energy resources if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;

- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or

- Comply with federal, state, and local statutes and regulations related to solid waste.

The second criterion listed above is not applicable because construction of new and upgraded water infrastructure services is the primary subject of this DEIR and the environmental effects of the Proposed Program are described throughout this document. In addition, the Proposed Program would not directly result in any wastewater discharges that would require additional wastewater facilities; temporary portable wastewater facilities would be used during construction activities, and temporary pipeline flushing wastewater volumes would be negligible. Indirect/growth-related impacts on water or wastewater infrastructure from the Proposed Program are addressed in Chapter 15, *Population and Housing*. Therefore, this criterion does not require further discussion in this chapter.

The fifth criterion listed above is not applicable because the Proposed Program's water infrastructure improvements would not result in any permanent wastewater discharges. Some wastewater may be discharged to the local wastewater treatment system or stormwater system during construction activities as part of the required pipeline flushing activities. However, these activities would not be conducted without the City's or other local agency's pre-authorization as described in Chapter 2, *Program Description*, and, as such, would not exceed the wastewater treatment provider's capacity. Therefore, this criterion does not require further discussion in this chapter.

17.4.3 Environmental Impacts

Impact UTL-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board (*Less than Significant*)

The Proposed Program would result in the construction of infrastructure to address the City's existing and future water system deficiencies. These improvements would replace and repair aging water storage and distribution system infrastructure or ensure adequate water infrastructure to accommodate growth in the City's service area. Construction activities for the Proposed Program would require the disinfection and flushing of newly constructed pipelines,

and other water facilities (tanks/wells) prior to connection to the existing system and operation of the new facilities. Disinfection activities would involve heavily chlorinating the water in the water facilities (tanks/pipelines), and then flushing it and dechlorinating the water. De-chlorinated water from the disinfection and flushing tank and pipeline processes would be discharged to the City's, or, for the outlying service areas, other local agencies' storm drainage systems or wastewater collection systems. As a result, this flushed water would not contain chemicals or pollutants such that it would affect the local agency's ability to comply with its applicable stormwater NPDES permit or the wastewater treatment processes or requirements. (Specific permitting requirements for the City and outlying service areas are further described in Chapter 12, *Hydrology and Water Quality*.) Operation of the Proposed Program would not directly require wastewater treatment. Based on this information, any change in the quantity or quality of wastewater caused by the Proposed Program would be accommodated by the City's wastewater system and would not result in a violation of any wastewater treatment or discharge requirements. As a result, this impact would be **less than significant.**

Impact UTL-2: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects (*Less than Significant*)

The Proposed Program would result in the construction of new water storage tanks, booster pump stations, groundwater wells and new water main pipelines. These improvements would require site preparation activities such as clearing, grubbing and trenching, which would result in excavated soil that has the potential to be washed into the City's stormwater drainage system. As discussed in Chapter 11, *Hazards and Hazardous Materials*, many water quality impacts associated with Program construction activities would be minimized or avoided through compliance with the NPDES General Construction Permit. As a result, new facilities or expansion of existing stormwater facilities would not be required.

The construction of the storage tanks and booster pump stations would result in the construction and operation of new impervious surfaces that would lead to a small degree of runoff. While some on-site stormwater drainage may be needed for these facilities, given the relatively small scale of the storage tanks and booster pump stations, the environmental effects of constructing any new stormwater drainage facilities would be minimal. Furthermore, the operation of this new infrastructure would not significantly contribute to runoff. As a result, this impact would be **less than significant.**

Impact UTL-3: Require New or Expanded Water Supply Entitlements (*No Impact*)

Construction of each improvement would require the use of water to compact loose soils and earthen materials that are dug up from trenching activities. Construction crews would likely use publicly available recycled water for most construction uses throughout the various construction phases. As a result, construction of proposed improvements would not substantially affect local water supplies.

The Proposed Program involves the construction and operation of water system infrastructure as well as the implementation of water management programs. The Proposed Program's water infrastructure would not require any new or expanded water supply entitlements. In addition, the

Proposed Program would result in a beneficial impact on the City's overall ability to use existing water supply entitlements to meet existing and future water demands, as discussed further below.

Operation of the Proposed Program would enhance the use of available, existing water supply entitlements by improving the City's water system infrastructure to accommodate increased surface water supplies from the MRWTP's Phase II, and by implementing groundwater management programs and infrastructure. The Proposed Program's groundwater management activities, groundwater aquifer storage and recovery (ASR) program, proposed wellhead treatment activities, and construction of replacement and new wells would allow for use of the existing groundwater supply entitlements by the City. This would alleviate pressure on the need to expand the City's water supply entitlements. Additional or new water supply entitlements would not be required to support the operation of the Proposed Program's facilities. As a result, there would be **no impact.**

Impact UTL-4: Require Additional Permitted Landfill Capacity to Accommodate the Project's Solid Waste Disposal Needs (*Less than Significant*)

Construction of the Proposed Program facilities would produce solid waste in the form of demolished asphalt, concrete, and excavated soils (construction waste). Construction waste would be transported to one of the recycling facilities currently used by the City of Modesto and outlying service areas, and soils may be reused pending testing results (see Chapter 11, *Hazards and Hazardous Materials*), thus minimizing the amount of waste sent to landfills.

When construction waste recycling is not possible, waste would be transported to the Stanislaus County Fink Road landfill, located at 4000 Fink Road in Crows Landing. The landfill has a total permitted capacity of 14.5 million tons, about one-third of which is full. The facility has an estimated closure date of 2022. The landfill is currently considering alternatives for facility expansion, which would extend the closure date to approximately 2030 (California Integrated Waste Management Board 2007; Frank pers. comm.). In the event that a new landfill would need to be used once the Fink Road landfill is closed, the City has disposal requirement standard practices and general provisions in place that would prevent any potential impacts caused by this activity. These standard practices state that the City would only dispose of waste at a licensed disposal facility, and would identify such facility prior to committing to any project action (i.e. construction activity). These practices can be found in Section 5.06, Disposal of Excess Material, and Section 11.04, Grading Plans, of the City of Modesto Standard Specifications (2014). Furthermore, the treatment and handling of all wastes produced during the construction period would adhere to all applicable federal, state, and local statutes.

The generation of construction waste is considered a short-term impact that would not require existing disposal facilities or conveyance transfer and haul systems to be expanded. While the Proposed Program could result in the creation of additional solid waste once proposed facilities are operational, the standard practices stated above would ensure that the Proposed Program's waste would only be disposed of at licensed disposal facilities and in accordance with all solid waste handling and disposal requirements. Therefore, this impact would be **less than significant**.

Impact UTL-5: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste (*Less than Significant*)

The Proposed Program would be in compliance with federal, state, and local statutes and regulations related to solid waste. Construction specifications would contain requirements for the handling, storage, cleanup, and disposal of hazardous materials. For additional information about hazardous materials compliance and permitting requirements, refer to Chapter 11, *Hazards and Hazardous Materials*. The Proposed Program would also comply with all of the applicable policies outlined in Section 17.2.3, "Local Laws, Regulations, and Policies." As a result, this impact would be **less than significant.**

Chapter 18
OTHER STATUTORY CONSIDERATIONS

18.1 Overview

This chapter presents discussions of significant and unavoidable impacts, growth-inducing impacts, and cumulative impacts as required by the State CEQA Guidelines.

18.2 Significant and Unavoidable Impacts

Section 15126.2(b) of the State CEQA Guidelines requires an EIR to describe any significant impacts that cannot be mitigated to a less-than-significant level. All of the impacts associated with the Proposed Program would be reduced to a less-than-significant level through the implementation of identified mitigation measures, with the exception of the impacts discussed below. The following impacts have been identified as significant and unavoidable:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use (Impact AG-1)
- Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use (Impact AG-3)
- Conflict with or Obstruct Implementation of an Applicable Air Quality Plan (Impact AQ-1)
- Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard (Impact AQ-3)
- Generate a Substantial Amount of GHG Emissions (Impact GHG-1)
- Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs (Impact GHG-2)
- Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level (Impact HYD/WQ-2)
- Cumulative Impacts on Agriculture (Impact CUM-2)
- Cumulative Impacts on Air Quality and GHG (Impact CUM-3)
- Cumulative Impacts on Hydrology and Water Quality (Impact CUM-6)

18.3 Growth Inducement

Section 15126.2(d) of the State CEQA Guidelines requires an EIR to include a discussion of a proposed project's growth-inducing impacts. The analysis of growth-inducing impacts must discuss the ways in which a proposed project (or program) could foster economic or population growth or the construction of additional housing in the surrounding environment. The analysis must also address project-related actions that, either individually or cumulatively, would remove existing obstacles to population growth. The Proposed Program is considered growth-inducing because it removes water service infrastructure as an obstacle to growth. Refer to Impact PH-3 in Chapter 15, *Population and Housing,* for a detailed discussion of the secondary effects of growth and direct growth-related effects of the Proposed Program.

18.4 Cumulative Impacts

According to State CEQA Guidelines Section 15130(a)(1), a cumulative impact is created by the combination of a proposed project with other past, present, and probable future projects causing related impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355[b]). Under CEQA, an EIR must discuss the cumulative impacts of a project when the project's incremental contribution to the group effect is "cumulatively considerable." An EIR does not need to discuss cumulative impacts that do not result, in part, from the project evaluated in the EIR.

To meet the adequacy standard established by State CEQA Guidelines Section 15130, an analysis of cumulative impacts must contain the following elements:

- an analysis of related past, present, and probable future projects that would affect resources in the project area similar to those affected by the Proposed Program;
- a summary of the environmental effects expected to result from those projects with specific reference to additional information stating where that information is available; and
- a reasonable analysis of the combined (cumulative) impacts of the relevant projects.

The cumulative impacts analysis must evaluate a project's potential to contribute to the significant cumulative impacts identified, and it must discuss feasible options for mitigating or avoiding any contributions assessed as cumulatively considerable. The discussion of cumulative impacts is not required to provide as much detail as the discussion of the effects attributable to the project alone. Rather, the level of detail is to be guided by what is practical and reasonable.

18.4.1 Approach to Analysis: Combined Approach

The following analysis of cumulative impacts focuses on whether the cumulatively significant impacts exist to which the Proposed Program may contribute, and whether the Proposed Program's contribution to such impacts would be considerable. The cumulative impact analysis considers both the Proposed Program and other projects proposed within the area defined for each resource that have the potential to contribute to cumulatively significant impacts.

State CEQA Guidelines Section 15130 provides the following two alternative approaches for analyzing and preparing an adequate discussion of significant cumulative impacts:

- the list approach, which involves listing past, existing, and probable future projects or activities that have or would produce related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency; or

- the projection approach, which uses a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions and their contribution to the cumulative effect.

This discussion combines the projection approach and the list approach for the Proposed Program's cumulative impact analysis. Projects included in the cumulative analysis were determined using several factors, including the location and type of activity and the characteristics of the activity related to resources that could be affected by the Proposed Program. In addition, regional or global conditions that might lead to cumulative impacts (e.g., greenhouse gas [GHG] emissions) are also described.

Resource Topics Considered and Dismissed

The Proposed Program has been evaluated for its potential to make a considerable contribution to cumulative impacts related to the following resource topics: agricultural resources, air quality, biological resources, cultural resources, GHG and energy, hydrology and water quality, noise and vibration, traffic/transportation, and utilities and service systems. GHG emissions are inherently a cumulative issue and are already addressed in Chapter 10, *Greenhouse Gas Emissions and Energy Resources.* In addition, the Proposed Program's contribution to cumulative air quality impacts is addressed in Chapter 6, *Air Quality.* Therefore, these topics are not discussed further in this section. For several other resource topics, as shown in **Table 18-1**, either significant cumulative impacts do not exist, or the Proposed Program would not have the potential to make a considerable contribution to any significant cumulative impacts. These resource topics have been eliminated from consideration in the analysis of cumulative impacts and are not discussed further.

Note also that, while the Proposed Program would be growth inducing and the secondary effects of growth could contribute to significant cumulative impacts, such secondary effects are considered to be already captured in the cumulative setting. Therefore, the analysis of the Proposed Program's contributions to cumulative impacts focus on the impacts of the Proposed Program itself, and not such secondary effects.

Table 18-1. Resource Topics Eliminated from Further Consideration in the Analysis of Cumulative Impacts

Resource Topic Not Discussed Further	Rationale
Forestry Resources	Stanislaus County's tracts of hardwood forest are located outside of the Program area. For this reason, the Proposed Program would not have any potential to make a contribution to any significant cumulative impacts pertaining to forest lands, or lands zoned for forest land or timberland uses. Therefore, this resource topic is dismissed from further analysis.
Geology, Soils, and Seismicity	Impacts related to geology, soils, and seismicity from other projects and development in the Modesto area would be site-specific and like the Proposed Program, would be required to comply with California Building Standards Code standards to minimize seismic-related impacts. For these reasons, there would be no significant cumulative impact regarding geology, soils and seismicity to which the Proposed Program could contribute. Therefore, this resource topic is dismissed from further analysis.
Hazards and Hazardous Materials	The Proposed Program's effects related to hazards and hazardous materials would be site-specific, temporary, and/or mitigated to a level that is less than significant. As described in Chapter 11, *Hazardous Materials,* City standards and policies require that proper measures are taken in the event of an accidental hazardous materials spill or in the event that contaminated soils are encountered during construction. Other projects in the Modesto region could have similar construction-related hazards and hazardous materials impacts but these likewise would likely be site-specific and/or temporary. Similar to the Proposed Program, other projects would also be required to comply with the same regulations pertaining to safe use, storage, transport, and disposal of hazardous materials used during construction. Other development in the region that adds hazardous materials-intensive land uses (e.g., gas stations, dry cleaners) could increase the cumulative burden of potential hazardous materials releases in the area, but these impacts would result by a different mechanism than the Proposed Program. Therefore, there are no cumulatively significant impacts to which the Proposed Program could contribute, and this resource topic is dismissed from further analysis.

Resource Topic Not Discussed Further	Rationale
Land Use and Planning	As discussed in Chapter 13, *Land Use and Planning,* the Proposed Program would not result in impacts that involve the division of an established community. Land use and planning has been dismissed from the cumulative analysis because, similar to the Program, other projects are subject to planning, environmental review, and a permitting process. Through these processes, inconsistencies with relevant plans and policies would be resolved before project implementation; therefore, there would be no significant cumulative impact related to conflicts with local plans and policies to which the Proposed Program could contribute.
Minerals	There are no known mineral resource zones, historic or active mines or quarries within the Program area, and the Proposed Program's components would not directly affect mineral production sites or prevent future availability of mineral resources. For this reason, the Proposed Program would not have the potential to make any contribution to a significant cumulative impact pertaining to mineral resources. Therefore, this resource topic is dismissed from further analysis.
Public Services	While the Proposed Program would indirectly induce growth, which would increase demand for public services, the City, County, and other affected communities would plan for and implement appropriate improvement to their public services (including associated facilities and infrastructure), such that cumulatively significant impacts related to public services does not and would not occur. For this reason, no cumulatively significant impact exists to which the Proposed Program could contribute, and this topic has been dismissed from further analysis.
Recreation	While the Proposed Program would indirectly induce growth, which would increase demand for recreational facilities, City, County, and other affected communities would plan for and implement appropriate improvement to their recreational facilities, such that cumulatively significant impacts related to recreation does not and would not occur. For this reason, no cumulatively significant impact exists to which the Proposed Program could contribute, and this topic has been dismissed from further analysis.

Notes: DEIR = Draft Environmental Impact Report

Geographic Scope of Analysis

The level of detail of a cumulative impact analysis should consider a proposed project's geographic scope and other factors (e.g., a project's construction or operational activities, the nature of the environmental resource being examined) to ensure that the level of detail is practical and reasonable. The discussion focuses on the cumulative impacts of the Proposed Program for

environmental resources that could be cumulatively affected by the Proposed Program in conjunction with other past, present, and reasonably foreseeable future projects.

The defined specific geographic scope for each environmental resource area analyzed in this DEIR to which the Proposed Program could contribute to cumulative impacts is provided below in **Table 18-2**.

Table 18-2. Geographic Scope for Resources with Cumulative Impacts Relevant to the Proposed Program

Resource	Geographic Scope	Explanation for the Geographic Scope
Aesthetics	General vicinity of the proposed components (e.g., within 0.5 mile) in Modesto and outlying service areas	Aesthetic impacts are limited to the general vicinity of the proposed components. Other projects in the vicinity of proposed above-ground components would contribute to cumulative aesthetic impacts and collectively affect the region's visual character.
Agricultural Resources	Generally, agricultural land throughout the state; for the purposes of this analysis, focused on the City of Modesto and outlying service areas, as well as the remainder of Stanislaus County	While the Proposed Program's impacts on agricultural resources are limited to the footprint of the proposed components, agricultural resources are a valuable regional asset and an important part of the character of Modesto and its surrounding area. Other projects in the vicinity of Modesto and the outlying service areas that affect agricultural land, in combination with the Proposed Program, could result in cumulative effects.
Biological Resources	Modesto and the outlying water service areas and greater Stanislaus County, particularly areas of sensitive biological resources value (e.g., wetlands)	Animals are able to migrate and plants may disperse long distances via seed carried by the wind or other mechanisms. Additionally, biological resources are important regional assets. Therefore, the geographic scope for this analysis considers projects in the vicinity of Modesto and the outlying service areas, as well as Stanislaus County as whole.
Cultural, Tribal, and Paleontological Resources	Modesto and the outlying service areas	Cultural, tribal, and paleontological resource impacts from the Proposed Program would be limited to the immediate area or footprint of the proposed components. Other projects in Modesto, the outlying service areas, and the vicinity that would disturb the ground surface could affect cultural resources (including tribal cultural resources) in a similar manner to the Proposed Program, potentially leading to significant cumulative impacts.

Resource	Geographic Scope	Explanation for the Geographic Scope
Hydrology and Water Quality	Immediate vicinity of Modesto and the outlying service areas, including adjacent reaches of the Tuolumne and San Joaquin Rivers	Contributions of the Proposed Program to cumulative impacts on hydrology and water quality (e.g., stormwater discharges from construction sites) would affect the immediate area of the proposed components and potentially areas downstream. Other projects that are constructed in this same area could affect hydrology and water quality in similar ways to the Proposed Program, potentially leading to cumulative impacts.
Noise and Vibration	Immediate vicinity (i.e., within roughly ¼ mile) of proposed components in Modesto and the outlying service areas	Noise impacts from the Proposed Program would be limited to the immediate area of the proposed components. Cumulative impacts could result if other projects were to be constructed at the same time as the proposed components and in same area (i.e., roughly ¼ mile), such that ambient noise levels could increase.
Transportation and Traffic	Immediate vicinity of the proposed components in Modesto and the outlying service areas	The Proposed Program would not add substantial numbers of vehicle trips over the long term. Therefore, the Proposed Program's impacts on transportation and traffic would primarily be limited to construction-related effects (i.e., temporary closures of up to one lane of traffic for installation of pipelines). Cumulative impacts could result if other nearby projects were to be constructed at the same time as the proposed components.
Utilities and Service Systems	Immediate vicinity of Modesto and the outlying service areas and regional landfills that may be used by the Proposed Program	The Proposed Program would improve water service within the City's service area and would not involve wastewater collection, conveyance, or treatment. The Proposed Program may require disposal of excavated and demolished material at a local landfill. Other projects in the Modesto area that may require disposal of large volumes of waste at a landfill, in combination with the Proposed Program, could result in cumulative impacts on the capacity of landfill(s) in the area.

Table 18-3 lists projects planned in the study area that could affect resources that would also be affected by the Proposed Program. The locations of these projects are also shown in **Figure 18-1.** The list was developed by reviewing sources available on the City's website, the Stanislaus County website, and the Governor's Office of Planning and Research CEQAnet database. While it is

unlikely that every potential cumulative project is listed, the list of cumulative projects is sufficiently comprehensive to be representative of the types of impacts that would be generated by other projects similar to or related to the Proposed Program. The evaluation of cumulative impacts assumes that the impacts of past and present projects are represented by baseline conditions. Cumulative impacts are based on the impacts of the Proposed Program plus impacts of reasonably foreseeable future projects, compared to baseline conditions.

Table 18-4 describes the planning documents containing projections used in the analysis.

Table 18-3. Reasonably Foreseeable Future Projects that Might Cumulatively Affect Resources of Concern for the Proposed Program

No.	Project Title	Brief Project Description	Distance from Program Area
Recreation Projects			
1.	Tuolumne River Regional Park Master Plan	The Tuolumne River Regional Park (TRRP) Master Plan envisions over 500 acres of parkland that would run along 7 river miles of the Tuolumne River. The regional park would extend from the Mitchell Street Bridge east to the Carpenter Road Bridge in Stanislaus County. Five major areas make up the TRRP: the Legion Park/Airport Area, the Gateway Parcel, Mancini Park, the Dryden Park Golf Course Area, and the Carpenter Road Area. The City is currently constructing recreational trails on the Gateway Parcel, which will establish a connection to the downtown corridor and existing pathways along the Tuolumne River (including those adjacent to Beardbrook Park and farther east toward the Modesto Airport). The new development on the Gateway Parcel includes a backwater channel, additional seating, an outdoor classroom, and a pedestrian bridge spanning the mouth of the channel on the bank of the Tuolumne River (Ortega pers. comm. 2017).	Overlaps Proposed Program study area

No.	Project Title	Brief Project Description	Distance from Program Area
Development and Agricultural Projects			
2.	Bronco Wine Co. 2016 Rezone Application (Stanislaus County)	The application requests Stanislaus County to rezone the entire 118-acre parcel to a new Planned Development, and to expand an existing wine manufacturing facility. The project includes 14 new buildings, totaling 1.4 million square feet, which includes warehousing, office and administrative buildings, and an employee center. The expansion also includes railroad access to the Union Pacific Railroad by constructing two rail spurs, which would minimize traffic impacts in surrounding areas. Access to the facility would be along Bystrum Road. Phase 1 is expected to occur within 5 years of project approval; future phases would be built based upon market demands. An initial study was circulated in March-April 2017 (Stanislaus County 2016a).	Approximately 3.5 miles south of proposed future tank
3.	Modesto Courthouse Project (Stanislaus County)	The State of California Judicial Council, Administrative Office of the Courts is pursuing the construction of a new courthouse in Modesto for the Superior Court of Stanislaus County. The preferred site is located in downtown Modesto in the city block bounded by G and H Streets and 9th and 10th Streets. The new courthouse will serve the public with a modern, secure, integrated, and efficient court facility in downtown Modesto. The new courthouse would occupy approximately 300,000 square feet, consist of 26 courtrooms, and replace seven facilities (City of Modesto 2014). The project has been approved but has not yet been constructed.	Overlaps Proposed Program study area
4.	DB Equipment Staff Approval Permit (Stanislaus County)	Request to establish an orchard tractor cab assembly and installation business on a legal non-conforming property, in two phases. Phase 1 includes the reuse of two existing buildings for shipping, receiving, and general office work. Phase 2 includes construction of a 10,000-square-foot metal building, which would be used for the assembly of the orchard tractor cabs.	Approximately 0.4 mile north of buildout pipeline
5.	Marketplace Shopping Center Project (City of Modesto)	The project includes the construction of a new shopping center with approximately 170,000 square feet of floor area on approximately 18 acres. The project includes two large buildings in the shopping center that would be partitioned into spaces for various tenants. A Final EIR was published in November 2013 (City of Modesto 2013). Following the resolution of legal challenges, construction began in early 2017 and will be completed in 2018.	Overlaps Proposed Program study area

No.	Project Title	Brief Project Description	Distance from Program Area
6.	Trinkler Dairy Farms (Stanislaus County)	The project proposes to increase a dairy herd size from 3,150 to 5,175 animal units, consisting of 3,180 milk cows, 600 dry cows, and 1,395 heifers in the A-2-40 (General Agriculture) zoning district. Expansion would require the construction of a freestall barn, a milk parlor, a calf barn, a feed storage pad, and a wastewater storage pond (lagoon). The 220± acre parcel is located at 7251 Crows Landing Road, at the southwest corner of Crows Landing and West Taylor Roads, in the Ceres area. The Planning Commission adopted a Negative Declaration for this project on December 14, 2016. A Notice of Determination was received on February 27, 2017 (Stanislaus County 2017).	Approximately 4.3 miles south of proposed future pipelines
7.	Blue Diamond Growers Rezone Application (Stanislaus County)	Request to rezone the existing parcels for future expansion of the Blue Diamond facility. Expansion plans would include removal of the stormwater basin and construction of an underground storage and percolation system, cold and/or dry storage, and pasteurization buildings. This project is currently undergoing CEQA review (Stanislaus County 2016b).	Overlaps Proposed Program study area
8.	Art Silva Dairy (Stanislaus County)	Request to increase the milk/dry cows at this facility by 928 head. The facility currently houses 583 milk cows, 60 dry cows, and 390 heifers. With the increase, the totals would be 920 milk cows, 180 dry cows, and 861 heifers. The proposed increase would require construction of an approximately 53,000-square-foot freestall barn within an existing exercise pen area. As per the amended Waste Water Management Plan, the lagoons are sufficiently sized to contain the increased wastewater (Stanislaus County 2015a).	Approximately 1.2 miles from proposed buildout pipelines
9.	Derrell's Mini Storage Rezone and Merger Application (Stanislaus County)	This is a request to rezone expired P-D (202) to a new P-D to allow for 100 spaces of RV storage on a 3± acre site. The project site consists of 3 separate parcels of 0.39± acre, 0.36± acre and 2.25± acres but the applicant requests to merge the three parcels into one parcel. The project would include construction and operation of 78 enclosed and 22 open storage spaces, a 20-foot pole sign, fencing, and landscaping. The operation would be unstaffed and is anticipated to generate an average of 5-10 vehicle trips per day. A Negative Declaration for this project was considered for adoption during the review period from February 9, 2016, to March 14, 2016 (Stanislaus County 2016c).	Overlaps Proposed Program study area

No.	Project Title	Brief Project Description	Distance from Program Area
10.	Kansas Woodland Business Park	The City of Modesto is proposing the development of the Kansas Woodland Business Park located northwest of downtown Modesto. It is bounded by Woodland Avenue to the north, Kansas Avenue to the south, 9th Street on the east, and is on the web by State Route 99. The City aims to attract technology intensive businesses to the park (City of Modesto 2017).	Overlaps Proposed Program study area
11.	Fruit Yard Amphitheater	This project would expand an existing Planned Development with an outdoor, fenced, 3,500-person-capacity amphitheater event center, a 5,000-square-foot stage, a 5,000-square-foot roof structure, a 4,000-square-foot storage building, a parking lot to the rear of the stage, and an additional 1,302-space temporary parking area. A maximum of 12 amphitheater events are proposed to take place per year. This use permit also includes a covered seating area of approximately 4,800 square feet and a 1,600-square-foot gazebo in the eastern half of the park area, east of the outdoor amphitheater, and replacement of the existing pylon freestanding pole sign with an electronic reader board sign. An initial study was circulated in March 2017.	Approximately 2.7 miles east of proposed future pipelines
12.	Amendment to Planned Development 190	This project would amend Planned Development 190 for Lander Crossings commercial center to change the use on one parcel (1831 Lander Avenue) from a 12,000-square-foot retail building to a 93-room hotel. The approved use for Parcel 2 (1811 Lander Avenue) would also be amended from retail to additional parking to support the Lander Crossings commercial center.	Approximately 2.8 miles southwest of proposed fire flow improvement pipelines
13.	Sikh Temple Turlock	The project includes construction of a new two-story, approximately 21,000-square-foot building. The first floor of the building would consist of a dining area and kitchen, and the second floor would have a conference room, priest residence, and guest rooms. A six-foot-tall, externally illuminated monument sign is also proposed. The subject property is located at 1391 Fifth Street, Stanislaus County.	Approximately 0.5 mile southwest of proposed fire flow improvement pipelines
14.	Northwest Triangle Specific Plan	The Northwest Triangle Specific Plan was adopted in 1995 and was amended in 2004. This project would update the specific plan, which covers 800 acres, to re-designate six properties within the Specific Plan area. The General Plan designation will be amended for select parcels to Community Commercial from existing designations of Highway Commercial. For additional parcels, the designations will be changed from Community Commercial to Community Commercial/Medium Density Residential.	Approximately 1.2 miles west of proposed fire flow improvement pipelines

No.	Project Title	Brief Project Description	Distance from Program Area
		Minor updates will also be made to the Specific Plan to ensure consistency with the updated 2012 General Plan policies and current regulation. An Initial Study was adopted and the project was approved in May 2017.	
15.	Assyrian Pentecostal Church	The project involves construction of a 12,000-square-foot sanctuary building and a 13,000-square-foot multi-purpose building for the Assyrian Pentecostal Church. Many of the on-site improvements, such as the construction of the parking lot with 175 spaces, have already been installed as part a previously approved project. The new project would be developed in phases. The project would construct a smaller 9,854-square-foot multi-purpose building first, with the sanctuary to be constructed at a later date. Landscaping and other site improvements would be required in accordance with updated standards. An application for a time extension to a previously approved minor discretionary permit from the City of Turlock was received in August 2017.	Approximately 1.9 miles northwest of proposed fire flow improvement pipelines
16.	Turlock Assisted Care Center	The project is an approved licensed assisted living and memory care community, involving the construction of a two-story, 67,430-square-foot building that will include a total of 82 assisted living apartments. An existing oak tree will be retained and incorporated into the wandering garden. On-site and off-site improvements include landscaping, parking, commercial driveways, and two monument signs. A time extension for this project was granted in June 2017 by the City of Turlock.	Approximately 0.4 mile south of proposed fire flow improvement pipelines
17.	Sunburst Disease Plant	The project would develop an approximately 5-acre property for the new headquarters for a full-service agricultural laboratory. The project would include the construction of two buildings totaling 16,256 square feet that would house the offices and laboratories and six 4,900-square-foot greenhouses. The office and laboratory buildings would be connected with a covered walkway. The project applicant requested a time extension from the City of Turlock in August 2017 for this previously approved project.	Approximately 2.4 miles west of proposed fire flow improvement pipelines
18.	Super Store Industries	The Super Store Industries project consists of the development of three parcels totaling approximately 26 acres for the construction of a new processing plant, guard shack, and parking lot for Super Store Industries. The project would be constructed in two phases that would generally involve constructing two parking lots (total of 339 spaces) in Phase 1 within one year of project approval, and,	Approximately 2.1 miles west of proposed fire flow improvement pipelines

No.	Project Title	Brief Project Description	Distance from Program Area
		in Phase 2, constructing a 157,018-square-foot processing plant to connect to an existing 155,728-square-foot processing plant. The guard shack and truck scale will include an off-street stacking lane for incoming delivery trucks. The proposed project will be an expansion of the current facility, which makes packaged dairy and juice products, and will increase the production of the same packaged dairy and juice products. The facility currently operates 24 hours a day, seven days a week and will continue to do so with the new expansion. Both processing plants will operate with a total of 110 employees per shift and approximately 435 truck deliveries/ loadings per day. An Initial Study was completed and the City of Turlock approved the project in August 2017.	
19.	Century Chevron	The project would remove and reconstruct an existing convenience mart, fuel island, and detached car wash on an approximately 1-acre parcel. The new 5,312-square-foot convenience mart would be constructed on the southern portion of the property. A new 6-tank fuel island and canopy would be constructed in the same location as the existing fuel island. The existing fuel tanks would remain in place. A new freestanding drive-through car wash would be located on the eastern side of the property. A new freestanding price sign would be constructed. New exterior wall signs for the convenience mart, car wash, and fuel canopy would also be constructed. The project was approved by the City of Turlock in June 2017.	Approximately 1.9 miles southwest of proposed fire flow improvement pipelines
Public Works Projects			
20.	City of Modesto Wastewater Master Plan Update	The City of Modesto is in the process of updating and replacing its Wastewater Master Plan and EIR to guide management of its wastewater service system. The Wastewater Master Plan would include various Capital Improvement Projects collectively intended for system-wide implementation to increase sewer capacity, extend service to new development, replace and repair existing sewers, reduce infiltration and inflow of stormwater into the sanitary sewers, reduce flooding impacts at the Sutter Plant site, increase treatment process operational flexibility and efficiencies by constructing new primary treatment and solids handling facilities at the Jennings Plant, and removing primary treatment and handling facilities from the Sutter Plant. The City proposes to construct and operate numerous improvements to its collection system and upgrades to the Sutter and Jennings plants. These include collection system	Overlaps contiguous service area

No.	Project Title	Brief Project Description	Distance from Program Area
		and treatment plant CIPs located throughout the City's service area and unincorporated Stanislaus County.	
21.	California High-Speed Rail Passenger Station	The City of Modesto Community and Economic Development Department has prepared a feasibility study for constructing a downtown passenger rail station for the California High-Speed Rail Project. The project is part of Phase 2 of the Proposition 1A High Speed Rail System project, but a specific start date has not been determined. The City has identified a potential site for the rail station, generally bounded by State Route 99 to the west, 9th Street to the east, North Jefferson Street to the northwest, and B Street to the south (California Department of Transportation 2013).	Overlaps Proposed Program study area
22.	Carpenter Road at Whitmore Avenue Intersection and Bridge Widening (Stanislaus County)	The project includes installation of light signals and widening or replacing the existing Carpenter Road over Turlock Irrigation District Lateral No. 1 Bridge (Stanislaus County N.D.a).	Overlaps Proposed Program study area
23.	Airport Neighborhood Sewer (Phase II) (Stanislaus County)	Phase I of this project was constructed in 2014 and included installation of a gravity sewer system along Kerr Avenue. The County has developed improvement plans for Phase II, which is scheduled to end in fall 2017 and would include construction of a new gravity sanitary sewer system consisting of approximately 20,000 feet of sewer pipe. The completed project would provide approximately 362 sewer service connections to the residents of the Airport Neighborhood Sewer District (Stanislaus County N.D.b).	Overlaps Proposed Program study area
24.	Crows Landing Road Corridor Improvement Project (Stanislaus County)	This road improvement project is intended to improve safety, help illuminate the corridor, and make pedestrians and cyclists more visible to drivers. The project includes constructing raised medians, street lighting, and buffered bike lanes. Crows Landing Road would be resurfaced for buffered bike lanes. Existing signals would be modified and obsolete parts would be removed and salvaged (Stanislaus County N.D.c).	Overlaps Proposed Program study area

No.	Project Title	Brief Project Description	Distance from Program Area
25.	McHenry Avenue Improvement Project (Stanislaus County)	San Joaquin County, in cooperation with Stanislaus County, has completed engineering work for a project to widen and improve a one-mile segment of McHenry Avenue from Jones Road to 1,700 feet south of River Road, in Stanislaus County. The project will widen and signalize the McHenry Avenue/River Road intersection; widen McHenry Avenue to provide a center left-turn lane; and replace two existing bridges - one across the Stanislaus River, and the other across the SSJID canal. Construction was anticipated to begin in spring 2017; the project shown as being in the design phase on the County's website as of August 2017 (Stanislaus County N.D.d).	Overlaps Proposed Program study area
26.	Claribel Road at Roselle Avenue Intersection Road Widening Project (Stanislaus County)	The project includes constructing a signalized intersection at Claribel Road and Roselle Avenue and right-of-way acquisition, utility relocation, widening the existing two-lane roadway at the intersection to accommodate turn lanes, new signalization, utilities, and drainage improvements. A Mitigated Negative Declaration was published in June 2016 (Stanislaus County 2016d).	Overlaps Proposed Program study area
27.	North Valley Regional Recycled Water Program (City of Modesto)	The City of Modesto, City of Turlock, and Del Puerto Water District (DPWD) are partnering on a regional solution to address water supply shortages in DPWD's service area on the west side of the San Joaquin River in San Joaquin, Stanislaus and Merced Counties. The project would deliver 59,000 af/yr of recycled water produced by the Cities of Modesto and Turlock via the Delta-Mendota Canal. Recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, and ending at the Delta-Mendota Canal. The purpose of the project is to make the Cities' recycled water available to DPWD for agricultural purposes, to provide an additional source of water south of the Delta, which can be used to meet agricultural uses and support wildlife refuges and wetland areas. Construction of this project is currently underway and is anticipated to be complete by the end of 2017 (City of Modesto 2016).	Modesto Water Quality Control Facility discharge site is approximately 5.4 miles southeast of Grayson improvements

No.	Project Title	Brief Project Description	Distance from Program Area
28.	Stanislaus River Regional Water Authority's Surface Water Supply Project	The SWSP would include release of up to 30,000 af/yr of water from Don Pedro Reservoir, downstream diversion from the Tuolumne River through an existing infiltration gallery and newly constructed pump station and raw water pipelines, treatment at a newly constructed water treatment plant, conveyance of the treated water to the Cities of Ceres and Turlock, and connection to the existing potable water system infrastructure of the two cities. The project also includes a minimum annual transfer of 2,000 af of "offset water" from SRWA member agencies to TID, which would increase in dry years.	The infiltration gallery, pump station, and water treatment plant would be located on the south bank of the Tuolumne River at Geer Road, approximately 3.9 miles southeast of the nearest CIP

Notes: af/yr = acre-feet per year; CIP = Capital Improvement Project; DPWD = Del Puerto Water District; EIR = environmental impact report; RV = recreational vehicle; SRWA = Stanislaus Regional Water Authority; SSJID = South San Joaquin Irrigation District; SWSP = Surface Water Supply Project; TID = Turlock Irrigation District; TRRP = Tuolumne River Regional Park

Cumulative Projects

1a, TRRPMP - Carpenter Road Area
1b, TRRPMP - Golf Course Area
1c, TRRPMP - Gateway Parcel
1d, TRRPMP - Legion Park Area
1e, TRRPMP - Airport
2, Bronco Wine Co. 2016 Rezone Application
3, Modesto Courthouse Project
4, DB Equipment Staff Approval Permit
5, Marketplace Shopping Center Project
6, Trinkler Dairy Farms
7, Blue Diamond Growers Rezone Application
8, Art Silva Dairy
9, Derrell's Mini Storage Rezone and Merger Application
10, Kansas Woodland Business Park
11, Fruit Yard Amphitheater
12, Amendment to Planned Development 190
13, Sikh Temple Turlock
14, Northwest Triangle Specific Plan
15, Assyrian Pentecostal Church
16, Turlock Assisted Care Center
17, Sunburst Disease Plant
18, Super Store Industries
19, Century Chevron
20, City of Modesto Wastewater Master Plan Update (not shown – overlaps contiguous WMP study area)
21, California High-Speed Rail Passenger Station
22, Carpenter Rd. at Whitmore Ave. Intersection and Bridge Widening
23, Airport Neighborhood Sewer (Phase II)
24, Crows Landing Road Corridor Improvement Project
25, McHenry Avenue Widening Phase II
26, Claribel Rd. at Roselle Ave. Intersection Road Widening Project
27, North Valley Regional Recycled Water Program
28, Surface Water Supply Project

N

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Miles

Horizon WATER and ENVIRONMENT

Proposed Components for Existing Water System

- Tank
- Well
- Fire Flow Improvements
- Grid Improvements

Proposed New Water System Components

- Future Tanks
- Future Well Sites
- Build Out Pipelines
- Fire Flow Improvements
- Grid Improvements
- Strengthen and Replace

- WMP Study Area
- Cumulative Projects

Figure 18-1
Cumulative Projects

City of Modesto
Water Master Plan EIR

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Table 18-4. Planning Documents Considered for Cumulative Impact Analysis

Document	Summary
City of Modesto Urban Area General Plan 2019	The City of Modesto Urban Area General Plan guides land use and development within the City of Modesto. The goals and policies in the General Plan provide an outline for new growth and minimization of possible impacts, while the adopted land use diagram included in the General Plan identifies desired land use types in the City. Adopted in 2019, the City of Modesto Urban Area General Plan updates the previous iteration completed in 2008 and provides a planning horizon to 2035. The General Plan foresees the majority of future development occurring within an approximately 19,450-acre Planned Urbanizing Area (PUA), which is land within and outside the City's sphere of influence that is predominantly flat, vacant and/or developed with agricultural uses, and minimally, if at all, served with urban services and infrastructure, including roads. The General Plan projects population within the Modesto General Plan boundary to be approximately 390,000. This population is assumed to be reached at some time after the 2040 general plan horizon year (City of Modesto 2019). (City of Modesto 2019).
Stanislaus County General Plan (2016f)	The Stanislaus County General Plan guides the physical development, preservation and conservation of areas within the unincorporated areas of the County. The General Plan was updated in 2015 to incorporate changes that had occurred in terms of legislation, code, and local standards since the previous version and to provide a planning horizon to 2035 (Stanislaus County 2016f). The Housing Element of the General Plan anticipates that most of the future residential growth in Stanislaus County to occur within the limits of the incorporated cities. Any concentrated growth in unincorporated Stanislaus County is anticipated to take place in the communities of Denair, Diablo Grande, Keyes, and Salida, which are guided by community or specific plans and are served by special districts which provide sewer and water, necessary to accommodate development. In 2010, the population of unincorporated Stanislaus County was 110,236. This number is projected to increase to 125,879 by 2030 (Stanislaus County 2016e).
City of Ceres General Plan 2035 (2018)	The City of Ceres General Plan formalizes a long-term vision for the physical evolution of Ceres and outlines policies, standards, and programs to guide day-to-day decisions concerning Ceres' development through the year 2035 (City of Ceres 2018). The General Plan designates land uses for and applies its policies and standards to an area defined as the City's Planning Area, which includes the City's Urban Growth Area. The Planning Area is bounded by the Tuolumne River on the north, Carpenter Road on the east, Grayson Road on the south, and Washington Road on the west, encompassing approximately 14,400 acres (City of Ceres 2018). The Urban Growth Area encompasses all land envisioned for development as part of Ceres through the year 2015. This area

Document	Summary
	is further divided into two phases of development to ensure orderly development and prevent premature conversion of agricultural lands.
City of Turlock General Plan (2012)	The General Plan governs all City actions relating to Turlock's growth and development. It is both a long-range vision and a guide to ongoing decision-making and near-term actions. The defined policies, maps, standards, and guidelines outline what actions must be implemented in order to accommodate population and employment growth over a 20-year time period. Guiding policies in each chapter are statements of vision and overall intent. There are approximately 8,730 acres in the current city limits (not including the County islands), and an additional 8,560 acres of land are contained within the Study Area outside of city limits. According to their General Plan Land Use designations, infill sites (those that are vacant or substantially underutilized) have a maximum capacity for approximately 5,000 new housing units. However, given site constraints, property owners' intentions, and other factors, it is likely that only a portion of these sites will actually develop over the next 20 years; an estimate is 60 percent (3,000 units). The remainder of the development needed to house Turlock's projected growth would be within new neighborhoods in master plan areas, several of which are outside of the current city limits. The WMP would affect North, Central, and South Turlock (see Figure 1-2), all of which are infill areas. Turlock has a number of unincorporated "County Islands," areas of unincorporated county land that are surrounded by incorporated Turlock on all sides. Generally, the county islands are not served by City infrastructure or services; some have no curb and gutter improvements and their roads are not maintained to City standards. Similarly, Stanislaus County is technically responsible for their public safety services. Turlock has an interest in incorporating the county islands and bringing their public infrastructure up to City standards, as this would help ameliorate public health and safety concerns. Turlock is in the process of negotiating a cost-sharing strategy with the County that would split the cost burden between the two jurisdictions.

Notes: PUA = Planned Urbanizing Area

18.4.2 Cumulative Impact Setting

This section describes the cumulative impact setting for which the Proposed Program could contribute to a cumulative impact.

Aesthetics

The visual setting of Stanislaus County is characterized by a combination of agricultural, rural development, suburban, and open space land uses. Due to the county's flat topography, expansive and long-range views of natural landscapes including the Diablo Range are accessible. Waterways including the Tuolumne River, Stanislaus River, and San Joaquin River, also provide scenic viewing opportunities.

Agricultural Resources

Stanislaus County is a major agricultural county in California. The County consists of over 425,000 acres of Important Farmland (CDOC 2016) and has over 575,000 acres of farmland under Williamson Act contracts (Stanislaus County 2015b). The success of agriculture in Stanislaus County is largely due to its favorable climate and the flat, fertile soils (Stanislaus County 2015b). However, while overall production trends for leading commodities have continued to grow, the County's agricultural industry is under threat from population growth/urban development and increased production costs. CDOC reports that while the period 2014-2016 saw an overall increase in Important Farmland acreage in Stanislaus County of over 6,700 acres, the County lost over 2,700 acres of Prime Farmland (CDOC 2016).

Biological Resources

Numerous species of plant and animal life are found in Stanislaus County which have aesthetic, recreational, economic, scientific, and educational value to the citizens of the area. Much of the area including Modesto and its surrounding areas is developed for urban and agricultural uses, but the Tuolumne and San Joaquin Rivers provide habitats various species. Most of the special-status wildlife species that have been identified as occurring within the County are associated with these riparian areas, as well as the annual grassland/vernal pool complexes on the eastern side of the county and the lands west of Interstate 5 (Stanislaus County 2016f).

Cultural, Tribal Cultural, and Paleontological Resources

A number of cultural resources have been identified in the Modesto urban area, including four sites recorded at the Central California Information Center, including habitation sites, burials, and artifacts concentrations located near the Stanislaus and Tuolumne Rivers, Dry Creek, and terraces above waterways (City of Modesto 2019). However, information on prehistoric cultural resources in the Modesto area is limited and is often obtained as a result of development or other proposed activities where archaeological research is required (City of Modesto 2019). Additionally, numerous historic structures and properties within the City of Modesto have been listed on the NRHP, California State Points of Historical Interest, and the City of Modesto Landmark Preservation Sites list (City of Modesto 2019). Within greater Stanislaus County, there are 20 NRHP listings, 5 state landmarks, and 7 points of historical interest (Stanislaus County 2016f), but none are located within the Proposed Program's outlying service areas. Paleontological resources have been found in the Modesto Formation of Stanislaus County. Paleontological resources have been found in the Modesto Formation of Stanislaus County.

Hydrology and Water Quality

The Tuolumne River is the primary watercourse in the Modesto area. Dry Creek also passes through portions of the City before joining the Tuolumne. The San Joaquin River passes through Stanislaus County southeast of Modesto, flowing in a southeast-northwest direction. The Stanislaus River flows roughly east to west north of Modesto and makes up the northern boundary of Stanislaus County. The Tuolumne River in the area of Modesto and the San Joaquin River are designated as impaired for a number of water quality contaminants, as shown in Table 12-2 in Chapter 12, *Hydrology and Water Quality,* likely as a result of urban and agricultural runoff in the watershed. Water quality contaminants include chlorpyrifos, diazinon, mercury, pesticides, among others.

Areas of groundwater contamination also exist in the Modesto and Turlock Groundwater Sub-basins. Historically, groundwater levels in the Modesto area have declined over past decades, but completion of the MRWTP in 1994, and subsequent importation of surface water supplies from the Modesto Irrigation District caused groundwater levels to rebound to some degree (STRGBA 2005). More recent data indicates that from 2007 to 2017 groundwater levels in the Modesto area decreased from 0 to 20 feet, with isolated areas of greater reductions (DWR 2017). Some of this decrease may be attributable to the recent drought in California, which lasted in its most severe form from roughly 2013-2014, though moderate drought conditions continued for up to years afterwards in some areas of the state, including in the Modesto area through February 2017.

Noise and Vibration

Numerous sensitive land uses (e.g., residential dwellings, schools, hospitals) are found in the City of Modesto and in proximity to the proposed components. Dominant existing noise and vibration sources vary within the area of the Proposed Program, but include industrial facilities (e.g., canneries), agricultural activities, railroads, air traffic (near the Modesto City-County Airport), and vehicular traffic. Railroad lines operated by multiple companies, as well as Highways 33, 99, 132, 108, and 219, create elevated ambient noise levels in large portions of the Program area. In general, ambient noise tends to decrease as one moves outside of the urban areas of Modesto and Ceres.

Transportation and Traffic

Primary transportation routes in the Program area include SR 33, 99, SR 132, SR 108, and SR 219. Proposed components would be installed within and along numerous local roads within the City of Modesto and surrounding area. In addition to commute traffic, goods movement is a potential source of congestion on area highways and roads. Transport of agricultural commodities has long been an important function in Stanislaus County, and the County also is an important food processing region for the State (Stanislaus County 2016f). Additionally, the large urbanized areas of Stanislaus County, such as Modesto, require millions of tons of goods each year to maintain their economic activities (Stanislaus County 2016f). In agricultural areas outside of the City, movement of agricultural equipment on public roadways may also be encountered.

Utilities and Service Systems

The Proposed Program would have little to no impact on wastewater and would not require the construction of new or expanded stormwater facilities or require new wastewater service. Therefore, these aspects are not discussed here.

The primary landfill within the Modesto area, and the only active landfill in Stanislaus County, is the Fink Road Sanitary Landfill. This landfill handles nonhazardous municipal solid waste. As of 2012, it had a remaining capacity of over 8 million cubic yards and an estimated closure date of 2023 (CalRecycle 2017).

18.4.3 Cumulative Impact Analysis

Impact CUM-1: Cumulative Impacts on Aesthetics *(Less than Significant with Mitigation)*

Several projects identified in Table 18-3 involve new development throughout Modesto and the County. For example, in northeastern Modesto, the Marketplace Shopping Center Project is planned within one mile of a new storage tank to be constructed under the Proposed Program. Residences and recreationists located in close proximity to these facilities may have views of both the new water storage tank and shopping center. Additionally, as discussed in Chapter 4, *Aesthetics and Visual Resources,* the Proposed Program would support planned growth in the City's service area which would involve conversion of agricultural lands. Given the large scale of the new water storage tanks, the facilities in combination with projects listed in Table 18-3 and other planned growth, would not substantially alter the Program area's rural and open space landscape. Cumulative impacts on aesthetics and visual resources would be considered significant and the Program's contribution, if left unmitigated, may be considerable.

Construction of Program components could adversely affect the visual quality and visual character of a particular site during construction, but Mitigation Measure AES-1 would reduce this impact by requiring that construction staging areas be located away from public areas. Other projects in the Modesto area, particularly new development projects and future water infrastructure projects, could alter the visual landscape in the study area. However, with implementation of Mitigation Measure AES-2 to incorporate aesthetic considerations into the design of these components, the Proposed Program would not make a considerable contribution to any significant cumulative impacts pertaining to aesthetics and visual resources. Therefore, the Program's contribution to this cumulative impact would be **less than significant with mitigation**.

Impact CUM-2: Cumulative Impacts on Agriculture (*Significant and Unavoidable*)

Several projects identified in Table 18-3 could result in conversion of agricultural land, including Important Farmland, to non-agricultural uses. Additionally, build out of the City of Modesto, Stanislaus County, City of Ceres, and City of Turlock General Plans would convert agricultural land to non-agricultural use. As described in Chapter 5, *Agricultural Resources,* the Proposed Program would result in the conversion of Prime Farmland or Unique Farmland to non-agricultural use associated with development of four storage tanks and six groundwater wells in the Program area.

Given the importance of agriculture to Stanislaus County and that loss of Prime Farmland has been occurring in recent years and is an ongoing concern with increasing urban development in the region, the loss of Prime Farmland is a significant cumulative impact, and the Proposed Program's contribution would be considerable.

As described in Chapter 5, LAFCO's Agricultural Preservation Policy (2015) and Policy 2.15 in the *Stanislaus County General Plan*, which require that agricultural land converted to residential use be replaced at a 1:1 ratio, do not apply to the Proposed Program. While the Stanislaus County's Farmland Mitigation Program provides a mechanism for establishing conservation easements, that program is designed to address loss of Farmland resulting from residential development and not public infrastructure projects such as the Proposed Program. Furthermore, the City has determined that the cost of establishing a conservation easement would substantially increase

the cost of the Proposed Program and burden on ratepayers which would not be acceptable and purchasing an agricultural easement over off-site agricultural land would not ultimately avoid or reduce the impact of converting Farmland. Additional mitigation (e.g., restoration of Farmland) is not considered feasible. Based on this, no feasible mitigation measures have been identified. This impact of the Proposed Program would be significant and unavoidable at the project level, and a considerable contribution to significant cumulative impacts related to loss of Farmland. Therefore, the Program's contribution to this cumulative impact would be **significant and unavoidable.**

Impact CUM-3: Cumulative Impacts on Air Quality and GHG Emissions (*Significant and Unavoidable*)

As stated in Table 18-3 above, cumulative impacts of air quality are evaluated in Chapter 6, *Air Quality* (Impact AQ-3) and Chapter 10, *Greenhouse Gas Emissions and Energy* (Impacts GHG-1 and GHG-2).

Impact CUM-4: Cumulative Impacts on Biological Resources *(Less than Significant with Mitigation)*

Construction projects in the Program area, such as those listed in Table 18-3, as well as elsewhere in Stanislaus County would have the potential to impact biological resources. Ground-disturbing construction activities could directly injure or kill wildlife, while development of new areas may result in permanent loss of habitat. Given that many of the special-status species known to occur in Stanislaus County are found in riparian areas, this may be particularly true for projects that are located along the Tuolumne River, Dry Creek, or the San Joaquin River. This is considered a cumulatively significant impact.

The Proposed Program would involve various construction activities that could impact wildlife, plants, and fish, which, left unmitigated, would be considered a considerable contribution to this cumulative impact.

However, implementation of **Mitigation Measures BIO-1** through **BIO-15** would avoid and/or minimize impacts. In addition, compliance with the NPDES General Construction Permit, the City of Modesto's Standard Specifications related to erosion control, and implementing **Mitigation Measure HYD/WQ-1** regarding a frac-out contingency plan for trenchless pipeline installation methods would serve to avoid and minimize impacts on water quality that could affect fish and aquatic life. Considering that the Program would not convert large areas of sensitive habitat and would avoid or minimize temporary effects to the maximum extent practicable, with implementation of the above-mentioned mitigation measures, its contribution to cumulative impacts on biological resources would not be considerable. Therefore, this impact would be **less than significant with mitigation.**

Impact CUM-5: Cumulative Impacts on Cultural, Tribal, and Paleontological Resources (*Less than Significant with Mitigation*)

While unlikely, it is possible that construction of WMP components in the Program study area could impact buried cultural or archaeological resources. Any project that would disturb the ground surface would have the potential to disturb buried cultural, archaeological, or paleontological resources. Therefore, many of the projects listed in **Table 18-3**, as well as currently

unknown projects that may be constructed in accordance with the City of Modesto, City of Ceres, City of Turlock, and Stanislaus County General Plans, could impact buried archaeological or paleontological resources. Such projects also could affect above-ground historical structures depending on the nature of the project and location. For these reasons, cumulative impacts on cultural and paleontological resources are considered significant.

If the Proposed Program were to impact resources or groups of resources, which are also being impacted by other projects, the Proposed Program's contribution to cumulative impacts, if left unmitigated, would be potentially considerable. However, along with implementing the City's standards and policies, the Proposed Program would implement Mitigation Measure CR-1 to avoid and/or minimize impacts to cultural and tribal cultural resources. This would include requirements to conduct cultural resources awareness training before beginning construction on CIP projects. With implementation of this measure, the Proposed Program would not substantially affect cultural, tribal cultural, and paleontological resources and would not contribute considerably to any cumulative impacts on such resources in the Program area or greater Stanislaus County. Therefore, this impact would be **less than significant with mitigation.**

Impact CUM-6: Cumulative Impacts on Hydrology and Water Quality *(Significant and Unavoidable)*

Projects listed in Table 18-3, and those that may be constructed in the future in accordance with the City of Modesto, City of Ceres, City of Turlock, and Stanislaus County General Plans, could adversely affect hydrology and water quality (e.g., via stormwater discharges from construction sites). In particular, projects located near the Tuolumne River, Dry Creek, Stanislaus River, or San Joaquin River would have potential to affect water quality in these water courses, which is already substantially compromised. The existing impairments to water quality in the region are considered to be a cumulatively significant impact. The Proposed Program, if left unmitigated, would result in discharges to impaired water bodies and therefore would make a considerable contribution to this impact.

The Proposed Program's impacts on hydrology and water quality, apart from groundwater supply impacts, would be avoided and/or minimized through compliance with the NPDES General Construction Permit, the City's Standard Specifications related to erosion control, and implementation of Mitigation Measures HYD/WQ-1, which would require preparation and implementation of a frac-out contingency plan for trenchless pipeline installation methods.

While discharges of pollutants to the Tuolumne, Stanislaus, and San Joaquin Rivers may be considered a contribution to a significant cumulative impact given the existing contamination in these water bodies, the mitigation measures prescribed in the DEIR would avoid or reduce any such discharges to minimal levels. Additionally, although not specifically identified, the sources of the existing contaminants in the Tuolumne, Stanislaus, and San Joaquin Rivers shown in Table 12-2 in Chapter 12, *Hydrology and Water Quality,* are more likely attributed to agricultural and urban runoff, rather than construction-related stormwater discharges, as many of the contaminants are pesticides.

Several of the CIP projects listed in Table 18-3 could add impervious surface area to the region or require additional use of groundwater supplies. The new impervious surface area, concentrated largely within or near urban areas, would not substantially affect groundwater recharge because

the majority of groundwater recharge within the Modesto and Turlock Subbasins occurs via percolation of irrigation water in the vast agricultural lands in the area. However, any additional groundwater use by the projects listed in Table 18-3 and the Proposed Program's groundwater needs could contribute to declining groundwater levels and potential overdraft of the aquifer. As discussed in Impact HYD/WQ-2, although the Sustainable Groundwater Management Act (SGMA) process and the future development of a groundwater sustainability plan (GSP) would include measures or allocations to prevent groundwater overdraft, these GSP measures or allocations have not yet been developed and the aquifers' sustainable yields may be exceeded by the Proposed Program (in combination with other users) before these measures and allocations are in place. Thus, while it is the intent of the City to avoid use of groundwater in a manner which would contribute to overdraft, because overall use of groundwater in the relevant aquifers is partially outside of the City's control, and the GSP has not yet been developed to address this issue, the Proposed Program's groundwater use has been conservatively concluded to make a considerable contribution to the cumulative groundwater use and cumulatively exceedance of the local aquifers' sustainable yields. Therefore, following mitigation, the Proposed Program's contribution to cumulative impacts on hydrology and water quality could be considerable. This impact would be **significant and unavoidable.**

Impact CUM-7: Cumulative Impacts Related to Noise and Vibration (*Less than Significant*)

Other projects in the immediate area of the proposed components could add to, or exacerbate, noise generated by construction and/or operation of the proposed CIP projects. Several projects listed in Table 18-3 fit this description. Additionally, projects that may be constructed in the future in accordance with applicable jurisdictions' general plans could be located in immediate proximity to the proposed CIP projects. Because the schedule for the projects listed in Table 18-3 and that for specific CIP projects under the Proposed Program is unknown and/or is subject to change, this analysis makes the conservative assumption that overlaps would occur, potentially producing significant cumulative effects.

As described in Chapter 14, *Noise,* Proposed Program construction and operation would not generate noise in excess of standards established in the local general plan or noise ordinance, depending on the specific characteristics of the proposed components. This would not be a considerable contribution to cumulative impacts. **Mitigation Measures NOI-1** through **NOI-4** would reduce these effects through a variety of means.

In conclusion, temporary or periodic increases in ambient noise levels caused by the Proposed Program (after mitigation) would not make a considerable contribution to significant cumulative noise impacts. Therefore, it is **less than significant with mitigation.**

Impact CUM-8: Cumulative Impacts Related to Transportation (*Less than Significant*)

Depending on the timing of construction activities, other projects located in the immediate vicinity of the proposed components listed in Table 18-3 or included in general plans could overlap in duration with Program construction activities, exacerbating temporary effects on transportation and traffic. These projects, as well as other development that may be constructed in accordance with the City of Modesto, City of Ceres, City of Turlock, and Stanislaus County General Plans could add substantial vehicle trips associated with residential and commercial uses,

which could contribute to a long-term reduction in LOS and operating conditions on roads and highways in the area, creating a significant cumulative impact.

As described in Chapter 16, *Transportation and Traffic,* the Proposed Program would include trenching within the roadway for installation of new and replacement water lines, as well as off-hauling of construction debris and spoils to the landfill. These activities could temporarily create congestion on local streets, which would be largely confined to the immediate area of the Program components.

Because the Program would not add substantial vehicle trips over the long-term and its impacts on transportation and traffic would be temporary, it would not contribute considerably to cumulative impacts on transportation and traffic. Therefore, this impact would be **less than significant.**

Impact CUM-9: Cumulative Impacts on Utilities and Service Systems (*Beneficial*)

During construction, measures would be implemented to avoid any interruptions to utilities and service systems. Over the long-term, the Proposed Program would not generate the need for additional stormwater or wastewater infrastructure or increased solid waste disposal needs. Additionally, the Proposed Program would provide necessary water supply infrastructure to support planned development. As such, the Proposed Program is anticipated to be **beneficial** from the standpoint of cumulative impacts related to utilities and service systems.

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Chapter 19
ALTERNATIVES

19.1 Overview

This chapter describes the CEQA requirements related to evaluation of alternatives in an EIR, presents the alternatives development process for the Proposed Program, describes the alternatives analyzed in detail and those considered but eliminated from detailed analysis, provides environmental impact analysis of the alternatives considered, presents a comparison of alternatives, and identifies the environmentally superior alternative.

19.2 CEQA Requirements

CEQA requires that an EIR evaluate a reasonable range of potentially feasible alternatives to the Proposed Program, including the No Project Alternative. The No Project Alternative allows decision-makers to compare the impacts of approving the action against the impacts of not approving the action. Although no clear rule exists for determining a reasonable range of alternatives to a proposed project or program, the State CEQA Guidelines provide guidance that can be used to define the range of alternatives for consideration in the environmental document.

The alternatives described in an EIR must feasibly accomplish most of the basic project objectives, should avoid or substantially lessen one or more of the significant impacts of the Proposed Program, and must be potentially feasible (State CEQA Guidelines Section 15126.6[a]). In determining whether alternatives are potentially feasible, Lead Agencies are guided by the general definition of feasibility found in State CEQA Guidelines Section 15364: “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” In accordance with State CEQA Guidelines Section 15126.6(f), the Lead Agency should consider site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, and jurisdictional boundaries in determining the feasibility of alternatives to be evaluated in an EIR. An EIR must briefly describe the rationale for selection and rejection of alternatives and the information that the Lead Agency relied on in making the selection. It also should identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reason for their exclusion (State CEQA Guidelines Section 15126.6[c]).

An EIR’s analysis of alternatives is required to identify the environmentally superior alternative among all those considered (State CEQA Guidelines Sections 15126.6(a) and 15126.6(e)(2). If the “no project” alternative is identified as the environmentally superior alternative, then the EIR must also identify an environmentally superior alternative among the other alternatives.

These guidelines were used in developing and evaluating the alternatives to the Proposed Program, as described below.

19.3 Alternatives Development Process

The Proposed Program's purpose and objectives, as well as its significant environmental impacts, were considered while developing alternatives. In accordance with the requirements of CEQA, alternatives were developed to achieve most of the Proposed Program's basic objectives while avoiding or substantially lessening one or more of its significant adverse environmental impacts. Alternatives development was also based on potential feasibility. A reasonable range of potentially feasible alternatives is presented in Section 19.5, "Alternatives Analysis," describing their impacts as well as benefits.

19.3.1 Program Objectives

As stated in Chapter 2, *Project Description,* the objectives of the Proposed Program are as follows:

- To implement and support the City's economic goals and General Plan by planning for, and providing water infrastructure in a timely and cost-effective manner to serve new and existing development.
- To clearly define the City's long-term water supply needs (from both groundwater and the Modesto Irrigation District's [MID's] surface water supplies), and identify the associated infrastructure required to deliver these supplies to existing and future customers.
- To provide the flexibility, system redundancy and reliability at a reasonable cost to accommodate possible changing future conditions (regulatory, climate, additional conservation, etc.).
- To repair and replace aging water infrastructure.
- To ensure adequate water infrastructure and services are available to serve new growth within the General Plan area, the City's SOI, and the outlying service areas.
- To plan for state-of-the-art facilities that reliably and economically meet changing regulatory requirements.
- To provide safe and reliable water supply by planning for and constructing appropriately sized storage facilities, redundancies, and alternate (back up) power supplies for key facilities.
- To provide adequate storage capacity to meet operational, fire flow and emergency storage needs.
- To maintain system pressures that meet regulatory requirements and peak demand conditions.
- To provide transmission and distribution pipelines to safely and reliably convey water throughout the water system.
- To provide safe and reliable water that meets regulatory water quality requirements.

- To evaluate a groundwater aquifer storage and recovery program.
- To sustainably utilize and protect groundwater resources.

19.3.2 Significant Environmental Impacts of the Proposed Program

A number of impacts have been identified as significant, but would be mitigated to a level of less-than-significant through implementation of mitigation measures. These impacts are listed in Table ES-1 in the *Executive Summary* of this Draft EIR (DEIR).

19.3.3 Significant and Unavoidable Environmental Impacts of the Proposed Program

The following impacts have been identified as significant and unavoidable:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use (Impact AG-1)
- Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use (Impact AG-3)
- Conflict with or Obstruct Implementation of an Applicable Air Quality Plan (Impact AQ-1)
- Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Non-Attainment Under an Applicable Federal or State Ambient Air Quality Standard (Impact AQ-3)
- Generate a Substantial Amount of GHG Emissions (Impact GHG-1)
- Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing Emissions of GHGs (Impact GHG-2)
- Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level (Impact HYD/WQ-2)
- Cumulative Impacts on Agriculture (Impact CUM-2)
- Cumulative Impacts on Air Quality and GHG (Impact CUM-3
- Cumulative Impacts on Hydrology and Water Quality (Impact CUM-6)

19.4 Alternatives Considered and Eliminated

The following alternatives were considered, but ultimately were eliminated from further analysis for one or more of the following reasons: (1) they would not sufficiently meet most of the Proposed Program objectives; (2) they were determined to be infeasible; or (3) they would not avoid or substantially lessen one or more significant impacts of the Proposed Program:

- **Reduced Program Alternative:** Under this alternative, only a portion of the identified WMP components would be constructed to address rehabilitation/repair needs, capacity issues, and water supply shortfall issues. This alternative was eliminated from consideration because it would not meet the City's responsibility to provide water supply capacity for both existing demand and planned growth.

- **Contiguous Service Area Only Alternative:** Under this alternative, only those CIPs identified within the contiguous service area would be implemented. This alternative was eliminated from consideration because it would not meet the City's responsibility to serve the outlying service areas included within the adopted service area.

- **Alternate Sites Alternative:** The locations of existing facilities needing improvements are known and identified in the CIPs. The exact locations of some new facilities have yet to be finalized; however, in some cases tentative sites have been identified. In general, under the Proposed Program, CIP sites with significant environmental impacts would not be developed, and would be replaced by alternate sites with lesser environmental impacts. Therefore, this alternative was eliminated from consideration because many of the CIPs are site specific, and replacing those sites would require extensive redesign of the City's water infrastructure. For new CIPs not tied to existing facilities, the process of identifying suitable sites already takes into consideration the environmental impacts of those components. Thus, this alternative would not be anticipated to ultimately reduce significant environmental impacts of the Proposed Program and could increase those impacts.

19.5 Alternatives Analysis

The following alternatives were considered for the Proposed Program:

- No Program Alternative

- Deferred Implementation Alternative

- Alternative Sources of Water Supply

These alternatives were identified in the context of the primary environmental concerns raised during EIR scoping, and the significant impacts of the Proposed Program. Section 19.5.3 summarizes the alternatives considered and compares them to the Proposed Program.

19.5.1 No Program Alternative

Characteristics of this Alternative

Under this alternative, no new water supply infrastructure would be constructed or upgraded. Operation of the City's water treatment, pumping, storage, and conveyance infrastructure would continue similar to existing conditions. The existing storage tanks and booster pump stations, groundwater wells, and transmission/distribution pipeline network would continue to operate. Facilities that are currently operating in the contiguous service area and the outlying service areas would continue functioning, but capacity issues would not be addressed and would likely increase over time as the population of the contiguous service areas is projected to increase by

approximately 52 percent (from 255,906 to 388,579) by 2050. The Del Rio and Grayson areas would experience some growth until buildout. The City's outlying water service area in Turlock is already at buildout.

Impact Analysis

Aesthetics

Under this alternative, significant and unavoidable impacts on visual character or quality would be avoided. Because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts on scenic vistas, scenic resources, and light and glare would not occur.

Agricultural Resources

Under this alternative, significant and unavoidable impacts of direct conversion of Important Farmland would be avoided. Because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts on zoning for agricultural use or Williamson Act contracts would not occur.

Air Quality

Under this alternative, significant and unavoidable impacts of conflicts with applicable air quality plans, violation of air quality standards, and cumulatively considerable net increases in criteria pollutants would be avoided. Because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts on sensitive receptors from pollutant concentrations and increases in objectionable odors would not occur.

Biological Resources

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts on biological resources would not occur.

Cultural, Tribal, and Paleontological Resources

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts on archaeological, tribal, or paleontological resources or human remains would not occur.

Geology, Soils, and Seismicity

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to geology, soils, and seismicity would not occur.

Greenhouse Gas Emissions and Energy Resources

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to greenhouse gas emissions, consumption of energy, and energy demand would not occur.

Hazards and Hazardous Materials

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to routine transport, use, or disposal of hazardous materials; upset and accident conditions; proximity of hazardous materials to schools; location on a hazardous materials site or in an airport land use plan; interference with an emergency response plan; or exposure to wildfire would not occur. The potential exists for fire risk to increase as a result of the City's failure to address shortfalls or needed expansion of water supply to meet fire flow requirements.

Hydrology and Water Quality

Under this alternative, significant and unavoidable impacts of groundwater depletion and interference with groundwater recharge would be avoided. Because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to violation of water quality standards, drainage patterns, groundwater recharge, siltation, runoff, and flooding would not occur. However, under this alternative, more wells could go out of production due to water quality concerns, without the installation of new wells or wellhead treatment to address the issue. Therefore, this could adversely affect the City's water supply as groundwater resources may be less available.

Land Use and Planning

Because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to land use and planning would not occur. It is assumed that the City would not approve development which would result in demand for water supply that cannot be met under the No Program Alternative. As such, this alternative would impede attainment of the City's land use plans and policies which rely upon the water supply that would be made available by the Proposed Program.

Noise and Vibration

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to increases in ambient noise levels, groundborne noise or vibration levels, and other noise and vibration impacts would not occur.

Population and Housing

Under this alternative, impacts of long-term inducement of substantial population growth, and the secondary impacts of growth, would be reduced. Because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to inducement of population growth and displacement of population would not occur.

Transportation

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to effectiveness of the circulation system, congestion management programs, design hazards, emergency access, and alternative transportation would not occur.

Utilities and Service Systems

Under this alternative, because no new construction or additional operation of infrastructure would result aside from ongoing operations, impacts related to expansion of wastewater or stormwater drainage facilities, solid waste disposal, and need for additional permitted landfill capacity would not occur. The potential exists for increased impacts related to the need for new or expanded water supply or entitlements as a result of the No Program Alternative, if growth in population and housing proceeds in the absence of additional water supply infrastructure and/or if the existing infrastructure becomes deteriorated or otherwise incapable due to pressure or groundwater quality issues of providing adequate water supplies to the City's water service area.

19.5.2 Deferred Implementation Alternative

Characteristics of this Alternative

Under the Deferred Implementation Alternative, the schedule for construction of all Program-level WMP components would be delayed by 5 years compared to the schedule for implementation of the Proposed Program. Under this alternative, new water supply infrastructure would be constructed or upgraded as indicated for the Proposed Program, but at a later date. Similarly, operation of the City's water treatment, pumping, storage, and conveyance infrastructure would be improved and expanded, but at a slower pace. Maintenance and addition of storage tanks and booster pump stations, groundwater wells, and the transmission/distribution pipeline network would continue, but some shortfalls in capacity or pressure flows may result from the delay in implementation of identified CIPs. Facilities in the contiguous service area and the outlying service areas would continue to operate, but capacity and pressure issues may not be addressed in a timely manner. Development in the City's water service area may be delayed to the extent that construction of necessary infrastructure to support such development would be delayed under this alternative.

Impact Analysis

Aesthetics

Under this alternative, significant and unavoidable impacts on visual character or quality would still occur but would take place later in time. Because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts on scenic vistas, scenic resources, and light and glare would occur but on an extended timeline.

Agricultural Resources

Under this alternative, significant and unavoidable impacts of direct conversion of Important Farmland could be delayed but would remain. Because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts on zoning for agricultural use or Williamson Act contracts would occur later in time.

Air Quality

Under this alternative, significant and unavoidable impacts of conflicts with applicable air quality plans, violation of air quality standards, and cumulatively considerable net increases in criteria pollutants would remain. Because new construction and additional operation of infrastructure

would be implemented as under the Proposed Program, similar impacts on sensitive receptors from pollutant concentrations and increases in objectionable odors would occur, but later in time.

Biological Resources

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts on biological resources would occur, but later in time. Extending the timeframe for implementation of CIPs could allow additional flexibility in timing for site-specific improvements that would allow avoidance of special-status species.

Cultural, Tribal, and Paleontological Resources

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts on archaeological, tribal, or paleontological resources or human remains would occur but later in time.

Geology, Soils, and Seismicity

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to geology, soils, and seismicity would occur but later in time.

Greenhouse Gas Emissions and Energy Resources

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to increased GHG emissions and conflicts with GHG reduction policies; wasteful, inefficient, and unnecessary consumption of energy; and increase in energy demand would occur but later in time.

Hazards and Hazardous Materials

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to routine transport, use, or disposal of hazardous materials; upset and accident conditions; proximity of hazardous materials to schools; location on a hazardous materials site or in an airport land use plan; interference with an emergency response plan; or exposure to wildfire would occur but later in time. The potential exists for fire risk to increase if the extended timeline results in delays in addressing shortfalls or needed expansion of water supply to meet fire flow requirements.

Hydrology and Water Quality

Under this alternative, potential for significant and unavoidable impacts of groundwater depletion would be delayed but could still occur. Because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to violation of water quality standards, drainage patterns, groundwater recharge, siltation, runoff, and flooding would occur, but later in time.

Land Use and Planning

By delaying construction of facilities, this alternative may not fully meet the City's land use plans, which could result in greater impacts than under the Proposed Program.

Noise and Vibration

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to increases in ambient noise levels, groundborne noise or vibration levels, and other noise and vibration impacts would occur but later in time.

Population and Housing

Under this alternative, impacts of long-term inducement of substantial population growth, and related secondary impacts, would remain, but would be delayed as growth would be impeded by the lack of adequate water supply infrastructure.

Transportation

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to effectiveness of the circulation system, congestion management programs, design hazards, emergency access, and alternative transportation would occur but later in time.

Utilities and Service Systems

Under this alternative, because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts related to expansion of wastewater or stormwater drainage facilities, solid waste disposal, and need for additional permitted landfill capacity would occur but later in time.

19.5.3 Alternative Sources of Water Supply

Characteristics of this Alternative

Under this alternative, alternative sources of water supply would be used to address existing system deficiencies and meet increases in demand. This would alter the mosaic of capital improvements needed to deliver water to City customers. This alternative would not ultimately alter the amount of water to be used; however, it would rely on a greater range of sources for that water, aside from groundwater and surface water. Different capital facilities would be required to utilize this water throughout the City's service area compared to those proposed under the Program. The actual facilities would depend upon the sources selected and their relative contributions to the overall supply. The additional sources identified for this alternative are assumed to be in addition to alternative water supply sources already being developed by the City, such as water conservation through the City's water shortage contingency plan, in-lieu groundwater recharge, and Aquifer Storage and Recovery (ASR).

Alternative sources of water supply under this alternative could include the following:

- **Additional Sources of Potable Water:** A MRWTP Phase Three Expansion project may be possible if there is a sizable future conversion of agricultural land to urban uses that would allow for a corresponding redistribution of MID's existing surface water rights.

- **Development of Recycled Water Options:** Recycled water could be used in future Comprehensive Planning Districts. This additional supply, however, may affect potable

water supply needs by supporting additional and future irrigation of golf courses and parks with non-potable water supply sources. The existing non-potable water supply sources, however, may be subject to cut-backs during dry years; the City would need to use groundwater to make up the difference. Recycled water supplies are not subject to cut-backs and, therefore, could reduce groundwater extractions during dry years.

Impact Analysis

Aesthetics

Under this alternative, some new aboveground facilities would be constructed that could have adverse effects on visual resources. These impacts could be greater or less than those of the Proposed Program, depending upon the facilities. For facilities that would be different from those of the Proposed Program, impacts would occur in different locations.

Agricultural Resources

Because new construction and additional operation of infrastructure would be implemented as under the Proposed Program, similar impacts on zoning for agricultural use or Williamson Act contracts would occur with this alternative.

In addition, one of the potential sources of water supply under this alternative would be water previously used for agriculture. As such, it would be dependent upon the conversion of agricultural lands to non-agricultural uses.

Air Quality

The new facilities that would be built under this alternative could result in some construction-related and operational emissions. These impacts could be greater or less than those of the Proposed Program, depending upon the extent of construction required to implement the various water supply options.

Biological Resources

The new facilities that would be built under this alternative could result in impacts to biological resources. These impacts could be greater or less than those of the Proposed Program, depending upon the extent of construction required to implement the various water supply options.

Cultural, Tribal, and Paleontological Resources

The new facilities that would be built under this alternative could result in impacts to cultural, tribal and paleontological resources. These impacts could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities.

Geology, Soils, and Seismicity

The new facilities that would be built under this alternative would result in impacts to geology, soils and mineral resources that are similar to those of the Proposed Program. These impacts could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities.

Greenhouse Gas Emissions and Energy Resources

The new facilities that would be built under this alternative would result in impacts to greenhouse gas emissions and energy resources that are similar to those of the Proposed Program. These impacts could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities.

Hazards and Hazardous Materials

Under this alternative, construction and operation of the proposed facilities could result in the release of, or exposure to, hazardous materials. These impacts could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities.

Hydrology and Water Quality

Under this alternative, new facilities would be constructed that could cause impacts to water quality or affect flooding conditions. These impacts could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities.

The alternative, by using alternative means of addressing system deficiencies and meeting future water demand, would reduce the need for the sources of potable water identified for the Proposed Program (i.e., groundwater and surface water supplies from MID). As such, the impacts related to use of those water sources would be avoided. However, these new sources of water could have their own set of environmental impacts. While the water supply options evaluated under this alternative are very general in nature, examples of impacts include: reductions or changes of instream flows and related effects on water quality and/or instream habitat, injury to other legal holders of water rights, and third-party effects, such as changes in land uses associated with changed water usage patterns. Appropriate mitigation would need to be developed to address any such impacts. No water supplies would be tapped without a prior agreement with their water rights holders.

While altered approaches to groundwater management may be implemented as part of this alternative, the alternative would be required to comply with SGMA and the region's GSP and thus would not involve groundwater pumping beyond the long-term sustainable yield of the aquifer. Therefore, it would not result in overdraft conditions.

Land Use and Planning

Similar to the Proposed Program, this alternative would not result in any development that would have potential to physically divide an established community. This alternative would be consistent with relevant general plans by providing the necessary infrastructure and sources of water to support the development envisioned in those plans.

Noise and Vibration

Under this alternative, construction and operation of the proposed facilities could generate new sources of noise. These impacts could be greater or less than those of the Proposed Program, depending on the extent and location of new facilities.

Population and Housing

This alternative would provide infrastructure that would remove an obstacle to growth. The alternative would therefore be considered growth-inducing and would have related secondary impacts that are similar to those of the Proposed Program.

Transportation

The new facilities that would be built under this alternative would result in impacts to transportation and traffic that are similar to those of the Proposed Program. These impacts could be greater or less than those of the Proposed Program, depending upon the extent and location of new facilities.

Utilities and Service Systems

Under this alternative, construction of new facilities could affect the provision of public services, such as fire and police protection. These impacts could be greater or less than those of the Proposed Program, depending upon the duration of construction and location of new facilities. The alternative would have similar impacts as the Proposed Program in terms of the volume of potable water required. The alternative would not generate substantial need for wastewater and stormwater infrastructure, solid waste disposal, schools, or parks.

19.5.4 Comparison of Alternatives

Table 19-1 compares each of the alternatives analyzed above to the Proposed Program by environmental topic. For each topic, significant impacts of the Proposed Program are summarized; each alternative is noted as having less, similar, or greater impacts in comparison to the Proposed Program.

Table 19-1. Summary of Alternatives and Comparison to the Proposed Program

Impact Category	Proposed Program	No Program Alternative	Deferred Implementation Alternative	Alternative Sources of Water Supply
Aesthetics and Visual Resources	Short-term and long-term degradation of visual character or quality; substantial source of light and glare	Less	Delayed	Similar
Agricultural Resources	Direct or indirect conversion of Important Farmland	Less	Delayed	Similar
Air Quality	Conflict with applicable air quality plans; violate air quality standards; cumulatively considerable net increase in criteria pollutants; expose sensitive receptors to substantial pollutant concentrations	Less	Delayed	Similar

Impact Category	Proposed Program	No Program Alternative	Deferred Implementation Alternative	Alternative Sources of Water Supply
Biological Resources	Impacts on special-status plants, vernal pool branchiopods, VELB, special-status fishes, western pond turtle, burrowing owl, raptors including special-status species, passerine species and birds protected under the MBTA, riparian habitat and other sensitive natural communities, federal protected wetlands, wildlife movement, local ordinances or policies	Less	Delayed	Similar
Cultural, Tribal, and Paleontological Resources	Impacts on historical, archaeological, tribal, or paleontological resources or human remains	Less	Delayed	Similar
Geology, Soils, and Seismicity	Impacts from expansive soils; erosion; or subsidence, liquefaction, or collapse	Less	Delayed	Similar
Greenhouse Gas Emissions and Energy Resources	Substantial GHG emissions or conflict with applicable plan or policy	Less	Delayed	Similar
Hazards and Hazardous Materials	Upset and accident conditions involving the release of hazardous materials	Less	Delayed	Similar
Hydrology and Water Quality	Violate water quality standards or otherwise degrade water quality; deplete groundwater supplies; alter drainage patterns	Less	Delayed	Less
Land Use and Planning	No significant impacts	Greater (potential to conflict with land use plans, policies, and regulations)	Greater (potential to conflict with land use plans, policies, and regulations)	Similar
Noise and Vibration	Violate noise standards; excessive groundborne vibration or noise; increase in ambient noise levels	Less	Delayed	Similar

Impact Category	Proposed Program	No Program Alternative	Deferred Implementation Alternative	Alternative Sources of Water Supply
Population and Housing	Inducement of substantial population growth	Less	Delayed	Greater
Transportation	No significant impacts	Less	Delayed	Similar
Utilities and Service Systems	No significant impacts	Less	Delayed	Similar

19.6 Environmentally Superior Alternative

Of the alternatives evaluated in detail above, the No Program Alternative is considered environmentally superior as, with one exception, it would reduce or avoid the impacts of the Proposed Program. This alternative, however, would result in increased impacts related to land use and planning as growth planned by the City would not be able to proceed because necessary infrastructure to support development would not be constructed.

Under CEQA, if the "no project" alternative is identified as environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives. Therefore, the Deferred Implementation Alternative, has been selected as environmentally superior; this alternative would avoid impacts during the interim period during which the program would be delayed (although the impacts would eventually occur). The Deferred Implementation Alternative would result in increased impacts related to land use and planning as growth planned by the City would not be able to proceed in the interim period while necessary infrastructure to support development is not completed. As such, the Deferred Implementation Alternative would not as effectively meet program objectives, as necessary infrastructure to address system deficiencies and support planned development would be delayed.

The Alternative Sources of Water Supply Alternative is not considered to be environmentally superior because, while it would reduce some impacts through use of alternative water supplies, it would be anticipated to have impacts that are, on the whole, similar to those of the Proposed Program.

For this reason, the Proposed Program has been selected for implementation, as it would have the same impacts over the long term and would more fully meet Program objectives.

Chapter 20
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Chapter 21
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CHAPTER 19. ALTERNATIVES

None cited.

Appendix A

Scoping Materials

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Notice of Preparation and Distribution List

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NOTICE OF PREPARATION

Notice of Preparation of a Draft Environmental Impact Report for the Water Master Plan

Date: August 26, 2016

To: State Clearinghouse, and Responsible and Trustee Agencies

The City of Modesto (City) will serve as the Lead Agency under the California Environmental Quality Act in preparing an Environmental Impact Report (EIR) for the Water Master Plan (Program or Proposed Program). The Proposed Program is located in the City of Modesto and other communities in Stanislaus County. The City is seeking the views of your agency regarding the scope and content of the environmental information which is germane to your agency's statutory responsibilities in conneclion with the Proposed Program. Your agency may need to use the subject EIR when considering any necessary permit or other approval for lhe Program. Interested parties and individuals are also invited to comment on alternatives to, concerns with. and environmental issues or potential effects of the project. Please share this notice with anyone you feel may be interested in the Program.

The Proposed Program description, location, and the potential environmental effects are contained in the attached materials and available at http://www.modestogov.com/847/Water-Plans-Reports.

Public Scoping Meeting: A public scoping meeting will be held to receive agency and public comments on the scope of the EIR for the Proposed Program.

Date and Time: September 6, 2016 at 5:00 pm

Location: City Hall
1010 10th Street, Room 2001
Modesto, CA 95354

Due to the time limits mandated by State law, your written response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to: Jack Bond, Senior Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 10th Street)
Modesto, CA 95353
jbond@modestogov.com

Jack Bond
Senior Civil Engineer

8/25/16
Date

Aviso de Preparación de un reporte preliminar de impacto ambiental para el Plano Maestro de Agua

Fecha: 26 de agosto de 2016

Para: State Clearinghouse, y Agencias Responsables y Fideicomisarios

La Ciudad de Modesto (Ciudad) va servir como la agencia principal bajo la Ley de Calidad Ambiental de California (California Environmental Quality Act, CEQA) en preparación de un informe de impacto ambiental (Environmental Impact Report, EIR) para el Plano Maestro de Agua del 2016 (Programa Propuesto). El Programa Propuesto está localizado en la Ciudad y en otras comunidades del Condado de Stanislaus. La Cuidad está buscando el punto de vista de su agencia en relación con la cobertura y el contenido de la información ambiental cual es relacionado a las responsabilices legales de su agencia en conexión con el Programa Propuesto. Su agencia pueda necesitar el uso del sujeto informe de impacto ambiental cuando considere cualquier permiso necesario o alguna aprobación para el Programa Propuesto. Partidos o individuos interesados también son invitados a comentar sobre alternativas para, preocupaciones sobre, y asuntos ambientales o efectos potenciales del Programa Propuesto. Por favor comparta este aviso con cualquier persona que usted piense que tuviera interés sobre el Programa Propuesto.
La descripción, localidad, y posibles efectos ambientales del Programa Propuesto, están contenidos en los materiales incluidos.

Junta Pública: Una Junta Publica sobre la cobertura se va a llevar acabo para recibir comentarios de las agencias y el público sobre la cobertura del informe de impacto ambiental por el Programa Propuesto.

Fecha y Tiempo:	El 6 de septiembre del 2016 a las 5:00 pm
Lugar:	Municipio (City Hall) 1010 10th Street, Room 2001 Modesto, CA 95354

Debido a los límites de tiempo establecidos por las leyes del estado, debe mandar su repuesta en escrito lo más pronto posible pero **no más tarde de 30 días después de recibir este aviso**.

Por favor mande su respuesta a:	Jack Bond, Senior Civil Engineer City of Modesto Utilities Department P.O. Box 642 (1010 10th Street) Modesto, CA 95353 jbond@modestogov.com

J. M. Bond — 8/25/16

Jack Bond — Fecha

Master Notification list for WMP NOP

Organization	Name	Title	Street Address	City	State	Zip Code	Phone Number	Email
Turlock Irrigation District	Casey Hashimoto	General Manager	P.O. Box 949	Turlock	CA	95381-0949	209-883-8222	
Modesto Irrigation District	Patrick Ryan	Civil Engineering Manager	1231 Eleventh St	Modesto	CA	95352		patrick.ryan@mid.org
City of Ceres	Michael Brinton	Public Works Deputy Director	2220 Hackett	Ceres	CA	95307		Michael.Brinton@ci.ceres.ca.us
City of Turlock	Garner Reynolds	Regulatory Affairs Manager	156 S. Broadway, Suite 270	Turlock	CA	95380		greynolds@turlock.ca.us
City of Waterford	(Currently vacant)	City Manager	312 E Street	Waterford	CA	95386		
Stanislaus LAFCO	Sarah Lytle-Pinhey	Executive Officer	1010 Tenth Street, 3rd Floor	Modesto	CA	95354		
StanCOG	Rosa De Leon Park	Executive Director	1111 I Street, Suite 308	Modesto	CA	95354		
Stanislaus County	Matt Machado	Stanislaus County Public Works Director	1716 Morgan Rd	Modesto	CA	95358		machadom@stancounty.com
Stanislaus County	Miguel Galvez	Senior Planner	1010 Tenth Street, 3rd Floor	Modesto	CA	95354		
Stanislaus County	Walter Ward	Manager, Water Resources Program	3800 Cornucopia Way, Suite C	Modesto	CA	95358		wward@envres.org
Stanislaus County Clerk's Office	Lee Lundrigan	County Clerk-Recorder	1021 "I" Street	Modesto	CA	95354		
Stanislaus County Library	Reference Desk		1500 "I" Street	Modesto	CA	95354		
Modesto Police Department	Galen Carroll	Chief of Police	600 10th Street	Modesto	CA	95354		
Modesto City/County Airport	Mark Germanowski	Airport Manager	617 Airport Way	Modesto	CA	95354		

Non-governmental organizations	Name	Title	Street Address	City	State	Zip Code	Phone Number	Email
The Nature Conservancy	Laura Jensen		555 Capitol Mall, Suite 1290	Sacramento	CA	95814		
Stanislaus County Farm Bureau	Wayne Zipser	Executive Manager	1201 L Street, PO Box 3070	Modesto	CA	95353-3070		
Audubon California	Meghan Hertel	Working Lands Director	400 Capitol Mall, Suite 1535	Sacramento	CA	95814		mhertel@audubon.org
Friends of the Tuolumne River	Allison Boucher		1900 NE 3rd Street, Ste 106, PMB 314	Bend	OR	97701		
Tuolumne River Trust	Patrick Koepele	Executive Director	829 Thirteenth Street	Modesto	CA	95354		

Regulatory Agencies	Name	Title	Street Address	City	State	Zip Code	Phone Number	Email
U.S. Fish and Wildlife Service	Jana Affonso	Deputy Division Chief, Sacramento Valley Branch	2800 Cottage Way, Room W-2605	Sacramento	CA	95825		
NOAA National Marine Fisheries	Maria Rea	Assistant Regional Administrator, Central Valley Office	650 Capitol Mall, Suite 5-100	Sacramento	CA	95814		
Central Valley Flood Protection Board			3310 El Camino Avenue, Room 151	Sacramento	CA	95821		
San Joaquin Valley Air Pollution Control District	Georgia Stewart	Planning Division	1990 East Gettysburg Avenue	Fresno	CA	93726-0244		georgia.stewart@valleyair.org
U.S. Army Corp of Engineers, Sacramento District	Kate Dadey	Chief, California South Branch	1325 J Street, Room 1350	Sacramento	CA	95814		

School Districts	Name	Title	Street Address	City	State	Zip Code	Phone Number	Email
Empire Union School District			116 N. McClure Rd	Modesto	CA	95357		
Hart Ransom School District	Matthew Shipley	Superintendent	3920 Shoemaker Ave	Modesto	CA	95358	209-523-9996	mshipley@hartransom.org
Paradise Elementary School	Heath Thomason	Superintendent/Principal	3361 California Ave	Modesto	CA	95358	(209) 524-0184	hthomason@paradiseesd.org
Salida Union School District		Superintendent	4801 Sisk Rd	Salida	CA	95358		kkent@salida.k12.ca.us
Sylvan Union School District	Debra Hendricks	Superintendent	605 Sylvan Ave	Modesto	CA	95355		dhendricks@sylvan.k12.ca.us
Stanislaus Union School District	Britta M. Skavdahl	Superintendent	2410 Janna Ave	Modesto	CA	95350		
Shiloh k-8 School			6633 Paradise Rd	Modesto	CA	95358		
Orville Wright School	Victoria Kyte (No longer wo	Principal	1602 Monterey Avenue	Modesto	CA	95354		
Modesto City Schools District	Pam Able	District Superintendent	426 Locust Street	Modesto	CA	95351		

Fire Districts	Name	Title	Street Address	City	State	Zip Code	Phone Number	Email
Burbank-Paradise Fire District			1313 Beverly Drive	Modesto	CA	95351		
City of Ceres Fire Department	Chief	Nicholes	2755 Third Street	Ceres	CA	95307		
Salida Fire Protection District			P.O. Box 1335	Salida	CA	95368		
Turlock City Fire Department	Robert Talloni	Chief	244 N. Broadway	Turlock	CA	95380-5454		
Turlock Rural Fire District			690 W. Canal Dr	Turlock	CA	95380		
Woodland Avenue Fire Protection District	Mike Passalaqua	District Chief	3300 Woodland Ave	Modesto	CA	95358		
Modesto Fire Department	Sean Slamon (No longer fir	Fire Chief	600 11th Street	Modesto	CA	95354		

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State Clearinghouse
Notice of Preparation Posting

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STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

Notice of Preparation

August 26, 2016

To: Reviewing Agencies

Re: Water Master Plan
SCH# 2016082069

Attached for your review and comment is the Notice of Preparation (NOP) for the Water Master Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jack Bond
City of Modesto
P.O. Box 642
1010 Tenth Street
Modesto, CA 95353

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2016081069

Project Title: Water Master Plan

Lead Agency: City of Modesto — Contact Person: Jack Bond

Mailing Address: P.O. Box 642 — Phone:

City: Modesto — Zip: 95353 — County: Stanislaus

Project Location: County: Stanislaus — City/Nearest Community: Modesto

Cross Streets: Various — Zip Code: various

Longitude/Latitude (degrees, minutes and seconds): varies° ___ ' ___ " N / ___ ° ___ ' ___ " W Total Acres: Various

Assessor's Parcel No.: Various — Section: ___ Twp.: ___ Range: ___ Base: ___

Within 2 Miles: State Hwy #: 108, 132, 99 — Waterways: Tuolumne River, Stanislaus River, Dry Creek

Airports: Modesto City-County Airport — Railways: Southern Pacific — Schools: various

Document Type:

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ___ Other: ___

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other: ___

Governor's Office of Planning & Research
AUG 25 2016
STATE CLEARINGHOUSE

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan ☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan ☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.) ☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Water System

Development Type:

☐ Residential: Units ___ Acres ___
☐ Office: Sq.ft. ___ Acres ___ Employees ___
☐ Commercial: Sq.ft. ___ Acres ___ Employees ___
☐ Industrial: Sq.ft. ___ Acres ___ Employees ___
☐ Educational: ___
☐ Recreational: ___
☒ Water Facilities: Type water infrastructure MGD ___

☐ Transportation: Type ___
☐ Mining: Mineral ___
☐ Power: Type ___ MW ___
☐ Waste Treatment: Type ___ MGD ___
☐ Hazardous Waste: Type ___
☐ Other: ___

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☒ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other: ___

Present Land Use/Zoning/General Plan Designation:

Various

Project Description: *(please use a separate page if necessary)*

The Proposed Program would consist of a Capital Improvement Program (CIP) for system-wide implementation needed to ensure adequate water infrastructure and services are available to meet water demand requirements under both existing and future developed conditions. The CIPs proposed in the Master Plan include water storage tanks, groundwater wells, wellhead treatment or blending facilities, pump stations, extension of water pipelines, and repair or replacement of water pipelines. Other CIPs include installation of back-up power generators at various booster pump stations for tanks and wells. Additionally, the Master Plan includes construction of a new corporation yard and an aquifer storage recovery program. The CIPs would be implemented within the City's contiguous and outlying service areas.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Document Details Report
State Clearinghouse Data Base

Document Details Report
State Clearinghouse Data Base

Date Received 08/26/2016 *Start of Review* 08/26/2016 *End of Review* 09/26/2016

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County: Stanislaus AW

SCH# 2016082069

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Dept. of Water Resources
Resources Agency
Nadell Gayou

Fish and Game

- ☐ **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- ☐ **Fish & Wildlife Region 1**
  Curt Babcock
- ☐ **Fish & Wildlife Region 1E**
  Laurie Harnsberger
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- ☐ **Fish & Wildlife Region 3**
  Craig Weightman
- ☐ **Fish & Wildlife Region 4**
  Julie Vance
- ☐ **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- ☐ **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- ☐ **Fish & Wildlife Region 6 I/M**
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- ☐ **Dept. of Fish & Wildlife M**
  William Paznokas
  Marine Region

Other Departments

- ☐ **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- ☐ **Depart. of General Services**
  Public School Construction
- ☐ **Dept. of General Services**
  Cathy Buck/George Carollo
  Environmental Services Section
- ☐ **Delta Stewardship Council**
  Kevan Samsam
- ☐ **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- ☐ **Delta Protection Commission**
  Erik Vink
- ☐ **OES (Office of Emergency Services)**
  Monique Wilber
- ■ **Native American Heritage Comm.**
  Debbie Treadway
- ☐ **Public Utilities Commission**
  Supervisor
- ☐ **Santa Monica Bay Restoration**
  Guangyu Wang
- ☐ **State Lands Commission**
  Jennifer Deleong
- ☐ **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- ☐ **Caltrans - Division of Aeronautics**
  Philip Crimmins
- ☐ **Caltrans – Planning HQ LD-IGR**
  Terri Pencovic
- ☐ **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- ☐ **Caltrans, District 1**
  Rex Jackman
- ☐ **Caltrans, District 2**
  Marcelino Gonzalez
- ☐ **Caltrans, District 3**
  Eric Federicks – South
  Susan Zanchi - North
- ☐ **Caltrans, District 4**
  Patricia Maurice
- ☐ **Caltrans, District 5**
  Larry Newland
- ☐ **Caltrans, District 6**
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- ☐ **Caltrans, District 11**
  Jacob Armstrong
- ☐ **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- ☐ Airport & Freight
  Cathi Slaminski
- ☐ Transportation Projects
  Nesamani Kalandiyur
- ☐ Industrial/Energy Projects
  Mike Tollstrup
- ☐ **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- ☐ **State Water Resources Control Board**
  Cindy Forbes – Asst Deputy
  Division of Drinking Water
- ☐ **State Water Resources Control Board**
  Div. Drinking Water # 10
- ☐ **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- ☐ **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- ☐ **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- ☐ **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- ☐ **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- ☐ **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- ☐ **RWQCB 3**
  Central Coast Region (3)
- ☐ **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- ☐ **RWQCB 5S**
  Central Valley Region (5)
- ☐ **RWQCB 5F**
  Central Valley Region (5)
  Fresno Branch Office
- ☐ **RWQCB 5R**
  Central Valley Region (5)
  Redding Branch Office
- ☐ **RWQCB 6**
  Lahontan Region (6)
- ☐ **RWQCB 6V**
  Lahontan Region (6)
  Victorville Branch Office
- ☐ **RWQCB 7**
  Colorado River Basin Region (7)
- ☐ **RWQCB 8**
  Santa Ana Region (8)
- ☐ **RWQCB 9**
  San Diego Region (9)

- ☐ **Other** _____
- ☐ _____
  Conservancy

Last Updated 7/19/2016

FILED
2016 AUG 26 AM 8:54
STANISLAUS CO. CLERK-RECORDER
Jennifer Mercado

NOTICE OF PREPARATION

Notice of Preparation of a Draft Environmental Impact Report for the Water Master Plan

Date: August 26, 2016

To: State Clearinghouse, and Responsible and Trustee Agencies

The City of Modesto (City) will serve as the Lead Agency under the California Environmental Quality Act in preparing an Environmental Impact Report (EIR) for the Water Master Plan (Program or Proposed Program). The Proposed Program is located in the City of Modesto and other communities in Stanislaus County. The City is seeking the views of your agency regarding the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the Proposed Program. Your agency may need to use the subject EIR when considering any necessary permit or other approval for the Program. Interested parties and individuals are also invited to comment on alternatives to, concerns with, and environmental issues or potential effects of the project. Please share this notice with anyone you feel may be interested in the Program.

The Proposed Program description, location, and the potential environmental effects are contained in the attached materials and available at http://www.modestogov.com/847/Water-Plans-Reports.

Public Scoping Meeting: A public scoping meeting will be held to receive agency and public comments on the scope of the EIR for the Proposed Program.

Date and Time:	September 6, 2016 at 5:00 pm
Location:	City Hall 1010 10th Street, Room 2001 Modesto, CA 95354

Due to the time limits mandated by State law, your written response must be sent at the earliest possible date but **not later than 30 days after receipt of this notice**.

Please send your response to: Jack Bond, Senior Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 10th Street)
Modesto, CA 95353
jbond@modestogov.com

Jack Bond
Senior Civil Engineer

8/25/16
Date

Aviso de Preparación de un reporte preliminar de impacto ambiental para el Plano Maestro de Agua

Fecha: 26 de agosto de 2016

Para: State Clearinghouse, y Agencias Responsables y Fideicomisarios

La Ciudad de Modesto (Ciudad) va servir como la agencia principal bajo la Ley de Calidad Ambiental de California (California Environmental Quality Act, CEQA) en preparación de un informe de impacto ambiental (Environmental Impact Report, EIR) para el Plano Maestro de Agua del 2016 (Programa Propuesto). El Programa Propuesto está localizado en la Ciudad y en otras comunidades del Condado de Stanislaus. La Cuidad está buscando el punto de vista de su agencia en relación con la cobertura y el contenido de la información ambiental cual es relacionado a las responsabilices legales de su agencia en conexión con el Programa Propuesto. Su agencia pueda necesitar el uso del sujeto informe de impacto ambiental cuando considere cualquier permiso necesario o alguna aprobación para el Programa Propuesto. Partidos o individuos interesados también son invitados a comentar sobre alternativas para, preocupaciones sobre, y asuntos ambientales o efectos potenciales del Programa Propuesto. Por favor comparta este aviso con cualquier persona que usted piense que tuviera interés sobre el Programa Propuesto.
La descripción, localidad, y posibles efectos ambientales del Programa Propuesto, están contenidos en los materiales incluidos.

Junta Pública: Una Junta Publica sobre la cobertura se va a llevar acabo para recibir comentarios de las agencias y el público sobre la cobertura del informe de impacto ambiental por el Programa Propuesto.

Fecha y Tiempo:	El 6 de septiembre del 2016 a las 5:00 pm
Lugar:	Municipio (City Hall) 1010 10th Street, Room 2001 Modesto, CA 95354

Debido a los límites de tiempo establecidos por las leyes del estado, debe mandar su repuesta en escrito lo más pronto posible pero **no más tarde de 30 días después de recibir este aviso**.

Por favor mande su respuesta a:	Jack Bond, Senior Civil Engineer City of Modesto Utilities Department P.O. Box 642 (1010 10th Street) Modesto, CA 95353 jbond@modestogov.com

Jack Bond

Fecha 8/25/16

A. Project Description

1. Introduction

As the lead agency responsible for compliance with the California Environmental Quality Act (CEQA), the City of Modesto (City) has determined that the newly developed 2016 Water Master Plan (Program or Proposed Program) has potential to result in a significant impact on the physical environment, and has decided to prepare an Environmental Impact Report (EIR) to provide ample opportunity for public disclosure and participation in the planning and decision making process. The Proposed Program would consist of several Capital Improvement Projects (CIPs) collectively intended for system-wide implementation needed to deliver safe and reliable water, which would effectively meet water demand requirements under both existing and future developed conditions. Further details of the Proposed Program are provided below.

The purpose of the draft EIR process is to identify and evaluate possible environmental impacts of the Program, and consider mitigation measures and feasible alternatives to avoid, reduce, or compensate for any significant impacts on environmental resources, while still achieving the primary Program objectives.

This document, which serves as the Notice of Preparation (NOP) required by CEQA and the State CEQA Guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq.), contains a brief description of the Program, including its goals and objectives, and possible environmental impacts. It also provides an overview of the opportunities for participation in review of the EIR, along with contact information.

2. Background

The City periodically reevaluates its water service system through development of Water Master Plans (also referred to as Water System Engineer's Reports [WSERs]). The Proposed Program updates and replaces the City's 2010 WSER and includes a variety of CIPs to improve the City's water service system.

The City has been providing potable water service to its urban area since 1895 through the purchase and acquisition of several private water companies and, as a result, has become the primary domestic water purveyor in Stanislaus County. In the early 1990s, the City, Modesto Irrigation District (MID), and the Del Este Water Company formed a partnership to use a portion of MID's surface water rights for municipal uses. The resulting Modesto Regional Water Treatment Plant (MRWTP) was completed in 1995. The MRWTP, in addition to providing water storage and delivery, initially provided 30 million gallons per day (mgd) of treated surface water to the City. In combination with groundwater resources, the MRWTP meets the City's water supply needs for those municipal customers within the City's Sphere of Influence (SOI) north of the Tuolumne River (southern boundary of MID's service area), including the communities of Salida and Empire. For a number of years, the City and MID have been working together on the MRWTP Phase Two Expansion, which recently became operational and has capacity to treat an additional annual average of 12 mgd, for an annual average total of up to 42 mgd. The initial

phase of the MRWTP significantly reduced the City's reliance on groundwater pumping and eliminated the emerging groundwater overdraft condition at the time.

Water treatment, pumping, storage, and conveyance infrastructure is operated and maintained by the City's Utilities Services Department, Water Operations Division. Potable water resources delivered by the City's system to customers originate from two sources: treated surface water purchased from MID and groundwater pumped from the many wells scattered throughout the contiguous service area and the outlying service areas. The MRWTP is owned and operated by MID and is located approximately 10 miles east of the city limits near the Modesto Reservoir. Outlying areas do not receive treated water from the MRWTP and rely solely on groundwater. The key components of the City's water system are storage tanks, groundwater wells, and a transmission/distribution pipeline network.

In addition to making improvements related to the City's water system components, the City is proposing to implement an aquifer storage and recovery program.

3. Program Purpose and Objectives

The goal of the 2016 Water Master Plan is to accommodate the water supply needs of the population and land uses described in the City's Urban Area General Plan Amendment (General Plan Amendment) and community plans of service areas outlying the City's urban area or SOI. The Proposed Program is intended to meet the following objectives:

- Implement the City's economic goals and Urban Area General Plan by planning for, and providing, sewer infrastructure in a timely and cost-effective manner to serve new and existing development.
- Continue the City's policy of providing affordable and attractive water rates.
- Repair and replace aging water infrastructure.
- Ensure adequate water infrastructure and services are available to serve new growth within the City's SOI.
- Provide an adequate funding mechanism to pay for necessary improvements.
- Require new development to pay for infrastructure necessary to serve it.
- Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

4. Program Location

The Proposed Program is located in the City of Modesto and other communities in Stanislaus County (see **Figure** 1). The project area encompasses two distinct customer location categories: (1) the contiguous service area and (2) outlying service areas. The City's contiguous service area is limited to the current SOI, Salida, North Ceres, and some unincorporated

Stanislaus County "islands" within and adjacent to the SOI (Empire is within the SOI). The outlying service areas include Del Rio, Ceres (Walnut Manor), Grayson, and a portion of the City of Turlock. These areas are shown in **Figure 2**. Collectively, the contiguous service area and outlying service areas constitute the "study area" for the EIR.

5. Existing Facilities and Operations

The City supplies water to its SOI and outlying areas identified above via surface water supplies (treated water from the MRWTP) and groundwater supplies. Existing City water supply and treatment infrastructure includes storage tanks, groundwater wells, and transmission/distribution pipelines.

6. Program Description

The Proposed Program is the collection of CIPs proposed in the 2016 Water Master Plan. These CIPs include improvements to existing water storage tanks, and construction and operation of new water storage tanks, groundwater wells, wellhead treatment or blending facilities, pump stations, extension of water pipelines, and repair or replacement of water pipelines. Other CIPs include installation of generators for back-up power at various booster pump stations for tanks and wells, upgrades to the Supervisory Control and Data Acquisition (SCADA) system to improve the City's management of the water system, and installation of fencing and security measures to be implemented at well and tank sites. Additionally, the 2016 Water Master Plan includes construction of a new corporation yard and an aquifer storage recovery program.

The CIPs would be implemented within the City's contiguous and outlying service areas. The exact locations of some of the proposed new facilities have yet to be finalized; where tentative sites have been identified, these locations will be evaluated in the draft EIR.

7. Topics to Be Analyzed in the EIR

The City has prepared this NOP pursuant to CEQA Guidelines Section 15082. Based on the Proposed Program's potential for significant impacts on the environment, the City has decided to prepare an EIR. The EIR will further assess the Proposed Program's effects on the environment, identify significant impacts, and indicate feasible mitigation measures to reduce or eliminate potentially significant environmental impacts. An analysis of alternatives to the Proposed Program will also be included in the EIR. Topics to be analyzed in the EIR include, but are not necessarily limited to, the following:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Geomorphology
- Land Use and Planning
- Noise and Vibration
- Recreation

- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Water Quality
- Cumulative Impacts
- Irreversible Impacts

Responses received to this NOP may modify or add to the preliminary assessment of potential issues addressed in the EIR.

8. Environmental Process and Public Scoping Meeting

This NOP initiates the CEQA process through which the City will refine the range of issues and project alternatives to be addressed in the draft EIR. Comment is invited on the proposal to prepare the EIR and on the scope of issues to be included in the EIR.

Please submit any comments within 30 days of receipt of this notice to the City (see *Contact Information* below). In conjunction with the 30-day review period for the NOP, the City will hold a scoping meeting to provide an additional opportunity to learn about the project, ask questions, and provide comments about the scope and content of the information to be addressed in the draft EIR. The scoping meeting will be held at 5:00 pm on September 6, 2016 at the following location:

City Hall
1010 Tenth Street, Room 2001
Modesto, CA 95354

After the 30-day review period for the NOP is complete and all comments are received, a draft EIR will be prepared in accordance with CEQA, as amended (Public Resources Code [PRC] Section 21000 et seq.), and the State CEQA Guidelines (PRC Section 15000 et seq.).

Once the draft EIR is completed, it will be made available for a 45-day public review and comment period. Copies of the draft EIR will be sent directly to those agencies commenting on the NOP, and will also be made available to the public at a number of locations, including the City's offices and public libraries in the area. Information about availability of the draft EIR will also be posted on the following website: http://www.modestogov.com/847/Water-Plans-Reports.

9. Contact Information

For further information, contact:

Jack Bond, Senior Civil Engineer
City of Modesto Utilities Services Department
1010 Tenth Street, Suite 4500
Modesto, CA 95354
P.O. Box 642, Modesto, CA 95353
jbond@modestogov.com

Additional information relevant to the Program and the draft EIR can also be found online at the following website: http://www.modestogov.com/847/Water-Plans-Reports.

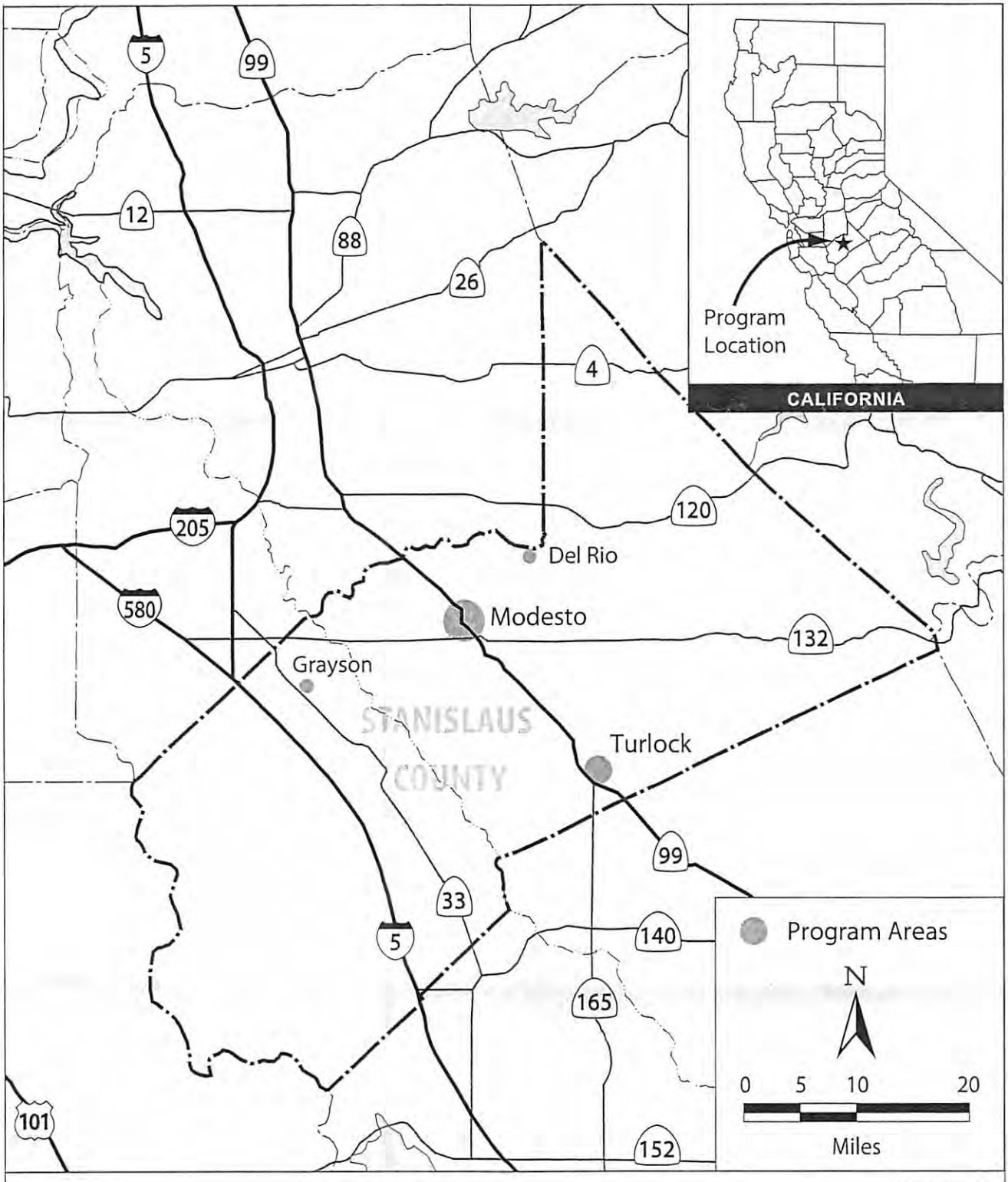
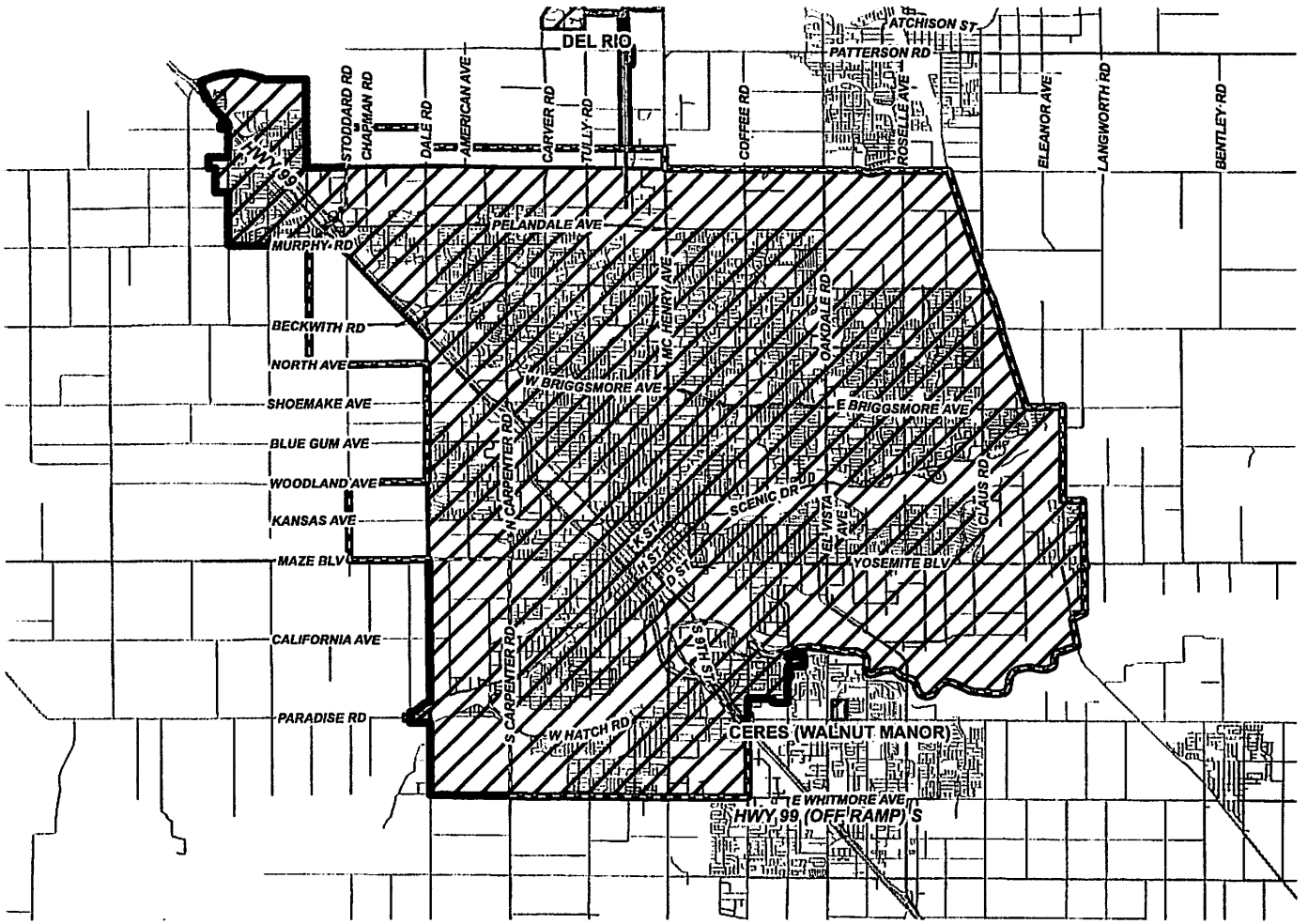
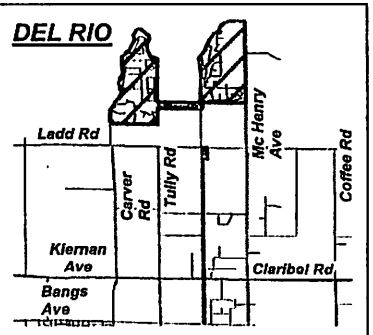


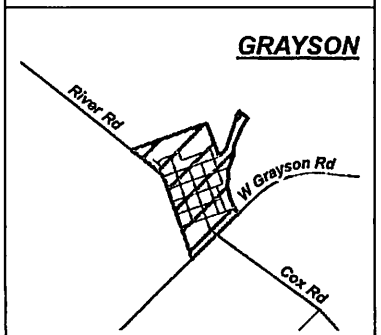
Figure 1
Project Location

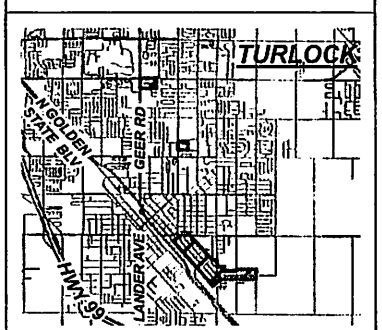
Prepared by:
Horizon
WATER and ENVIRONMENT

City of Modesto Water Master Plan Update









Legend

- Outlying Service Area Names
- Sphere of Influence
- Study Area Boundary*
- Contiguous Service Area
- Roads

*This is the maximum area; actual boundary will be determined by future council action

Prepared by: Horizon Water and Environment

Figure 2
Study Area

City of Modesto Water Master Plan

Join us for a
CEQA public scoping meeting
on the
Water Master Plan

The City of Modesto (City) is preparing an environmental impact report (EIR) for the Water Master Plan (Proposed Program) pursuant to the California Environmental Quality Act (CEQA). The Proposed Program is located in the City of Modesto and other communities in Stanislaus County and would consist of a Capital Improvement Program (CIP) for system-wide implementation needed to deliver safe and reliable water, which will effectively meet water demand requirements under both existing and future developed conditions. The City requests input from interested individuals, public agencies, and other parties regarding the scope and content of the EIR during the public scoping period. The scoping period begins on August 26, 2016 and ends on September 26, 2016. During this period, the City will hold a public meeting on the following date and location.

_____

September 6, 2016 at 5:00 P.M.
City Hall
1010 10th Street, Room 2001
Modesto, CA 95354

To submit comments, contact the following:

Jack Bond
City of Modesto Utilities Department
P.O. Box 642
Modesto, CA 95353
jbond@modestogov.com

If special assistance is required to participate in the public scoping meeting, please contact Michael Stevenson (Michael@horizonh2o.com, 510-986-1852). Auxiliary aides and services are available to individuals with disabilities upon request.

Public Meeting Materials

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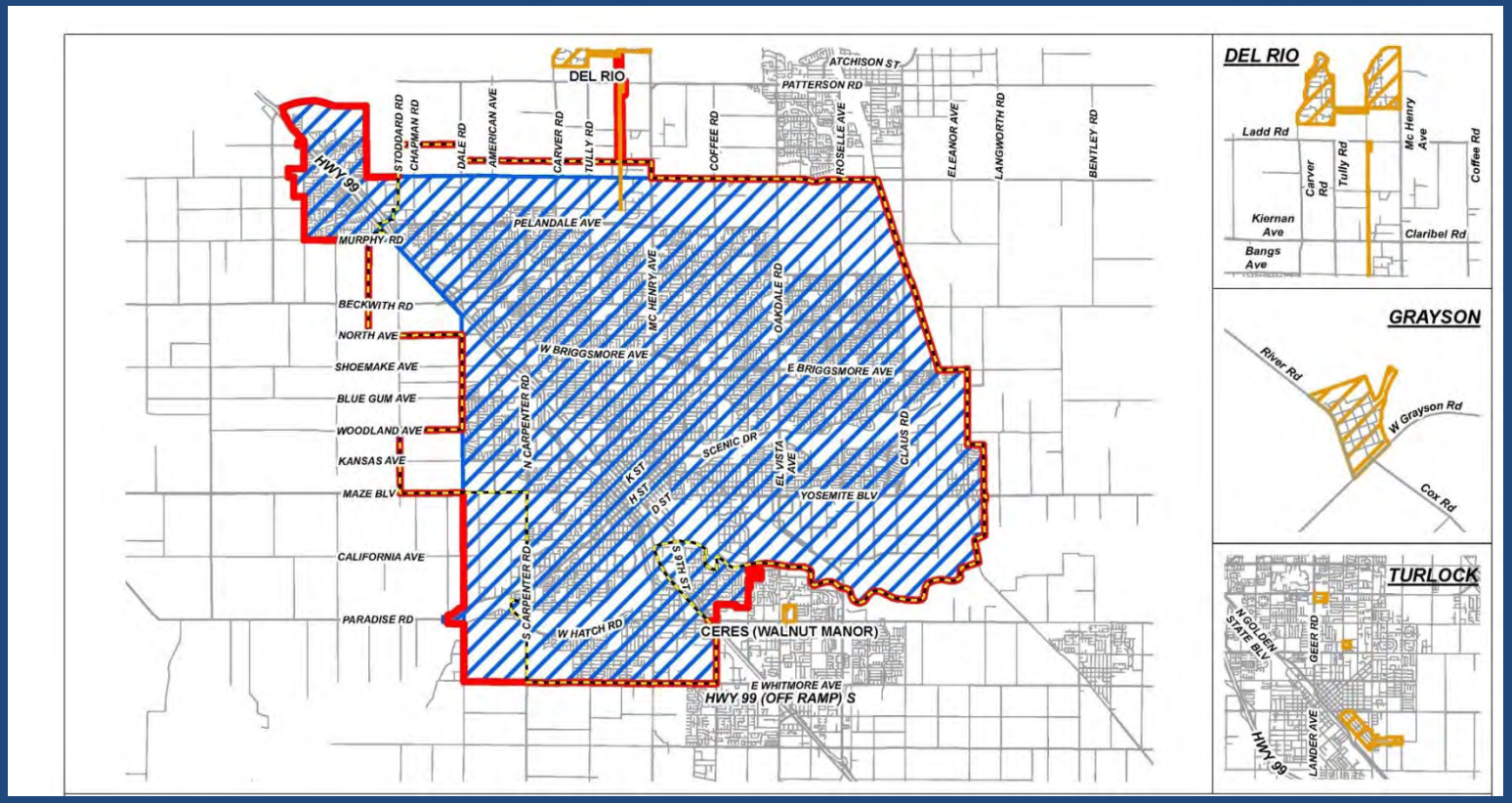
City of Modesto

Water Master Plan

CEQA Scoping Meeting – September 6, 2016



Introductions

City of Modesto

- Jack Bond - Project Manager

Horizon Water and Environment

- Michael Stevenson – Principal-in-Charge
- Debra Lilly – CEQA Project Coordinator

Horizon
WATER and ENVIRONMENT

Meeting Agenda

- Meeting purpose and protocol
- Project overview
- Overview of the California Environmental Quality Act
- Receipt of public comment

Horizon
WATER and ENVIRONMENT

Meeting Purpose

CEQA Scoping: To allow the public and agencies to provide input on the scope and content of the project's environmental impact analysis.

Scoping comments inform the scope and nature of the CEQA environmental analysis.

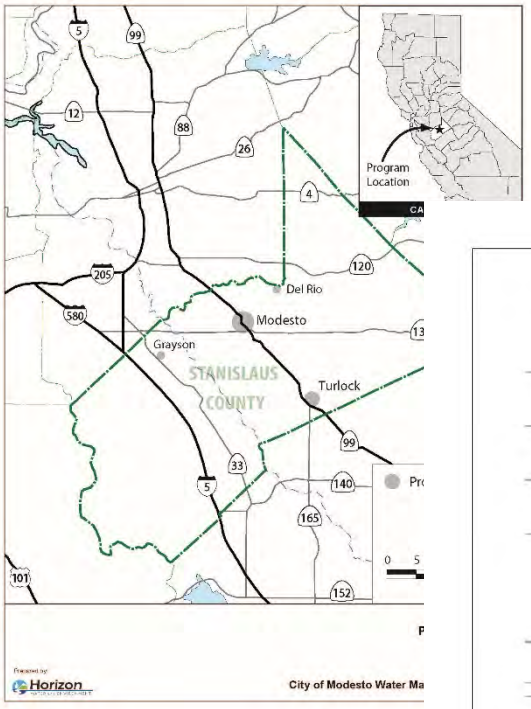
Horizon
WATER and ENVIRONMENT

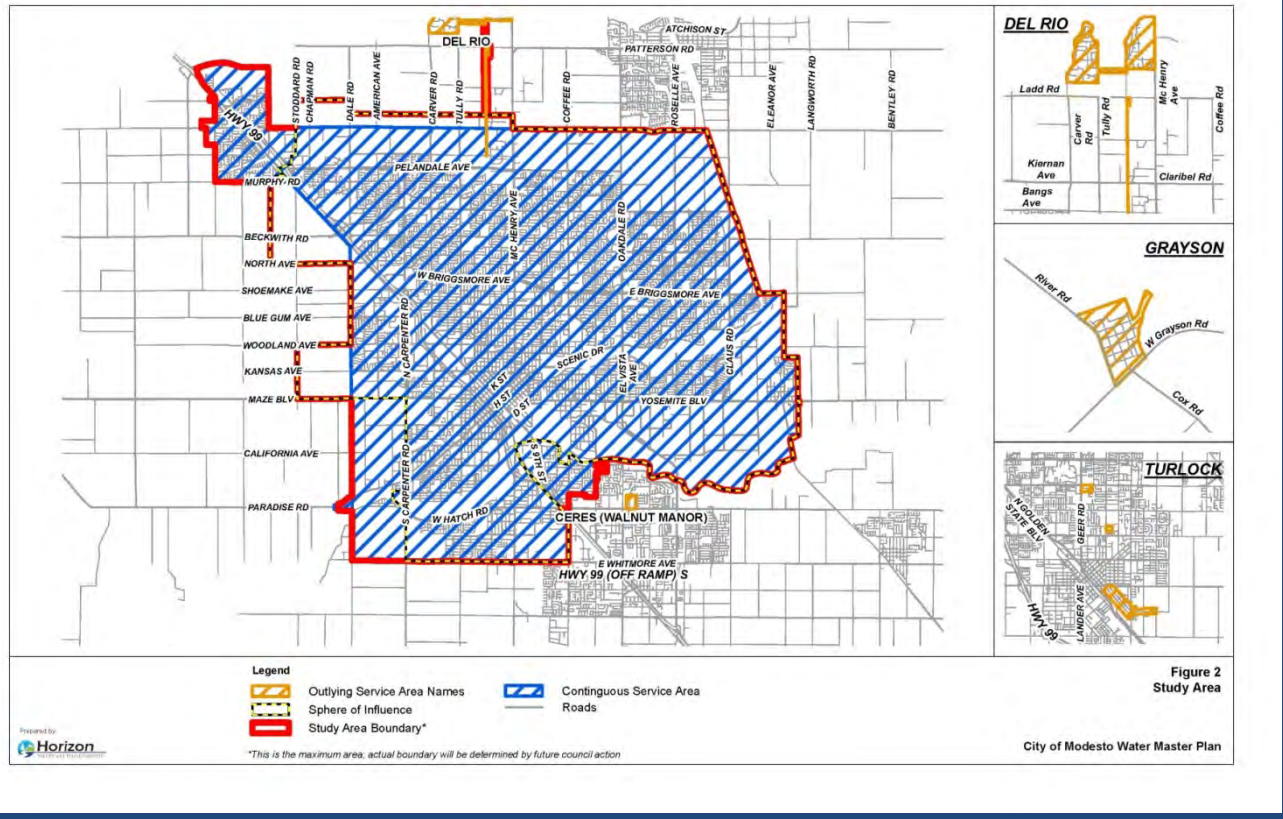
Meeting Protocol

- Please silence cell phones.
- One person speaks at a time; please do not interrupt a speaker.
- Make clear and succinct comments in order for us to effectively capture the comment in notes.
- Be respectful of each other and differing points of view.

Horizon
WATER and ENVIRONMENT

Program Location





Program Objectives

- Implement the City's economic goals and Urban Area General Plan by planning for, and providing, water infrastructure in a timely and cost-effective manner to serve new and existing development.
- Continue the City's policy of providing affordable and attractive water rates.
- Repair and replace aging water infrastructure;
- Ensure adequate water infrastructure and services are available to serve new growth within the City's Sphere of Influence;
- Provide an adequate funding mechanism to pay for necessary improvements; and
- Require new development to pay for infrastructure necessary to serve it.
- Plan for state-of-the-art facilities that reliably and economically meet the changing regulatory requirements.

Horizon
WATER and ENVIRONMENT

Program Elements

Program Elements	Improvements
Storage Tanks and Pump Stations	Del Rio/South Modesto tanks, and other new tanks
	Install new back-up generators
	Replace deficient water pumps
	Improve existing tanks (maintenance)
Groundwater Wells	Install wellhead treatment
	Construct new wells
Pipelines	Replace/upgrade deficient water mains, extend water mains to new areas, new transmission pipes
Misc. Water System Improvements and Programs	Install automated water meters and upgrade existing meters
	Water System Evaluation and water quality studies, UWMP updates (every 5 years), GW Management Program, water system security, SCADA upgrades
	New corporation yard (store materials for water projects)

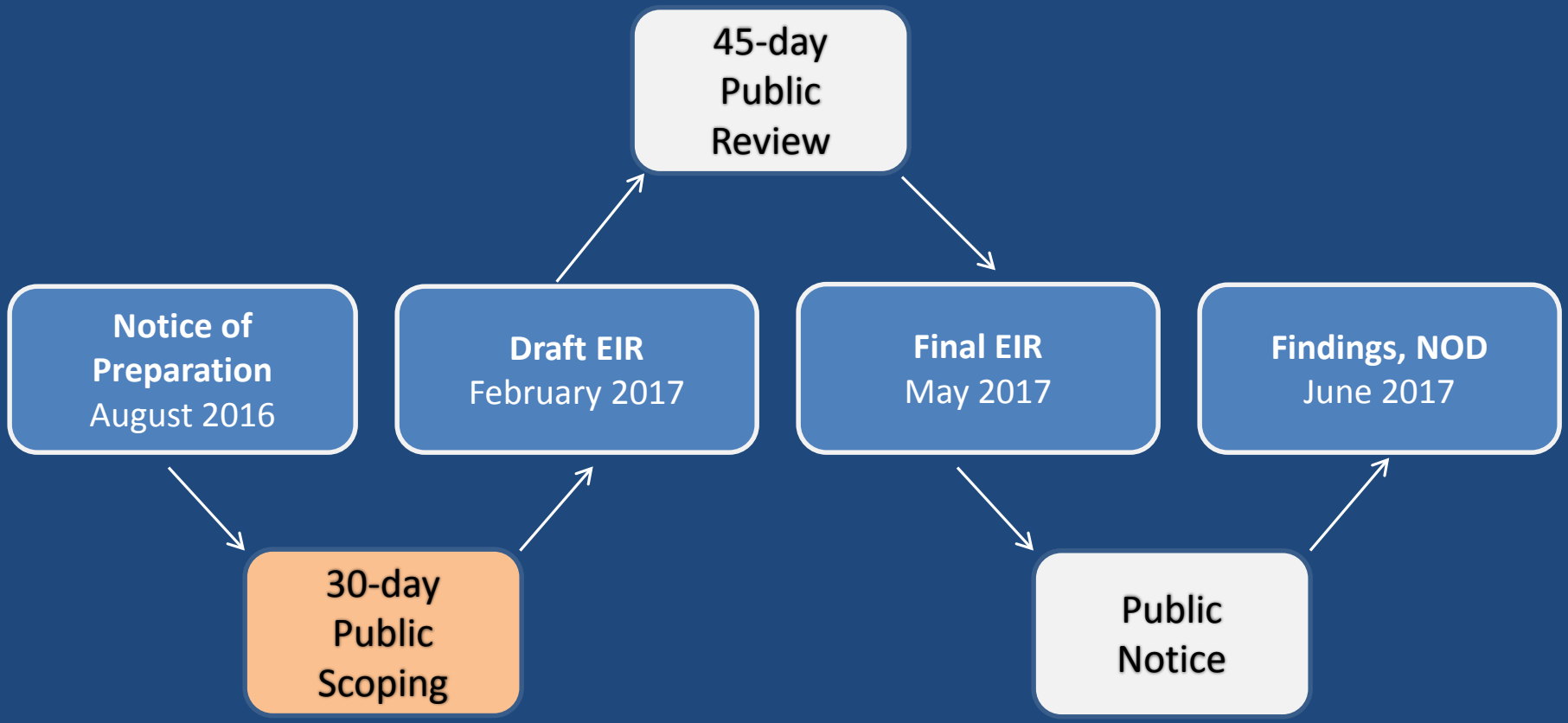
CEQA Overview

Basic purposes of CEQA (State CEQA Guidelines, Section 15002):

- Inform governmental decision makers and public about potential, significant environmental effects of proposed activities.
- Identify ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to environment by requiring changes in projects through the use of alternatives or mitigation measures when governmental agency finds changes to be feasible.
- Disclose to public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Horizon
WATER and ENVIRONMENT

EIR Process



Horizon WATER and ENVIRONMENT

CEQA Resource Topics

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Population and Housing
- Cumulative impacts

Horizon
WATER and ENVIRONMENT

Purpose of Scoping

To provide the public and agencies the opportunity to provide input on the scope and content of the environmental impact analysis.

Scoping comments can include information on:

- ✓ Potential environmental issues
- ✓ Potential mitigation measures
- ✓ Characteristics of the existing environment
- ✓ Resources that may be cumulatively affected

Horizon
WATER and ENVIRONMENT

How to Comment

Submit oral or written comments tonight. Fill out a speaker card and wait to be called or write your comments on a written comment form.

Or submit written comments via mail or email. Send comments to:

Jack Bond, Senior Civil Engineer
City of Modesto Utilities Department
P.O. Box 642 (1010 10th Street)
Modesto, CA 95353
jbond@modestogov.com

Comments accepted until **5:00 p.m.** on September 26, 2016.

NOP is available at: https://www.modestogov.com/847/Water-Plans-Reports/

Horizon WATER and ENVIRONMENT

Verbal Comments

- One person speaks at a time; please do not interrupt a speaker.
- Make clear and succinct comments in order for us to effectively capture the comment in notes.
- Be respectful of each other and differing points of view.

Horizon
WATER and ENVIRONMENT

Public Comments Received

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Stanislaus County
Striving to be the Best

CHIEF EXECUTIVE OFFICE

Stan Risen
Chief Executive Officer

Patricia Hill Thomas
Chief Operations Officer/
Assistant Executive Officer

Keith D. Boggs
Assistant Executive Officer

Jody Hayes
Assistant Executive Officer

1010 10th Street, Suite 6800, Modesto, CA 95354
Post Office Box 3404, Modesto, CA 95353-3404

Phone: 209.525.6333 Fax 209.544.6226

OCT 2016
Received
Capital Improvement
Services

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

September 30, 2016

Jack Bond, Senior Civil Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4500 / PO Box 642
Modesto, CA 95354

SUBJECT: ENVIRONMENTAL REFERRAL – CITY OF MODESTO UTILITIES DEPARTMENT – 2016 WATER MASTER PLAN – NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT

Mr. Bond:

Thank you for the opportunity to review the scope for the above-referenced project.

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has several significant concerns with the project as presented.

Sphere of Influence

The Sphere of Influence (SOI) as presented is incorrectly depicted in Figure 2. West of McHenry Avenue, Figure 2 shows the SOI boundary too far north and incorrectly encompasses the southeast portion of Salida.

The western SOI boundary depicted in Figure 2 shows the SOI incorrectly stretching west of Dakota Avenue between Murphy Road and North Avenue and to Dakota Avenue between Woodland Avenue and Maze Boulevard. Attached is a Local Agency Formation Commission (LAFCO) map detailing Modesto's adopted SOI.

Study Area Boundary

Stanislaus County cannot support the inclusion of the areas known as the Beckwith Triangle and Wood Colony in the master plan as proposed. We strongly urge The City of Modesto to remove these areas from the plan and study area.

Stanislaus Community Plan

The proposed Study Area Boundary includes only a portion of the unincorporated community of Salida. Stanislaus County would hope for your consideration to include the entire Salida Community Plan area, including Amendment Area 1, into the Study Area Boundary. The attached map details the Salida Community Plan, which includes areas to the north, east and west of the existing Salida community. Zoning designations for the area are shown on the map and include: Planned Industrial; Business Park; Commercial; Residential; and Agricultural (for the proposed Stanislaus River Park).

The ERC appreciates the opportunity to comment on this project. I would encourage additional discussion between City and County leadership on these issues at our collective earliest convenience.

Sincerely,

Patrick Cavanah
Management Consultant
Environmental Review Committee

PC:ss

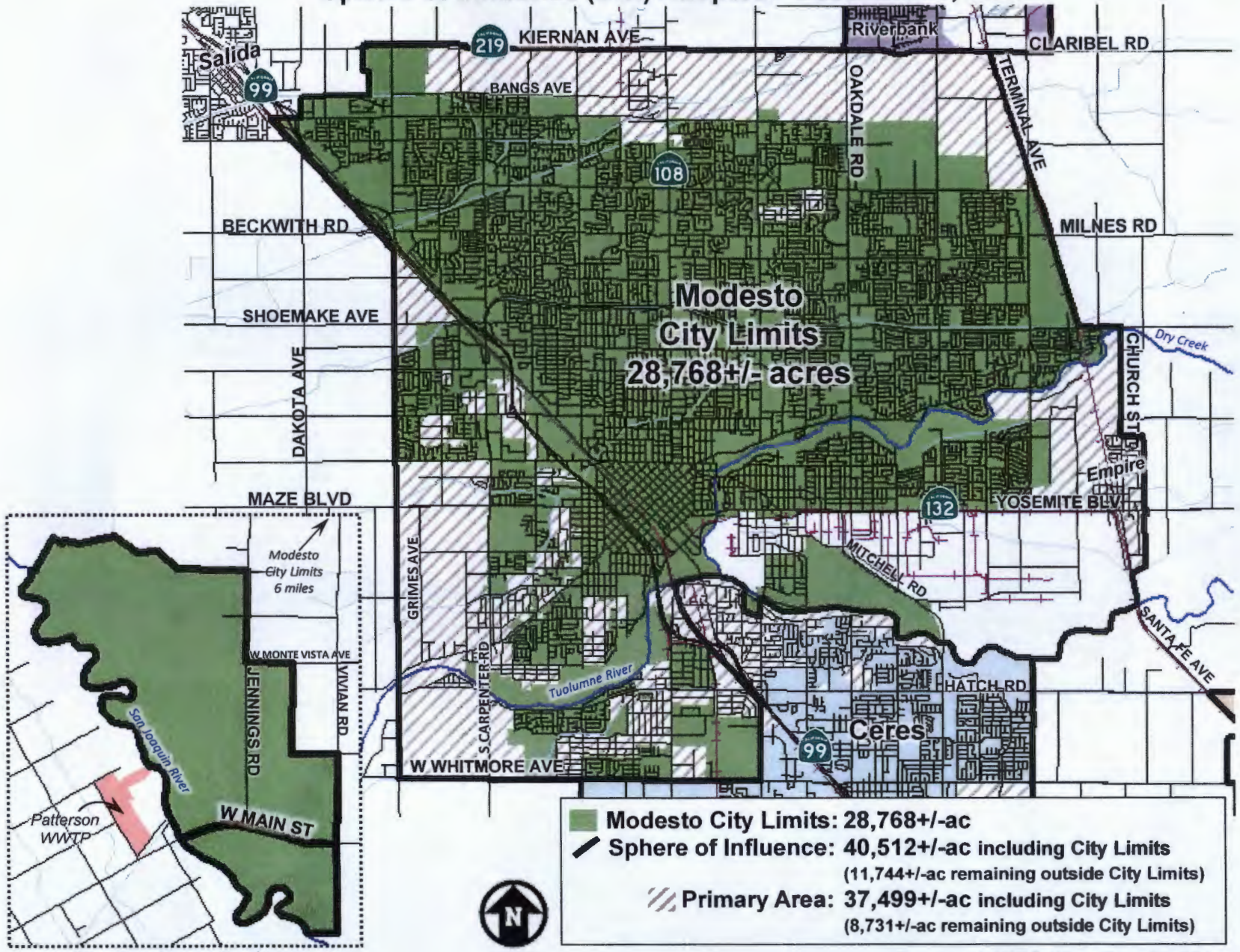
cc: ERC Members
Terry Withrow, County Board of Supervisors – D3
Stan Risen, County Chief Executive Officer
Keith D Boggs, Assistant Executive Officer
Matt Machado, County Public Works Director
Angela Freitas, County Planning and Community Development Director

Attachments:

1. City of Modesto Sphere of Influence Map – Adopted: December 1, 2010
2. Salida Community Plan Map
3. City of Modesto Water Master Plan, Figure 2 with County Notes

Modesto

Sphere of Influence (SOI) Adopted: December 1, 2010



Non-Contiguous Territory

Source: LAFCO Files, Dec. 31, 2014

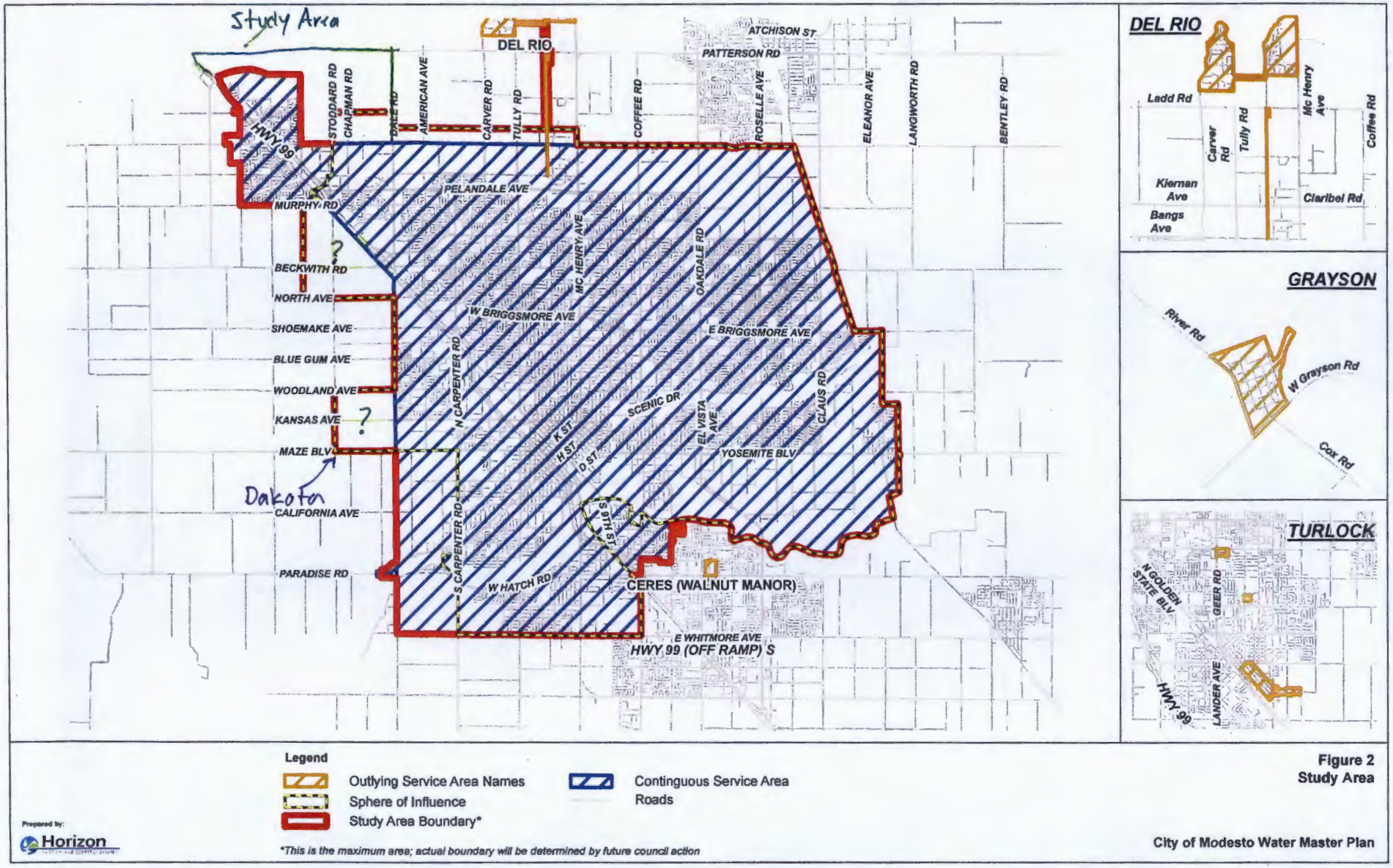
LEGEND

Description	Description
Business Park	Public Uses
High Visibility Business Park	Private School
Commercial	Parks & Open Spaces
Planned Industrial	LDR
PI Reserve	MDR
Existing Salida Community	MHDR

SALIDA COMMUNITY PLAN

SALIDA, CA

ILLUSTRATION 1



Legend

- Outlying Service Area Names
- Sphere of Influence
- Study Area Boundary*
- Contiguous Service Area Roads

*This is the maximum area; actual boundary will be determined by future council action

Figure 2
Study Area

Prepared by: Horizon

City of Modesto Water Master Plan

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Appendix B

Biological Resources Technical Information

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CNDDB Query Results

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Manteca (3712172) OR Avena (3712171) OR Escalon (3712078) OR Ripon (3712162) OR Salida (3712161) OR Riverbank (3712068) OR Westley (3712152) OR Brush Lake (3712151) OR Ceres (3712058) OR Oakdale (3712077) OR Waterford (3712067) OR Denair (3712057) OR Turlock (3712047))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Anniella pulchra northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Atriplex subtilis subtle orache	PDCHE042T0	None	None	G1	S1	1B.2
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G2	S2	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California macrophylla round-leaved filaree	PDGER01070	None	None	G3?	S3?	1B.2
Caulanthus lemmonii Lemmon's jewelflower	PDBRA0M0E0	None	None	G3	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Clarkia rostrata beaked clarkia	PDONA050Y0	None	None	G2G3	S2S3	1B.3
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Dipodomys heermanni dixoni Merced kangaroo rat	AMAFD03062	None	None	G3G4T2T3	S2S3	
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Elderberry Savanna Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Eschscholzia rhombipetala diamond-petaled California poppy	PDPAP0A0D0	None	None	G1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Lasiurus blossevillii western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Melospiza melodia song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
Monardella leucocephala Merced monardella	PDLAM180C0	None	None	GH	SH	1A
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Neostapfia colusana Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Neotoma fuscipes riparia riparian (=San Joaquin Valley) woodrat	AMAFF08081	Endangered	None	G5T1Q	S1	SSC
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Oncorhynchus mykiss irideus steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
Sphenopholis obtusata prairie wedge grass	PMPOA5T030	None	None	G5	S2	2B.2
Sylvilagus bachmani riparius riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S1	
Tuctoria greenei Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 56

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California Native Plant Society Inventory of Rare and Endangered Plants

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CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

17 matches found. Click on scientific name for details

Search Criteria

Found in Quads 3712172, 3712171, 3712078, 3712162, 3712161, 3712068, 3712152, 3712151, 3712058, 3712077, 3712067 3712057 and 3712047;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex coronata var. coronata	crownscale	Chenopodiaceae	annual herb	Mar-Oct	4.2	S3	G4T3
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	1B.1	S2	G2
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	Jun,Aug,Sep(Oct)	1B.2	S1	G1
Blepharizonia plumosa	big tarplant	Asteraceae	annual herb	Jul-Oct	1B.1	S2	G2
California macrophylla	round-leaved filaree	Geraniaceae	annual herb	Mar-May	1B.2	S3?	G3?
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2	S3	G3T3
Clarkia rostrata	beaked clarkia	Onagraceae	annual herb	Apr-May	1B.3	S2S3	G2G3
Eryngium racemosum	Delta button-celery	Apiaceae	annual / perennial herb	Jun-Oct	1B.1	S1	G1
Eschscholzia rhombipetala	diamond-petaled California poppy	Papaveraceae	annual herb	Mar-Apr	1B.1	S1	G1
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
Monardella leucocephala	Merced monardella	Lamiaceae	annual herb	May-Aug	1A	SH	GH
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	S1	G1
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	1B.1	S1	G1
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	Apr-Jul	2B.2	S2	G5
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	1B.1	S1	G1

Suggested Citation

California Native Plant Society, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 03 August 2017].

Simple Search
Advanced Search
Glossary

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About the Rare Plant Program
CNPS Home Page
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The Calflora Database
The California Lichen Society

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USFWS IPaC Resource List

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Not for consultation

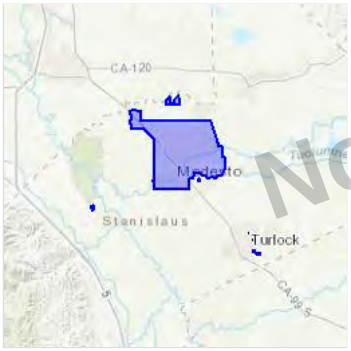
Project information

NAME

Modesto Water Master Plan

LOCATION

San Joaquin and Stanislaus counties, California



DESCRIPTION

The goal of the Water Master Plan is to accommodate the water supply needs of the population and land uses described in the City of Modesto's General Plan, along with the City's other water customers in the outlying service areas of Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock.

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local offce and a species list which fulfills this requirement can only be obtained by requesting an o cial species list from either the Regulatory Review section in IPaC (see directions below) or from the local eld o ce directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Athreatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Not for consultation

Mammals

NAME	STATUS
Fresno Kangaroo Rat Dipodomys nitratoides exilis There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5150	Endangered
Riparian Brush Rabbit Sylvilagus bachmani riparius No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6189	Endangered
San Joaquin Kit Fox Vulpes macrotis mutica No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
Least Bell's Vireo Vireo bellii pusillus There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard Gambelia silus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

tf

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Steelhead Oncorhynchus (=Salmo) mykiss There is a nal critical habitat designated for this species. Your location overlaps the designated critical habitat. https://ecos.fws.gov/ecp/species/1007	Threatened

Not for consultation

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Greene's Tuctoria Tuctoria greenei There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/1573	Endangered
San Joaquin Orcutt Grass Orcuttia inaequalis There is a nal critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5506	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves. This location overlaps the critical habitat for the following species:

NAME	TYPE
Steelhead Oncorhynchus (=Salmo) mykiss South-Central California Coast DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss Northern California DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss Southern California DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss California Central Valley DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated
Steelhead Oncorhynchus (=Salmo) mykiss Central California Coast DPS https://ecos.fws.gov/ecp/species/1007#crithab	Final designated

Not for consultation

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Migrating
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Year-round

Black Rail Laterallus jamaicensis https://ecos.fws.gov/ecp/species/7717	Breeding
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Year-round
Calliope Hummingbird Stellula calliope https://ecos.fws.gov/ecp/species/9526	Migrating
Costa's Hummingbird Calypte costae https://ecos.fws.gov/ecp/species/9470	Year-round
Fox Sparrow Passerella iliaca	Wintering
Least Bittern Ixobrychus exilis https://ecos.fws.gov/ecp/species/6175	Breeding
Lesser Yellowlegs Tringa flavipes https://ecos.fws.gov/ecp/species/9679	Wintering
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Wintering
Loggerhead Shrike Lanius ludovicianus https://ecos.fws.gov/ecp/species/8833	Year-round
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Wintering
Marbled Godwit Limosa fedoa https://ecos.fws.gov/ecp/species/9481	Wintering
Mountain Plover Charadrius montanus https://ecos.fws.gov/ecp/species/3638	Wintering
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Year-round
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Year-round
Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Migrating
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Wintering
Swainson's Hawk Buteo swainsoni https://ecos.fws.gov/ecp/species/1098	Breeding
Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910	Year-round
Western Grebe aechmophorus occidentalis https://ecos.fws.gov/ecp/species/6743	Wintering
Williamson's Sapsucker Sphyrapicus thyroideus https://ecos.fws.gov/ecp/species/8832	Year-round

Not for consultation

Yellow-billed Magpie Pica nuttalli Year-round
https://ecos.fws.gov/ecp/species/9726

What does IPaC use to generate the list of migratory bird species potentially occurring in my speci ed location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities o the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area o the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Not for consultation

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEMC
- PEMCx
- PEMA
- PEMF

FRESHWATER FORESTED/SHRUB WETLAND

- PFO/EMC
- PFOA
- PSSA
- PSSC
- PSSCx

FRESHWATER POND

- PUBKh
- PUBFx
- PUBF
- PUBKx
- PUBHx

RIVERINE

- R2UBH
- R2USA

Not for consultation

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix C

Tribal Cultural Resources Technical Information

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Ione Band of Miwok Indians
A Federally Recognized Sovereign Tribe

2tMarch 2016

City of Modesto
Community & Economic Development
Brent Sinclair, AICP Director
1010, 10 Street, Suite 3330
P.O. Box 642
Modesto CA. 95353

RE: Formal Request for Tribal Consultation Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code section 21080.3.1, subds. (b), (d) and (e) for City of Modesto

Dear Mr. Sinclair

This letter constitutes a formal request for tribal consultation for the first phase of planning under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)) for the mitigation of potential project impacts to tribal cultural and environmental resources for the above referenced project. The Ione Band of Miwok Indians requests formal notice and information for all projects within your agency's jurisdiction.

The Ione Band of Miwok Indians requests consultation on the following topics listed below, which shall be included in consultation if requested (Public Resources Code section 21080.3.2, subd. (a)):

- Alternatives to the project
- Recommended mitigation measures
- Significant effects of the project

The Ione Band of Miwok Indians also requests consultation on the following discretionary topics listed below (Public Resources Code section 21080.3.2, subd. (a)):

- Type of environmental review necessary
- Significance of tribal cultural resources, including any regulations, policies or standards used by your agency to determine significance of tribal cultural resources
- Significance of the project's impacts on tribal cultural resources
- Project alternatives and/or appropriate measures for preservation or mitigation that we may recommend, including, but not limited to:

(1) Avoidance and preservation of the resources in place, pursuant to Public Resources Code section 21084.3, including, but not limited to, planning and construction, geotechnical tests, utility location, and pedestrian surveys to avoid harming the resources (including water, endangered tribal plant resources, and endangered animal resources), and to protect the cultural and natural context, or planning greenspace, parks or other open space, to incorporate the resources with culturally appropriate protection and management criteria;

(2) Treating the resources with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resources, including but not limited to the following:

- Protecting the cultural character and integrity of the resource
- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places

(4) Protecting the resource

Additionally, the Ione Band of Miwok Indians would like to receive any cultural resources assessments or other assessments that have been completed on all or part of the project's potential "area of project effect" (APE), including, but not limited to:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response
   - Notification of whether the probability is low, moderate, or high that cultural resources are located in the APE
   - Notification if a records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE
   - Notification if a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measures
   - All information regarding site locations, Native American human remains, and associated funerary objects; such information should be placed in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through the Native American Heritage Commission. The request form can be found at **http://www.dot.ca.gov/hq/env/cultural/#templates** under Compliance Document Templates. Click on the link *Sacred Lands Inventory Form* to download the pdf. USGS 7.5- minute quadrangle name, township, range, and section are required for the search.
4. Any ethnographic studies conducted for any area including all or part of the potential APE

5. Any geotechnical reports regarding all or part of the potential APE

We would like to remind your agency that CEQA Guidelines section 15126.4, subdivision (b)(3) states that preservation-in-place is the preferred manner of mitigating impacts to archaeological sites. Section 15126.4, subd. (b)(3) of the CEQA Guidelines has been interpreted by the California Court of Appeal to mean that "feasible preservation in place must be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of impacts." *Madera Oversight Coalition v. County of Madera* (2011) 199 Cal.App.4th 48, disapproved on other grounds, *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439.

The Ione Band of Miwok Indians expects to begin consultation within 30 days of your receipt of this letter. Please contact the Cultural Committee of the Ione Band of Miwok Indians.

Thank you.

Sincerely,

Randy Yonemura

Randy Yonemura
Cultural Committee Chair
P.O. Box 699
9252 Bush St., Suite 2
Plymouth, CA 95669
Tel. (209) 245-5800
Email: Randy_yonemura@yahoo.com

IONE BAND OF MIWOK INDIANS
INDIGENOUS TERRITORY

NORTHERN VALLEY YOKUTS
P.O. BOX 717 * LINDEN, CA. 95236 * (209) 887-3415 * Fax: (209) 887-3415

RECEIVED
SEP 08 2015
C&ED PLANNING

August 25th 2015

Modesto
Community and Economic Development
Brent Sinclair, ACIP, Director
1010 10th Street, Suite 3300
P.O. Box 642
Modesto, CA 95353

RE: California Environmental Quality Act Public Resources Code section 21080.3, subd. (b) Request for Formal Notification of Proposed Projects Within the Northern Valley Yokut Tribe's Geographic Area of Traditional and Cultural Affiliation.

Dear Brent Sinclair

As of the date of this letter, in accordance with Public Resources Code Section 21080.3.1,subd. (b)Northern Valley Yokut Tribe, which is traditionally and culturally affiliated with a geographic area within your agency's geographic area of jurisdiction, requests formal notice of and information on proposed projects for which your agency will serve as a lead agency under the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq.

Pursuant to Public Resources Code section 21080.3.1, subd. (b), and until further notice, we hereby designate the following person as the tribe's lead contact for purposes of receiving notices of proposed projects from your agency:

Katherine Erolinda Perez
MLD
990 North Fine Rd. Linden CA, 95236
Phone number: (209) 887-3415
Cell Phone Number: (209) 649-8972
Fax Number: (209) 887-3415
Email: canutes@verizon.net

We request that all notices be sent via certified U.S. Mail with return receipt. Following receipt and review of the information your agency provides, within the 30-day period by Public Resources Code section 21080.3.1,subd. (d), the Northern Valley Yokut Tribe may request consultation, as defined by Public Resources Code section 21080.3.1,subd. (b), pursuant to Public Resources Code section 21080.3.2 to mitigate any project impacts a specific project may cause to tribal resources.

If you have any question or need information, please contact our lead contact person listed above.

Sincerely,
Katherine Erolinda Perez
MLD Katherine Perez

June 29, 2016

Lois Martin, Chairperson
Southern Sierra Miwuk Nation
P.O. Box 186
Mariposa, CA 95338

Subject: City of Modesto Utilities Department Water Master Plan Environmental Impact Report

Dear Chairperson Martin,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Water Master Plan (WMP) (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its water service system through development of a water master plan (also referred to as Engineer's Reports). The proposed Plan updates and replaces the City's 2010 Water System Engineer's Report, and includes a variety of Capital Improvement Program (CIP) projects to improve the City's water service system.

The proposed Plan would consist of a CIP for system-wide implementation needed to deliver safe and reliable water, which will effectively meet water demand requirements under both existing and future developed conditions. The Plan covers a contiguous area that includes the City's Sphere of Influence (SOI), Salida, North Ceres, and some unincorporated areas within and adjacent to the SOI including Empire. Outlying service areas included in the Plan are Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock (Figure 1).

The CIPs proposed in the WMP include improvements to existing water storage tanks, groundwater wells, pump stations, and pipelines; and construction and operation of new water storage tanks, groundwater wells, wellhead treatment or blending facilities, pump stations, extension of water pipelines, and repair or replacement of water pipelines. Other CIPs include installation of generators for back-up power at various booster pump stations for tanks and wells, Supervisory Control and Data Acquisition (SCADA) system upgrades to improve the City's management of the water system, and installation of fencing and security measures at well and tank sites. Additionally, the WMP includes construction of a new corporation yard, and an aquifer storage recovery program.

The CIPs would be implemented within the City's contiguous and outlying service areas. The exact locations of some of the proposed new facilities have yet to be finalized; where tentative sites have been identified, these locations will be identified in the Draft EIR.

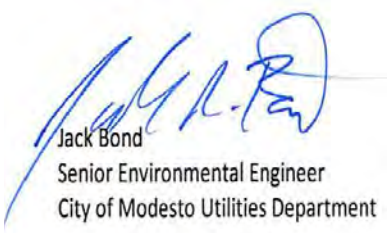
Pursuant to Public Resources Code Section 21080.3.1 *et seq*., the City of Modesto Utilities Department is notifying you of our intent to consider the Proposed Project. To initiate formal consultation with the City regarding any potential impacts of this Proposed Project on tribal cultural resources, Public Resources Code Section 21080.3.1(e) requires that you contact us within 30 days from your receipt of this letter. If you wish to request the consultation, or if you have any questions, please contact:

Jack Bond
Senior Environmental Engineer
City of Modesto Utilities Department
1010 Tenth Street, Suite 4600
Modesto, CA 95354
Phone: (209) 577-5424
Email: jbond@modestogov.com

If you do not contact us within 30 days following receipt of this letter, the City of Modesto Utilities Department will proceed with processing the above referenced application with the assumption that the project will not have a potential effect on tribal cultural resources. If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The City will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request.

More detailed information about this project is available, at your request. Thank you for giving this matter your prompt attention.

Sincerely,



Attachments

June 29, 2016

Katherine Erolinda Perez, MLD
North Valley Yokuts Tribe
990 North Fine Road
Linden, CA 95236

Subject: City of Modesto Utilities Department Water Master Plan Environmental Impact Report

Dear Ms. Perez,

The City of Modesto (City) Utilities Department will serve as lead agency under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR) for the Water Master Plan (WMP) (Program or Proposed Project) EIR. A Notice of Preparation will be released, as required by California Code of Regulations title 14, section 15000 et seq. The City periodically reevaluates its water service system through development of a water master plan (also referred to as Engineer's Reports). The proposed Plan updates and replaces the City's 2010 Water System Engineer's Report, and includes a variety of Capital Improvement Program (CIP) projects to improve the City's water service system.

The proposed Plan would consist of a CIP for system-wide implementation needed to deliver safe and reliable water, which will effectively meet water demand requirements under both existing and future developed conditions. The Plan covers a contiguous area that includes the City's Sphere of Influence (SOI), Salida, North Ceres, and some unincorporated areas within and adjacent to the SOI including Empire. Outlying service areas included in the Plan are Del Rio, Ceres (Walnut Manor), Grayson, and portions of Turlock (Figure 1).

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Pursuant to Public Resources Code Section 21080.3.1 *et seq*., the City of Modesto Utilities Department is notifying you of our intent to consider the Proposed Project. To initiate formal consultation with the City regarding any potential impacts of this Proposed Project on tribal cultural resources, Public Resources Code Section 21080.3.1(e) requires that you contact us within 30 days from your receipt of this letter. If you wish to request the consultation, or if you have any questions, please contact:

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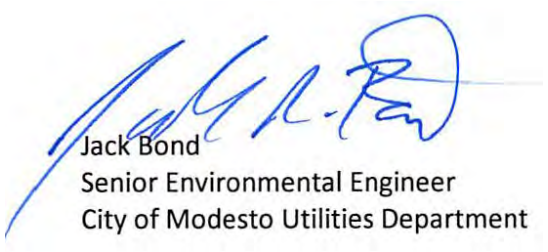
Sincerely,



Jack Bond
Senior Environmental Engineer
City of Modesto Utilities Department

Attachment

MODESTO
CALIFORNIA
Utilities Department

June 29, 2016

Neil Peyron, Chairperson
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

Subject: City of Modesto Utilities Department Water Master Plan Environmental Impact Report

Dear Chairperson Peyron,

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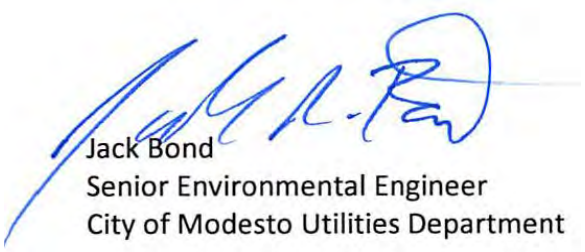
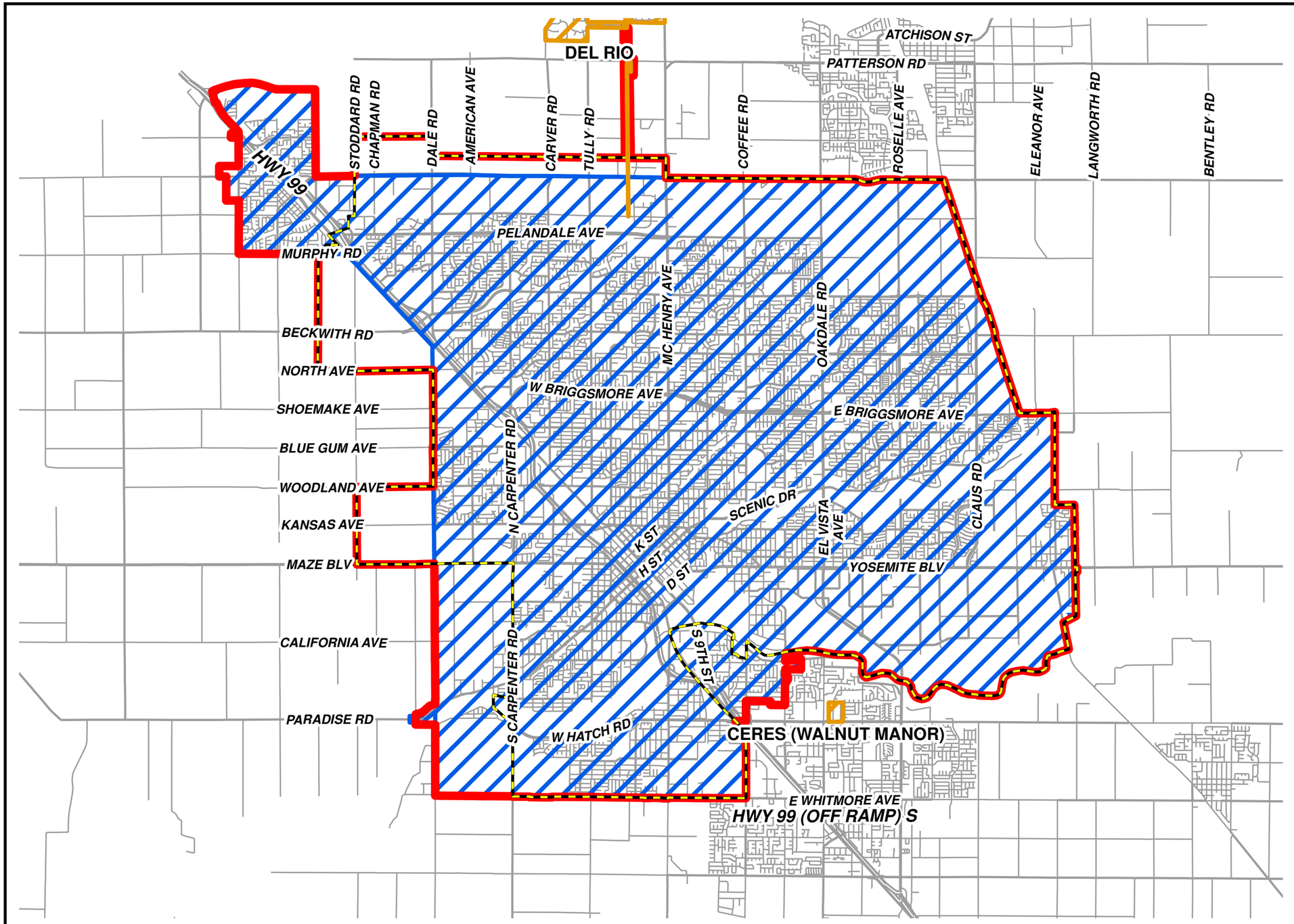
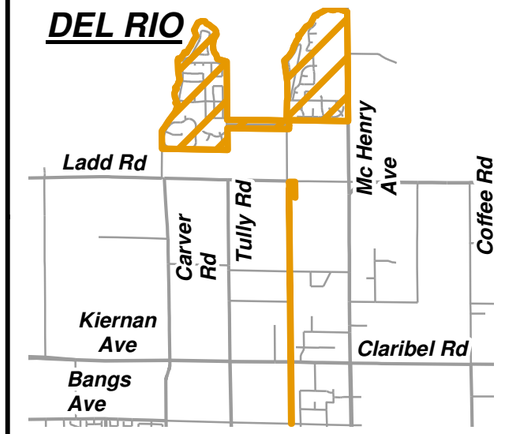
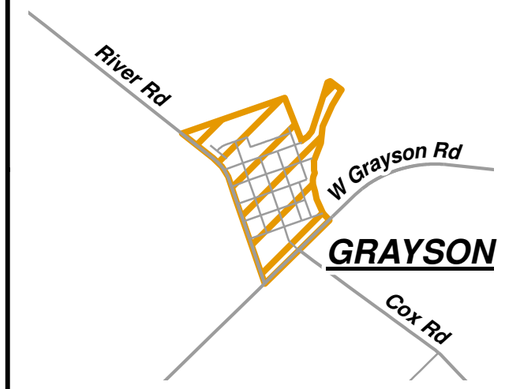


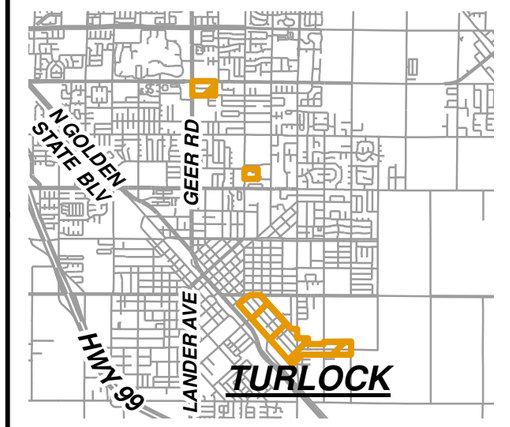
Jack Bond
Senior Environmental Engineer
City of Modesto Utilities Department

Attachment









Legend

- Outlying Service Area Names
- Sphere of Influence
- Study Area Boundary*
- Contiguous Service Area
- Roads

*THIS IS THE MAXIMUM AREA; ACTUAL BOUNDARY WILL BE DETERMINED BY FUTURE COUNCIL ACTION

WATER MASTER PLAN STUDY AREA

MODESTO CALIFORNIA

Appendix D

Draft Mitigation Monitoring and Reporting Program

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MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the City of Modesto (City) Wastewater Master Plan (WMP) Program Environmental Impact Report (EIR). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out, the party responsible for implementing these actions, and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed. It is the responsibility of the Contractor to ensure that actions required for all of the mitigation measures listed herein are included in the project plans and specifications. It is the responsibility of the City to review and confirm that all of the mitigation measure actions described herein are in the project plans and specifications.

Acronyms and Abbreviations

a.m.	ante meridiem
ANSI	American National Standards Institute
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Modesto
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dBA	A-weighted decibel scale
EIR	environmental impact report
GPS	global positioning system
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
mph	miles per hour
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NOx	nitrogen oxides
NRHP	National Register of Historic Places
p.m.	post meridiem
PM	particulate matter
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less
Rare Plant Plan	Rare Plant Relocation, Management, and Protection Plan
ROG	reactive organic gases

SJVAPCD	San Joaquin Valley Air Pollution Control District
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
VELB	valley elderberry longhorn beetle
WMP	Water Master Plan

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
Aesthetics					
AES-1	**Locate Staging Areas Away from Public Areas and Install Screening.** For components located in residential areas and near public parks or trails, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. To the extent practicable, staging areas shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials.	1. Include requirements in project plans and specifications. 2. Identify staging area locations that meet the requirements described in the measure. 3. In instances where on-street or on-site staging areas are necessary, implement screening methods.	1. Confirm that measure is included in plans and specifications. 2. Confirm that selected staging areas comply with requirements of the measure. 3. If necessary, confirm that screening methods are implemented appropriately.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to construction.	
AES-2	**Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Setting.** Where wells, tanks, pump stations and other above-ground facilities are located in proximity to or are readily visible from residential areas, recreational areas, or public roadways, the facility and fencing shall be designed to be consistent with the surrounding setting, to the maximum extent feasible. The following design elements shall be	1. N/A	1. Design facilities in accordance with considerations described in the measure.	1. During design phase.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	used to enhance the aesthetic appearance of proposed facilities and to integrate them with the existing visual setting: ▪ New storage tanks and pump station buildings shall be set back from public views and, upon completing Mitigation Measure AES-2, the City and/or contractor shall consider partially burying tanks to minimize view obstructions. ▪ Proposed facility designs shall integrate elements such as color, materials, and pattern of the surrounding landscape. ▪ The exterior of aboveground facilities shall be painted or include appropriate concrete admixtures to achieve low-glare, earth-tone colors that blend with the surrounding terrain and visual setting. ▪ Wherever possible, use of unpainted metallic surfaces and other reflective sources that may cause increased levels of reflectivity shall be eliminated. ▪ Wherever possible, install native landscaping and/or fencing to help screen views of the water treatment plant, pump station, and water storage tanks from public roads and adjacent residences. ▪ Any outdoor night lighting shall be motion-activated and include baffles that direct lighting onto the facility and minimize light spillage onto adjoining properties.				

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
Agricultural Resources					
	No feasible mitigation measures, such as restoration of Prime Farmland that has been previously converted or participation in an agricultural conservation easement program, have been identified to reduce impacts on agricultural resources to a less-than-significant level. Therefore, they would be **significant and unavoidable**.	–	–	–	
Air Quality					
AQ-1	**Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10}** The following controls are required to be implemented by the City or its contractor at all construction sites. ▪ All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover. ▪ All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant. ▪ All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid	1. Include emission reduction measures into the project plans and specifications. 2. Implement and document emission reduction measures.	1. Confirm emission reduction measures are incorporated into the project plans and specifications. 2. Confirm emission reduction measures are implemented properly.	1. During development of the plans and specifications. 2. During construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	fugitive dust emissions through the application of water during work or by presoaking. ▪ When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained. ▪ All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.) ▪ Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant. ▪ Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday. ▪ Any site with 150 or more vehicle trips per day will prevent carryout and trackout.				
AQ-2	**Implement Enhanced Control Measures for Construction Emissions of PM_{10}** The following measures will be implemented by the City or its contractor at construction sites when required to	1. Include enhanced emission control measures into	1. Confirm enhanced emission control	1. During preparation of plans and specifications.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	mitigate significant PM_{10} impacts as determined by SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements): 1. Limit traffic speeds on unpaved roads to 15 miles per hour (mph). 2. Install sandbags or other erosion-control measures to prevent silt runoff. The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason. 1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. 2. Install wind breaks at windward sides of construction areas. 3. Suspend excavation and grading activity when winds exceed 20 miles per hour (mph). 4. Limit the area subject to excavation, grading, and other construction activity at any one time. 5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.	project plans and specifications. 2. Implement and document enhanced emission control measures.	measures are included in project plans and specifications. 2. Confirm that enhanced emission control measures are implemented properly.	2. During construction.	
AQ-3	**Implement Control Measures for Operation Emissions of PM_{10} and for Ozone Precursors (ROG and NOx)** In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its	1. N/A 2. If necessary, and if directed by the City, install	1. For new or modified facilities, conduct site-	1. Prior to or during design phase.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	contractor shall install equipment with Best Available Control Technology, as indicated in a site-specific air quality analysis, to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified water system sites when required to mitigate significant PM10 and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.	equipment with Best Available Control Technology at new or modified facility sites.	specific air quality analysis to determine if operational emissions will exceed SJVAPCD thresholds. 2. If thresholds will be exceeded, ensure that equipment with Best Available Control Technology is installed.	2. If necessary, include equipment specifications during development of plans and specifications. Install equipment during construction.	
Biological Resources					
BIO-1	**Perform Focused Surveys for Special-status Plant Species.** Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species. Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site, as determined by the botanist. If special-status plants may be directly or indirectly	1. N/A 2. Provide the City with advance notice of construction schedule and anticipated start date. Support site access for qualified biologist.	1. Retain a qualified biologist to conduct focused surveys. 2. Ensure qualified biologist conducts focused surveys prior to	1. Prior to construction. 2. Prior to construction. 3. Prior to construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	affected, then Mitigation Measure BIO-2 shall be implemented.	3. Do not start construction until focused surveys have been conducted and, if necessary, Mitigation Measure BIO-2 has been implemented.	implementation of construction activities. 3. If special-status plants are identified that may be directly or indirectly affected by activities, ensure that Mitigation Measure BIO-2 is implemented.		
BIO-2	**Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species.** If special-status plants are detected, the City shall implement the following measures to avoid, minimize and compensate for impacts on special-status plant species: ▪ The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally-sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally sensitive area fencing will be installed at least 200 feet from the	1. If necessary, redesign or modify Program components to avoid or minimize impacts on special-status species. 2. Incorporate requirements prohibiting activities within fenced environmentally-sensitive areas	1. Confirm that modified design would avoid or minimize special-status plant species. 2. Confirm that requirements prohibiting activities within fenced environmentally-sensitive areas are included in	1. During design phase. 2. During preparation of plans and specifications. 3. Prior to start of construction. 4. Prior to construction. 5. During and/or after construction. Annual monitoring	

Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area. ▪ If avoidance is not feasible, the City will consult with either CDFW or USFWS, or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following components: relocation methods that will minimize the potential loss of plants from relocation, management plans and success criteria by which the mitigation can be measured for success, and regular monitoring to ensure that the plants are successfully transplanted. Success criteria shall require that at least 75% of the plants survive. The	into plans and specifications. 3. Protect any special-status plant species occurrences near a Program component site with environmentally-sensitive area fencing. 4. N/A 5. If directed by the City, implement the Rare Plant Plan prepared by the qualified botanist.	plans and specifications. 3. Confirm that environmentally-sensitive area fencing is appropriately implemented, if such fencing is necessary to protect special-status species. 4. If avoidance is not feasible, consult with CDFW and/or USFWS to determine feasibility of special-status plant species transplantation. If feasible, retain qualified botanist to prepare Rare Plant Plan. 5. If necessary (i.e., avoidance is not feasible),	would occur for 5 years after planting.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	Rare Plant Plan will include specific, measurable triggers for adaptive management actions that will be necessary to ensure survival. ▪ The Rare Plant Plan will specify annual monitoring of the mitigation site for at least five years after planting, and will assess factors such as population size and density, recruitment, and individual plant health and vigor. Monitoring will also assess whether the mitigation requires adaptive management actions, such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of exotic invasive vegetation (such as yellow star thistle) to ensure successful plant establishment and survival. The site will be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria identified in the Rare Plant Plan. If success criteria are not met at that time, then mitigation activities and monitoring will continue until success criteria are met. ▪ As part of the Rare Plant Plan, the City, in conjunction with a qualified restoration ecologist and/or botanist and the consulting agency, if any, will identify a suitable on- or off-site location for mitigation, and appropriate methods for seed collection, propagation, relocation, maintenance, and monitoring. Mitigation sites will be located within the range of the affected plant and contain		confirm Rare Plant Plan is appropriately prepared by a qualified individual, and appropriately implemented (including 5-year monitoring requirements).		

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	suitable habitat sites. For annual plant species, the seed crop from the individuals to be lost will be collected and then sown on appropriate habitat located on the mitigation site. The individuals will not be removed until seeds have been collected. For perennial plant species, both the seed and the plants themselves will be salvaged and relocated to the mitigation site. The individuals will not be removed until seeds have been collected. Seed from the populations that will be affected may be collected and propagated at a native plant nursery prior to planting in order to increase the potential for establishment and survival.				
BIO-3	**Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.** Prior to implementation of proposed projects in areas that could contain habitat for vernal pool branchiopods, the City will retain a qualified biologist to conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City will avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.	1. N/A 2. If necessary, and if habitat is present on-site, implement buffer zone identified by qualified biologist and/or USFWS to protect habitat.	1. Retain a qualified biologist to conduct surveys for vernal pools and wetlands. 2. If surveys find potential special-status invertebrate species habitat, confirm that an adequate buffer zone is implemented to	1. Prior to construction. 2. Prior to initiation of construction activities.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
			protect resources.		
BIO-4	**Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat.** If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures: ▪ After construction, restore surface topography and drainage to pre-construction conditions; and ▪ Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.	1. If impacts to habitat could not be avoided per Mitigation Measure BIO-3, restore surface topography and drainage to pre-construction conditions to minimize impacts. 2. N/A 3. If instructed by the City, implement off-site compensation plan for impacts to vernal pool branchiopods and/or western spadefoot.	1. If impacts could not be avoided per Mitigation Measure BIO-3, ensure that surface topography and drainage is restored to pre-construction conditions following construction. 2. Consult with USFWS and CDFW to determine appropriate ratios for off-site compensation for impacts to vernal pool branchiopods and/or western spadefoot.	1. Following construction. 2. As soon as it is determined that impacts to species/habitat cannot be avoided per Mitigation Measure BIO-3. 3. Following consultation with USFWS/CDFW and development of compensation approach.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
			3. Either implement compensation plan, instruct the contractor to do so, or hire a third party to perform the needed work.		
BIO-5	**Mitigation Measure BIO-5: Avoid Impacts on VELB Habitat.** The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed improvements that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017g). This shall include the following avoidance measures:	1. Incorporate requirement to avoid riparian habitat and/or elderberry shrubs into plans and specifications. 2. Make any necessary accommodations to allow biologist to conduct survey for elderberry shrubs/VELB habitat. 3. Avoid riparian habitat and/or elderberry shrubs whenever possible. If	1. Confirm that requirement to avoid riparian habitat and/or elderberry shrubs is included in project plans and specifications. 2. Retain qualified biologist to conduct surveys for the presence of elderberry shrubs that may be required. 3. If elderberry shrubs are	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to, and during, construction. 4. As soon as it is evident that elderberry shrubs cannot be avoided during construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	▪ If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal. ▪ The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities. ▪ No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. ▪ A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance. ▪ A qualified biologist shall monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of	necessary, and VELB habitat is present on-site, implement avoidance measures described in mitigation measure. 4. N/A	present, ensure that avoidance measures are implemented. 4. If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.		

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	monitoring shall depend on the project specifics and should be discussed with USFWS. ▪ As much as feasible, all activities that could occur within 165 feet of an elderberry shrub, shall be conducted outside of the flight season of the VELB (March-July). ▪ If required, trimming of elderberry shrubs shall occur between November and February and shall avoid the removal of any branches or stems that are ≥ 1 inch in diameter. ▪ Herbicides shall not be used within the drip-line of the shrub. Insecticides shall not be used within 98 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method. ▪ Mechanical weed removal within the drip-line of the shrub shall be limited to the season when VELB adults are not active (August-February) and shall avoid damaging the elderberry. ▪ Erosion control shall be implemented and the affected area shall be re-vegetated with appropriate native plants. If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.				
BIO-6	**Implement VELB Compensatory Mitigation, if Necessary.** The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by	1. Take all measures to preserve any elderberry shrub encountered that	1. Ensure that any elderberry shrub removed during	1. During or prior to construction, if elderberry	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	the project shall be transplanted to a USFWS-approved location per Mitigation Measure BIO-7. Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS. Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used. Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.	must be removed, such that the shrub may be transplanted per Mitigation Measure BIO-7. 2. If on-site mitigation is selected as the compensatory mitigation approach, implement any measures of the mitigation plan to which the contractor is delegated responsibility. 3. N/A	construction is preserved and transplanted per Mitigation Measure BIO-7, if feasible. 2. In coordination with USFWS, develop a compensatory mitigation approach following requirements set forth in mitigation measure. Either implement approach or delegate certain responsibilities to contractor. 3. Confirm that compensatory mitigation is satisfactorily provided.	shrubs are encountered. 2. Once it is determined that avoidance of elderberry shrubs is infeasible. Compensatory mitigation shall be provided after approach is confirmed by USFWS. 3. After implementation of compensatory mitigation plan/approach.	
BIO-7	**Transplant Elderberry Shrubs if Avoidance Is Not Feasible.**	1. N/A	1. Retain a qualified	1. Prior to construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to Mitigation Measure BIO-6, the shrub shall be transplanted. Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed: ▪ A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures. ▪ Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the CNDDB.	2. Under direction of the qualified biologist, transplant elderberry shrubs that cannot be avoided following the guidelines and requirements in the mitigation measure.	biologist to oversee transplantation activities, should such activities be necessary. 2. Confirm that any elderberry shrubs that cannot be avoided are transplanted appropriately in accordance with the guidelines contained in the mitigation measure, and that exit-hole surveys are reported to CDFW and USFWS.	2. After it is determined that elderberry shrubs cannot be avoided.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	▪ Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. ▪ Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (www.tcia.org/).				
BIO-8	**Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.** Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, and sloughs where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented. ▪ The City or its contractors will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating turtles. ▪ If a turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been conducted. 3. In coordination with the qualified biologist, relocate any discovered turtles outside of the construction area and erect exclusion fence to prevent re-entry. Implement minimization measures described in the mitigation measure, as	1. Retain a qualified biologist to conduct preconstruction surveys for western pond turtle in any suitable habitat. 2. Confirm that surveys are conducted in accordance with the mitigation measure prior to initiation of construction activities. 3. For any turtles discovered in the project	1. Prior to construction. 2. Prior to initiation of construction activities. 3. Prior to, or during, construction, if necessary.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	downstream from the project site (with authorization from CDFW). ▪ The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat. ▪ If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).	directed by the biologist.	area, ensure these individuals are relocated out of the area and that exclusion fence is installed to prevent re-entry. Also, confirm that minimization measures are implemented in the event that turtles or their habitat are present.		
BIO-9	**Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas if Necessary.** Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season (February 1 through August 31), surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been completed. Provide any needed support/assistance to the qualified	1. Retain a qualified biologist to conduct the preconstruction surveys for burrowing owls. 2. If burrowing owls are located on or within 250 feet	1. Prior to construction. 2. Prior to construction. 3. Prior to construction / after it is determined that occupied burrows cannot be avoided.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented. If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season. Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW. If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. If occupied burrows are relocated, the City shall enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one	biologist in establishing no-work buffers around occupied burrows, if such burrows are discovered. 3. Provide any needed support/assistance to the qualified biologist and the City in implementing a passive owl relocation plan, if such a plan is deemed necessary.	of the construction site, ensure that no-work buffers are established around occupied burrows in accordance with mitigation measure. Confirm appropriate buffer distances with CDFW. 3. If occupied burrows cannot be avoided, ensure that passive owl relocation techniques are appropriately implemented. Enhance or create burrows in adjacent habitat at a 1:1 ratio one week		

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, the City shall develop and implement a monitoring and management plan to assess the effectiveness of the mitigation. The plan shall be subject to the approval of CDFW.		prior to implementation of passive relocation techniques. Obtain approval from CDFW for owl relocation plan.		
BIO-10	**Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species.** The City shall implement the following measures. ▪ If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests. ▪ If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated	1. N/A 2. Do not initiate ground- and vegetation-disturbing activities between February 1 and August 31 until a nesting raptor survey has been conducted. If nesting raptors are detected, provide any needed support to the qualified biologist and/or the City in establishing no-disturbance	1. Retain a qualified biologist to conduct the nesting raptor survey. 2. If nesting raptors are detected, ensure that an appropriate 500-foot no-disturbance buffer is established around the nest.	1. Prior to construction. 2. Prior to construction, if necessary.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.	buffers around the nest(s). Do not conduct activities within the buffer(s) until directed by the biologist.			
BIO-11	**Compensate for Loss of Raptor Foraging Habitat.** The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's Hawk foraging habitat mitigation bank that covers the Proposed study area, such as the Dutchman Creek Conservation Bank. The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program components are assumed to be within 1 mile of an active Swainson's Hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows: ▪ 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active	1. N/A	1. Provide off-site compensation for losses of raptor foraging habitat through one of the methods described in the mitigation measure. Confirm that off-site mitigation is sufficient to compensate for impacts following the ratios outlined in the measure.	1. After the acreage of any permanent impacts to raptor foraging habitat is determined.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's Hawk; or ▪ 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands. The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be the responsibility of the mitigation bank.				
BIO-12	**Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas if Necessary.** The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If	1. N/A 2. Do not initiate construction activities during the bird breeding season until surveys have been conducted. Provide any assistance or accommodation necessary to the	1. Retain a qualified biologist to conduct the preconstruction surveys for nesting birds. 2. Confirm that surveys are appropriately conducted within 14 days	1. Prior to construction. 2. Prior to construction. 3. Prior to and during construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	the survey indicates that no active nests are found, no further mitigation shall be required. If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.	biologist conducting the survey. 3. In the event that active nests are identified, provide any needed assistance to the qualified biologist in establishing the no-disturbance buffers. Do not conduct construction activities within the buffers until directed by the biologist.	of construction activity that would occur during the bird breeding season. 3. In the event that active nests are identified, ensure that no-disturbance buffers are established around nests in accordance with the measure.		
BIO-13	**Avoid and Minimize Impacts on Federally Protected Wetlands.** The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands. If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of Mitigation Measure BIO-14. For all activities greater than one acre of disturbance, a SWPPP	1. N/A 2. Avoid wetlands to the extent feasible. 3. If wetlands cannot be avoided, following construction, restore surface	1. If complete avoidance of wetlands is not possible, perform or commission a wetland delineation study for the project site, to	1. Prior to construction. 2. During construction. 3. Following construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters. Mitigation Measure HYD/WQ-1 would also be implemented to minimize construction-related effects on wetlands and waters. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.	topography and drainage to pre-construction conditions. Additionally, where appropriate, revegetate impacted wetland areas with site-adapted native plant species.	be used during implementation of Mitigation Measure BIO-14. 2. Confirm that wetlands are avoided during construction activities to the extent feasible. 3. In the event that wetlands cannot be avoided, confirm that wetland areas are restored to pre-construction conditions.		
BIO-14	**Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.** The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be	1. Do not initiate work in areas defined as water of the U.S. and State until the City has obtained the appropriate	1. For work within areas defined as waters of the U.S. and State, obtain appropriate regulatory permits.	1. Prior to initiation of construction activities within waters. 2. At a time acceptable to	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. 19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.	regulatory permits. 2. N/A	2. For areas where wetland impacts occur, provide compensatory mitigation by one of the methods described in the mitigation measure.	the regulatory agencies.	
BIO-15	**Install Temporary Trench Plates over Open Trenches.** The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.	1. Incorporate requirement into project plans and specifications. 2. Cover open trenches with trench plates at the end of each work day.	1. Confirm that requirement is included in plans and specifications. 2. Confirm that contractor is covering trenches appropriately at the end of each work day.	1. During preparation of plans and specifications. 2. During construction.	
Cultural Resources					
CR-1	**Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work.**	1. Coordinate with the City to	1. Arrange for workers to	1. Prior to construction	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	The City shall implement the following measures. Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive information about the kinds of archaeological materials that could be present and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.	provide workers information about potential buried cultural resources.	receive information about potential buried cultural resources	2. During construction, if necessary	
Hydrology & Water Quality					
HYD/ WQ-1	**Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.** The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling or microtunneling) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include the following components/measures:	1. N/A 2. Implement all preventative measures identified in mitigation measure. Make accommodations for geotechnical engineer,	1. Incorporate requirements into plans and specifications. 2. Ensure that all preventative measures are implemented. Retain geotechnical	1. During preparation of plans and specifications. 2. During construction, if necessary.	

Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
▪ Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions. ▪ Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route. ▪ Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below. ▪ Maintain necessary response equipment on-site or at a readily accessible location and in good working order. ▪ Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003): ▪ For a terrestrial frac-out: – Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud.	archaeologist, and biologist to survey area and make recommendations. Coordinate worker training for field personnel. 3. For any frac-outs that occur, notify the appropriate agencies and implement the appropriate measures, as specified in the measure.	engineer and qualified archaeologist and biologist to make recommendations to minimize impacts. Arrange for field personnel to receive training. 3. For any frac-outs that occur, confirm that proper protocols were followed to contain the frac-out and minimize impacts.		

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	– Based on consultation with CDFW (see below), either: ▪ Use a mobile vacuum truck to pump the drilling mud from the contained area and recycle it to the return pit; or ▪ Leave the drilling mud in place to avoid potential damage from vehicles entering the area. – Once excess drilling mud is removed, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation. ▪ For an aquatic frac-out: – Monitor frac-out for 4 hours to determine if the drilling mud congeals (bentonite will usually harden, effectively sealing the frac-out location). – Based on consultation with CDFW (see below), either: ▪ If the drilling mud congeals, take no other action that would potentially suspend sediments in the water column. ▪ If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain). ▪ If the fracture becomes excessively large, call in a spill response team to contain and				

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	clean up excess drilling mud in the water. Keep phone numbers of spill response teams on-site. – If the spill affects an area that is vegetated, seed and/or replant the area using species similar to those in the adjacent area, or allow the area to re-grow from existing vegetation. ▪ Notify and consult with CDFW in the event of a frac-out. Restore vegetation damaged by drilling fluid to pre-construction conditions.				
Noise					
NOI-1	**Employ Noise-Reducing Construction and Maintenance Practices.** The following measures will be implemented by the City or its contractor to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected: ▪ locating stationary equipment as far as practical from noise-sensitive land uses, ▪ using electrified or otherwise quieter equipment when practical, ▪ using sound-control devices on equipment that are more effective than devices originally provided on the equipment, ▪ using noise-reducing enclosures around noise-generating equipment, and	1. Include noise reduction measures in project plans and specifications. 2. Implement and document noise reduction measures. In coordination with the City, develop haul routes that avoid sensitive receptors to the extent feasible.	1. Confirm that noise reduction measures are included in project plans and specifications. 2. Confirm that noise reduction measures are implemented properly. Work with Contractor to identify haul routes that avoid sensitive receptors.	1. During preparation of plans and specifications. 2. During construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	▪ installing temporary barriers between noise sources and noise sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission. When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.				
NOI-2	**Limit Nighttime Construction Noise.** The City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays or that the project has received a variance or special permit following procedures outlined in the applicable noise ordinance to operate outside of these hours.	1. Include measure in project plans and specifications. 2. Do not conduct construction activities in close proximity to a residence outside of the hours specified in the measure. Document compliance with this requirement.	1. Confirm that measure is included in project plans and specifications. 2. Confirm that Contractor follows requirements specified in the mitigation measure.	1. During development of plans and specifications. 2. During construction.	
NOI-3	**Employ Noise-Reducing Methods During Operations.** The City will implement noise-reducing methods so that noise from well operations and emergency generators does not exceed County noise-level standards at adjacent residences. Example measures may include but are not limited to:	1. N/A 2. If necessary, and if directed by the City, implement noise-reducing measures at new	1. For new or modified facilities, conduct site-specific noise analysis to determine if	1. Prior to or during the design phase. 2. Incorporate measures during design	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	▪ using sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available. ▪ locating stationary equipment as far as practical from noise-sensitive land uses, ▪ using electrified or otherwise quieter equipment when practical, ▪ using sound-control devices on equipment that are more effective than devices originally provided on the equipment, ▪ installing permanent barriers between noise sources and noise-sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission, and ▪ limiting operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas.	or modified facility sites.	County noise-level standards will be exceeded at adjacent residences during facility operations. 2. If standards will be exceeded, implement noise-reducing measures to reduce noise to below standards.	phase. Implement measures during construction.	
NOI-4	**Implement Vibration Reduction Measures.** The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:	1. Include measures in project plans and specifications. 2. Implement and document vibration-	1. Confirm that measures are included in project plans and specifications. 2. Confirm that measures are	1. During development of plans and specifications. 2. During construction.	

Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
▪ Ensure proper tuning of vibration-causing equipment. ▪ Use vibration damping devices to the extent feasible. ▪ Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings. ▪ Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ Use electric stationary equipment (e.g., generators) where feasible. ▪ Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction	reducing measures.	implemented properly.		

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of construction activities within that distance, the barrier will be removed.				

MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the City of Modesto (City) Water Master Plan (WMP) Program Environmental Impact Report (EIR). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out, the party responsible for implementing these actions, and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed. It is the responsibility of the Contractor to ensure that actions required for all of the mitigation measures listed herein are included in the project plans and specifications. It is the responsibility of the City to review and confirm that all of the mitigation measure actions described herein are in the project plans and specifications.

Acronyms and Abbreviations

a.m.	ante meridiem
ANSI	American National Standards Institute
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	capital improvement project
City	City of Modesto
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dBA	A-weighted decibel scale
EIR	environmental impact report
GPS	global positioning system
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
mph	miles per hour
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NOx	nitrogen oxides
NRHP	National Register of Historic Places
p.m.	post meridiem
PM	particulate matter
$PM_{2.5}$	particulate matter of aerodynamic radius of 2.5 micrometers or less
PM_{10}	particulate matter of aerodynamic radius of 10 micrometers or less
Rare Plant Plan	Rare Plant Relocation, Management, and Protection Plan
ROG	reactive organic gases

SJVAPCD	San Joaquin Valley Air Pollution Control District
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
VELB	valley elderberry longhorn beetle
WMP	Water Master Plan

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
Aesthetics					
AES-1	**Locate Staging Areas Away from Public Areas and Install Screening.** For components located in residential areas and near public parks or trails, the City shall implement the following measures. Construction staging areas for equipment, vehicle parking, and material storage will be sited as far as possible from residences, major roadways, parks and other public areas. To the extent practicable, staging areas shall be sited in areas where existing topography and vegetation can help screen views of the staging area. Where on-street or on-site staging areas are necessary, chain-link fencing with slats (either earth tone or another neutral color) or other screening methods shall be installed around designated staging areas to screen views of equipment and materials.	1. Include requirements in project plans and specifications. 2. Identify staging area locations that meet the requirements described in the measure. 3. In instances where on-street or on-site staging areas are necessary, implement screening methods.	1. Confirm that measure is included in plans and specifications. 2. Confirm that selected staging areas comply with requirements of the measure. 3. If necessary, confirm that screening methods are implemented appropriately.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to construction.	
AES-2	**Incorporate Aesthetic Considerations into Design for Storage Tanks, Pump Stations, Groundwater Well Buildings, and Other Above-ground Facilities to Be Consistent with Surrounding Setting.** Where wells, tanks, pump stations and other above-ground facilities are located in proximity to or are readily visible from residential areas, recreational areas, or public roadways, the facility and fencing shall be designed to be consistent with the surrounding setting, to the maximum extent feasible. The following design elements shall be used to enhance the aesthetic	1. N/A	1. Design facilities in accordance with considerations described in the measure.	1. During design phase.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	appearance of proposed facilities and to integrate them with the existing visual setting: ▪ New storage tanks and pump station buildings shall be set back from public views and, upon completing Mitigation Measure AES-2, the City and/or contractor shall consider partially burying tanks to minimize view obstructions. ▪ Proposed facility designs shall integrate elements such as color, materials, and pattern of the surrounding landscape. ▪ The exterior of aboveground facilities shall be painted or include appropriate concrete admixtures to achieve low-glare, earth-tone colors that blend with the surrounding terrain and visual setting. ▪ Wherever possible, use of unpainted metallic surfaces and other reflective sources that may cause increased levels of reflectivity shall be eliminated. ▪ Wherever possible, install native landscaping and/or fencing to help screen views of the water treatment plant, pump station, and water storage tanks from public roads and adjacent residences. ▪ Any outdoor night lighting shall be motion-activated and include baffles that direct lighting onto the facility and minimize light spillage onto adjoining properties.				

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
Agricultural Resources					
	No feasible mitigation measures, such as restoration of Prime Farmland that has been previously converted or participation in an agricultural conservation easement program, have been identified to reduce impacts on agricultural resources to a less-than-significant level. Therefore, they would be **significant and unavoidable**.	–	–	–	
Air Quality					
AQ-1	**Implement SJVAPCD Regulation VIII Control Measures for Construction Emissions of PM_{10}** The following controls are required to be implemented by the City or its contractor at all construction sites. ▪ All disturbed areas, including storage piles, that are not being actively used for construction purposes will be effectively stabilized to avoid dust emissions through application of water, a chemical stabilizer/suppressant, or by covering these areas with a tarp or other suitable cover or vegetative ground cover. ▪ All on-site unpaved roads and off-site unpaved access roads will be effectively stabilized to avoid dust emissions using water or a chemical stabilizer/suppressant. ▪ All land-clearing, grubbing, scraping, excavation, land-leveling, grading, cut-and-fill, and demolition activities will be effectively controlled to avoid fugitive dust emissions through the application of	1. Include emission reduction measures into the project plans and specifications. 2. Implement and document emission reduction measures.	1. Confirm emission reduction measures are incorporated into the project plans and specifications. 2. Confirm emission reduction measures are implemented properly.	1. During development of the plans and specifications. 2. During construction.	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	water during work or by presoaking. ▪ When materials are transported off-site, all material will be covered or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained. ▪ All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is expressly forbidden.) ▪ Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized of fugitive dust emissions using sufficient water or chemical stabilizer/suppressant. ▪ Within urban areas, trackout will be immediately removed when it extends 50 or more feet from the site and at the end of each workday. ▪ Any site with 150 or more vehicle trips per day will prevent carryout and trackout.				
AQ-2	**Implement Enhanced Control Measures for Construction Emissions of PM_{10}** The following measures will be implemented by the City or its contractor at construction sites when required to mitigate significant PM_{10} impacts as determined by	1. Include enhanced emission control measures into project plans and specifications.	1. Confirm enhanced emission control measures are included in	1. During preparation of plans and specifications. 2. During	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	SJVAPCD Air Quality Thresholds of Significance discussed above (note, these measures are to be implemented in addition to Regulation VIII requirements): 1. Limit traffic speeds on unpaved roads to 15 miles per hour (mph). 2. Install sandbags or other erosion-control measures to prevent silt runoff. The following measures are strongly encouraged at construction sites that are large in area, are located near sensitive receptors, or that warrant additional emissions reductions for any other reason. 1. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. 2. Install wind breaks at windward sides of construction areas. 3. Suspend excavation and grading activity when winds exceed 20 miles per hour (mph). 4. Limit the area subject to excavation, grading, and other construction activity at any one time. 5. Regardless of the wind speed, an owner/operator must comply with Regulation VIII's 20% opacity limitation.	2. Implement and document enhanced emission control measures.	project plans and specifications. 2. Confirm that enhanced emission control measures are implemented properly.	construction.	
AQ-3	**Implement Control Measures for Operation Emissions of PM_{10} and for Ozone Precursors (ROG and NOx)** In compliance with SJVAPCD rules, when the Air Quality Thresholds of Significance will be exceeded, the City or its contractor shall install equipment with Best Available	1. N/A 2. If necessary, and if directed by the City, install equipment with	1. For new or modified facilities, conduct site-specific air	1. Prior to or during design phase. 2. If necessary, include	

	Mitigation Measure	Contractor Responsibility	City Responsibility	Monitoring Schedule	Completion Date and Initials
	Control Technology, as indicated in a site-specific air quality analysis, to reduce emissions below the SJVAPCD significance threshold. Installed equipment with Best Available Control Technology may include but not be limited to pumping, dewatering, aerating, or heating equipment. This measure will be implemented at all new or modified water system sites when required to mitigate significant PM10 and ozone impacts, due to exceedance of Air Quality Thresholds of Significance.	Best Available Control Technology at new or modified facility sites.	quality analysis to determine if operational emissions will exceed SJVAPCD thresholds. 2. If thresholds will be exceeded, ensure that equipment with Best Available Control Technology is installed.	equipment specifications during development of plans and specifications. Install equipment during construction.	

Biological Resources					
BIO-1	**Perform Focused Surveys for Special-status Plant Species.** Prior to implementation of construction activities at a site with grasslands, valley and foothill riparian, wetlands, or vernal pools, a qualified botanist will perform floristic surveys for special-status plant species. Floristic surveys shall occur during the appropriate blooming period(s) for all special-status plant species with the potential to occur at the component site, as determined by the botanist. If special-status plants may be directly or indirectly affected, then Mitigation Measure BIO-2 shall be implemented.	1. N/A 2. Provide the City with advance notice of construction schedule and anticipated start date. Support site access for qualified biologist. 3. Do not start construction until focused surveys have been conducted and, if necessary, Mitigation Measure BIO-2 has been implemented.	1. Retain a qualified biologist to conduct focused surveys. 2. Ensure qualified biologist conducts focused surveys prior to implementation of construction activities. 3. If special-status plants are identified that may be directly or indirectly affected by activities, ensure that Mitigation Measure BIO-2 is implemented.	1. Prior to construction. 2. Prior to construction. 3. Prior to construction.	

BIO-2	**Avoid, Minimize, and Compensate for Impacts on Special-status Plant Species.** If special-status plants are detected, the City shall implement the following measures to avoid, minimize and compensate for impacts on special-status plant species: ▪ The component shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species, if feasible. Any special-status plant species occurrences near a Program site will be protected by environmentally-sensitive area fencing (orange construction barrier fencing) installed around special-status plant species populations. The environmentally sensitive area fencing will be installed at least 200 feet from the edge of the population where feasible, and where not feasible, the buffer will be large enough to adequately protect populations from program activities. Where special-status plant populations are located in wetlands, silt fencing also will be installed. The location of the fencing will be marked in the field with stakes and flagging, and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area. ▪ If avoidance is not feasible, the City will consult with either CDFW or USFWS, or both, depending upon which has jurisdiction, to determine whether transplantation of special-status plant species is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist will develop and implement a Rare Plant Relocation, Management, and Protection Plan (Rare Plant Plan) in coordination with the appropriate agencies. The Rare Plant Plan will include the following	1. If necessary, redesign or modify Program components to avoid or minimize impacts on special-status species. 2. Incorporate requirements prohibiting activities within fenced environmentally-sensitive areas into plans and specifications. 3. Protect any special-status plant species occurrences near a Program component site with environmentally-sensitive area fencing. 4. N/A 5. If directed by the City, implement the Rare Plant Plan prepared by the qualified botanist.	1. Confirm that modified design would avoid or minimize special-status plant species. 2. Confirm that requirements prohibiting activities within fenced environmentally-sensitive areas are included in plans and specifications. 3. Confirm that environmentally-sensitive area fencing is appropriately implemented, if such fencing is necessary to protect special-status species. 4. If avoidance is not feasible, consult with CDFW and/or USFWS to determine feasibility of special-status plant species transplantation. If feasible, retain qualified botanist to prepare Rare	1. During design phase. 2. During preparation of plans and specifications. 3. Prior to start of construction. 4. Prior to construction. 5. During and/or after construction. Annual monitoring would occur for 5 years after planting.	

BIO-3	**Avoid Impacts on Vernal Pool Branchiopods, Western Spadefoot, and Their Habitat.** Prior to implementation of proposed projects in areas that could contain habitat for vernal pool branchiopods, the City will retain a qualified biologist to conduct surveys to determine whether vernal pools or seasonal wetlands will be directly or indirectly affected by construction activities. If potential habitat for special-status invertebrate species is found, the City will avoid any habitats that may support special-status species by establishing a buffer zone for each resource. The sizes of buffer zones shall be determined in consultation with the USFWS.	1. N/A 2. If necessary, and if habitat is present on-site, implement buffer zone identified by qualified biologist and/or USFWS to protect habitat.	1. Retain a qualified biologist to conduct surveys for vernal pools and wetlands. 2. If surveys find potential special-status invertebrate species habitat, confirm that an adequate buffer zone is implemented to protect resources.	1. Prior to construction. 2. Prior to initiation of construction activities.	

BIO-4	**Minimize and Compensate for Impacts on Branchiopods, Western Spadefoot, and Their Habitat.** If direct or indirect impacts to habitat with the potential to support vernal pool branchiopods or potential western spadefoot breeding habitat cannot be avoided the City shall implement the following measures: ▪ After construction, restore surface topography and drainage to pre-construction conditions; and ▪ Provide off-site compensation for permanent, temporary, and indirect impacts at ratios determined through consultation with USFWS and CDFW. The performance standard shall be no net loss in acreage or habitat quality for vernal pool branchiopods and no net loss in breeding habitat quality or acreage for western spadefoot, as determined through consultation with USFWS and CDFW.	1. If impacts to habitat could not be avoided per Mitigation Measure BIO-3, restore surface topography and drainage to pre-construction conditions to minimize impacts. 2. N/A 3. If instructed by the City, implement off-site compensation plan for impacts to vernal pool branchiopods and/or western spadefoot.	1. If impacts could not be avoided per Mitigation Measure BIO-3, ensure that surface topography and drainage is restored to pre-construction conditions following construction. 2. Consult with USFWS and CDFW to determine appropriate ratios for off-site compensation for impacts to vernal pool branchiopods and/or western spadefoot. 3. Either implement compensation plan, instruct the contractor to do so, or hire a third party to perform the needed work.	1. Following construction. 2. As soon as it is determined that impacts to species/habitat cannot be avoided per Mitigation Measure BIO-3. 3. Following consultation with USFWS/CDFW and development of compensation approach.	

BIO-5	**Mitigation Measure BIO-5: Avoid Impacts on VELB Habitat.** The City and/or its contractor(s) shall avoid riparian habitat and/or elderberry shrubs whenever possible. If an individual CIP is not within a riparian area, is located on an existing site or other developed area, or within the public right of way, any impacts to the VELB would not be expected to be substantial and therefore would not require mitigation. For proposed improvements that may potentially impact VELB habitat, following USFWS guidance, the Program sites and a 165-foot-wide buffer surrounding such sites will be surveyed and mapped by a qualified biologist for the presence of elderberry shrubs. If elderberry shrubs are present, to the extent feasible, the Program shall adhere to avoidance measures outlined in USFWS' Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (USFWS 2017g). This shall include the following avoidance measures: ▪ If elderberry shrubs are located in non-riparian area, a qualified biologist shall evaluate the shrubs for exit holes. If exit holes are present, the shrubs are considered suitable habitat and likely occupied. If exit holes are not present, the biologist shall evaluate whether known VELB occurrences are located within 2,625 feet of the CIP, whether the project site is near suitable riparian habitat, and any surrounding barriers to VELB dispersal. ▪ The City shall fence and flag all areas to be avoided during construction activities including all established elderberry shrubs within 165 feet of ground disturbing construction that shall not be impacted by construction activities. ▪ No open-cut construction or other ground disturbance shall occur within 20 feet of the dripline of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. ▪ A qualified biologist shall provide training for all	1. Incorporate requirement to avoid riparian habitat and/or elderberry shrubs into plans and specifications. 2. Make any necessary accommodations to allow biologist to conduct survey for elderberry shrubs/VELB habitat. 3. Avoid riparian habitat and/or elderberry shrubs whenever possible. If necessary, and VELB habitat is present on-site, implement avoidance measures described in mitigation measure. 4. N/A	1. Confirm that requirement to avoid riparian habitat and/or elderberry shrubs is included in project plans and specifications. 2. Retain qualified biologist to conduct surveys for the presence of elderberry shrubs that may be required. 3. If elderberry shrubs are present, ensure that avoidance measures are implemented. 4. If elderberry shrubs cannot be avoided, implement Mitigation Measure BIO-6.	1. During preparation of plans and specifications. 2. Prior to construction. 3. Prior to, and during, construction. 4. As soon as it is evident that elderberry shrubs cannot be avoided during construction.	

BIO-6	**Implement VELB Compensatory Mitigation, if Necessary.** The City shall implement the following measures. If feasible, any shrub that would be adversely impacted by the project shall be transplanted to a USFWS-approved location per Mitigation Measure BIO-7. Impacts to VELB habitat shall be mitigated through purchase of compensatory mitigation credits from a USFWS-approved mitigation bank, or through on- or off-site mitigation. If on- or off-site mitigation is planned, a Compensatory Mitigation Proposal shall be developed and shall be subject to approval by USFWS. Mitigation ratios shall be based on impacts to VELB habitat, as well as impacts to individual shrubs. One credit (unit) = 1,800 square feet. For habitat, the total amount of permanent disturbance in square feet should be calculated, the appropriate ratio applied, and the total number divided by 1,800. Impacts to riparian habitat shall be mitigated at a 3:1 (acre(s) of credits: acre(s) of disturbance) ratio. For disturbance to elderberry shrubs in non-riparian habitat, a 1:1 ratio shall be used. Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at a USFWS-approved bank for each shrub impacted regardless of the presence of exit holes. Impacts to individual shrubs in non-riparian areas shall be replaced through a purchase of 1 credit at a USFWS-approved bank for each shrub that shall be impacted if exit holes have been found in any shrub on or within 165 feet of the project area.	1. Take all measures to preserve any elderberry shrub encountered that must be removed, such that the shrub may be transplanted per Mitigation Measure BIO-7. 2. If on-site mitigation is selected as the compensatory mitigation approach, implement any measures of the mitigation plan to which the contractor is delegated responsibility. 3. N/A	1. Ensure that any elderberry shrub removed during construction is preserved and transplanted per Mitigation Measure BIO-7, if feasible. 2. In coordination with USFWS, develop a compensatory mitigation approach following requirements set forth in mitigation measure. Either implement approach or delegate certain responsibilities to contractor. 3. Confirm that compensatory mitigation is satisfactorily provided.	1. During or prior to construction, if elderberry shrubs are encountered. 2. Once it is determined that avoidance of elderberry shrubs is infeasible. Compensatory mitigation shall be provided after approach is confirmed by USFWS. 3. After implementation of compensatory mitigation plan/approach.	

BIO-7	**Transplant Elderberry Shrubs if Avoidance Is Not Feasible.** The City shall implement the following measures. If an elderberry shrub cannot be avoided or if indirect effects shall result in the death of stems or the entire shrub, then in addition to Mitigation Measure BIO-6, the shrub shall be transplanted. Elderberry shrubs shall be transplanted as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site. Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may not be appropriate for transplanting. The transplanting guidelines below shall be followed: ▪ A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures. ▪ Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the Service and to the CNDDB. ▪ Elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. ▪ Transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (www.tcia.org/).	1. N/A 2. Under direction of the qualified biologist, transplant elderberry shrubs that cannot be avoided following the guidelines and requirements in the mitigation measure.	1. Retain a qualified biologist to oversee transplantation activities, should such activities be necessary. 2. Confirm that any elderberry shrubs that cannot be avoided are transplanted appropriately in accordance with the guidelines contained in the mitigation measure, and that exit-hole surveys are reported to CDFW and USFWS.	1. Prior to construction. 2. After it is determined that elderberry shrubs cannot be avoided.	

BIO-8	**Conduct Preconstruction Surveys for and Minimize Impacts on Western Pond Turtle.** Preconstruction surveys for western pond turtles in suitable aquatic and upland habitat will be conducted by a qualified biologist 2 weeks before and 24 hours before the start of construction activities in streams, irrigation canals, and sloughs where suitable habitat exists. If a western pond turtle is located within the construction area, it will be relocated out of this area (with authorization from the CDFW), and exclusion fence will be installed to prevent the movement of turtles back into the construction area. Additionally, the following minimization measures will be implemented. ▪ The City or its contractors will minimize grading and construction activities along the banks of streams, irrigation canals, and sloughs and within 1,000 feet of these areas between October 15 and April 15 in order to reduce potential mortality to hibernating turtles. ▪ If a turtle becomes trapped during construction activities within the waterway, the turtle will be removed from the work area and placed downstream from the project site (with authorization from CDFW). ▪ The construction area will be clearly defined, using orange barrier fencing, in order to minimize disturbance to riparian vegetation and western pond turtle habitat. ▪ If nesting areas for western pond turtles are identified in the study area during preconstruction surveys, a buffer of 300 feet will be established between the nesting site and the construction area. Buffers will be indicated by temporary fencing if construction begins before the nesting period ends (egg laying to emergence of hatchlings normally extends from April to November).	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been conducted. 3. In coordination with the qualified biologist, relocate any discovered turtles outside of the construction area and erect exclusion fence to prevent re-entry. Implement minimization measures described in the mitigation measure, as directed by the biologist.	1. Retain a qualified biologist to conduct preconstruction surveys for western pond turtle in any suitable habitat. 2. Confirm that surveys are conducted in accordance with the mitigation measure prior to initiation of construction activities. 3. For any turtles discovered in the project area, ensure these individuals are relocated out of the area and that exclusion fence is installed to prevent re-entry. Also, confirm that minimization measures are implemented in the event that turtles or their habitat are present.	1. Prior to construction. 2. Prior to initiation of construction activities. 3. Prior to, or during, construction, if necessary.	

BIO-9	**Conduct Pre-construction Surveys for Burrowing Owls and Implement No-Work Buffer Areas if Necessary.** Pre-construction surveys shall be conducted by a qualified biologist in all areas of suitable burrowing owl habitat within 250 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season (February 1 through August 31), surveys must be performed before work is resumed. If no burrowing owls or signs of burrowing owls are detected during the survey, no further mitigation shall be required. If breeding or resident burrowing owls are located on or within 250 feet of the proposed construction site, the following measures shall be implemented. If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season. Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), and at the discretion of a qualified wildlife biologist. Buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the breeding season, and 160 feet (100 meters) during the non-breeding season. Buffer distances shall be subject to the approval of CDFW. If occupied burrows cannot be avoided, passive owl relocation techniques may be implemented outside of the nesting season (February 1 through August 31). Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. If occupied burrows are relocated, the City shall enhance	1. N/A 2. Do not initiate construction activities until preconstruction surveys have been completed. Provide any needed support/assistance to the qualified biologist in establishing no-work buffers around occupied burrows, if such burrows are discovered. 3. Provide any needed support/assistance to the qualified biologist and the City in implementing a passive owl relocation plan, if such a plan is deemed necessary.	1. Retain a qualified biologist to conduct the preconstruction surveys for burrowing owls. 2. If burrowing owls are located on or within 250 feet of the construction site, ensure that no-work buffers are established around occupied burrows in accordance with mitigation measure. Confirm appropriate buffer distances with CDFW. 3. If occupied burrows cannot be avoided, ensure that passive owl relocation techniques are appropriately implemented. Enhance or create burrows in adjacent habitat at a 1:1 ratio one week prior to implementation of passive	1. Prior to construction. 2. Prior to construction. 3. Prior to construction / after it is determined that occupied burrows cannot be avoided.	

BIO-10	**Avoid, Minimize, or Compensate for Impacts on Raptors, including Special-status Species.** The City shall implement the following measures. ▪ If ground and vegetation disturbing activities occur between February 1 and August 31, the City shall conduct a nesting raptor survey, with a focus on Swainson's hawk and white-tailed kite, in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Survey's in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000, or current CDFW guidance). Surveys shall cover a minimum of a 0.5-mile radius around potentially suitable nesting habitat for Swainson's hawk and white-tailed kite. Agricultural lands within 500 feet of ground disturbing construction activities shall be surveyed for northern harrier nests. ▪ If nesting raptors are detected, the City shall establish a 500-foot no-disturbance buffer around the nest. No construction activities shall be initiated within the buffer until fledglings are fully mobile and no longer reliant upon the nest or parental care for survival.	1. N/A 2. Do not initiate ground- and vegetation-disturbing activities between February 1 and August 31 until a nesting raptor survey has been conducted. If nesting raptors are detected, provide any needed support to the qualified biologist and/or the City in establishing no-disturbance buffers around the nest(s). Do not conduct activities within the buffer(s) until directed by the biologist.	1. Retain a qualified biologist to conduct the nesting raptor survey. 2. If nesting raptors are detected, ensure that an appropriate 500-foot no-disturbance buffer is established around the nest.	1. Prior to construction. 2. Prior to construction, if necessary.	

BIO-11	**Compensate for Loss of Raptor Foraging Habitat.** The City shall implement the following measures. To mitigate for the loss of potential Swainson's Hawk foraging habitat, the City shall provide off-site habitat management lands, as described in the CDFW protocol for the mitigation of impacts on Swainson's hawks in the Central Valley (CDFG 1994), or by purchasing credits at a CDFW-approved Swainson's Hawk foraging habitat mitigation bank that covers the Proposed study area, such as the Dutchman Creek Conservation Bank. The City shall determine the final acreage of off-site management lands or mitigation bank credits to be provided based on the CDFW protocol (CDFG 1994). For the purposes of this mitigation measure, all program components are assumed to be within 1 mile of an active Swainson's Hawk nest tree. Mitigation credits would follow the same ratio guidelines as off-site management lands. The City shall compensate for losses as follows: ▪ 1 acre of habitat management land for each acre of development authorized (1:1 ratio), at least 10% of which shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% protected by a conservation easement acceptable to CDFW on agricultural lands or other suitable habitats that provide foraging habitat for Swainson's Hawk; or ▪ 0.5 acre of habitat management land for each acre of development authorized (0.5:1 ratio), all of which shall be met by fee title acquisition or a conservation easement acceptable to CDFW that allows for the active management of the habitat for prey production on the habitat management lands. The City shall provide for the long-term management of the habitat management lands by funding a management endowment (the interest on which shall be used for managing the habitat management lands). If mitigation credits are purchased, long term management would be	1. N/A	1. Provide off-site compensation for losses of raptor foraging habitat through one of the methods described in the mitigation measure. Confirm that off-site mitigation is sufficient to compensate for impacts following the ratios outlined in the measure.	1. After the acreage of any permanent impacts to raptor foraging habitat is determined.	

BIO-12	**Conduct Pre-construction Surveys for Nesting Birds and Implement No-Work Buffer Areas if Necessary.** The City shall implement the following measures. If construction activities occur during the breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 500 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If no work occurs for a period of 2 or more weeks during the nesting season, surveys must be performed before work is resumed. If the survey indicates that no active nests are found, no further mitigation shall be required. If active nests are identified, appropriate no-disturbance buffers around nests shall be established. No-disturbance buffers around special-status passerine nests shall be 500 feet. No disturbance buffers for non-listed birds protected under the MBTA and Fish and Game Code sections 3503 and 3513 will be established by a qualified biologist familiar with the life history and reproductive strategies of the nesting species. The buffer widths will be based on species' sensitivity to disturbance (as documented in peer-reviewed literature), planned construction activities, and baseline level of human activity. The buffers will be clearly marked in the field with flagging or fencing. No work shall commence within the buffer until the young have fledged or the nest is deemed inactive.	1. N/A 2. Do not initiate construction activities during the bird breeding season until surveys have been conducted. Provide any assistance or accommodation necessary to the biologist conducting the survey. 3. In the event that active nests are identified, provide any needed assistance to the qualified biologist in establishing the no-disturbance buffers. Do not conduct construction activities within the buffers until directed by the biologist.	1. Retain a qualified biologist to conduct the preconstruction surveys for nesting birds. 2. Confirm that surveys are appropriately conducted within 14 days of construction activity that would occur during the bird breeding season. 3. In the event that active nests are identified, ensure that no-disturbance buffers are established around nests in accordance with the measure.	1. Prior to construction. 2. Prior to construction. 3. Prior to and during construction.	

BIO-13	**Avoid and Minimize Impacts on Federally Protected Wetlands.** The City shall implement the following measures. To the extent feasible, proposed construction activities shall avoid federally protected wetlands. If complete avoidance of wetlands is not possible, a jurisdictional wetland delineation shall be conducted for the project site, which will be used during implementation of Mitigation Measure BIO-14. For all activities greater than one acre of disturbance, a SWPPP shall be implemented to reduce the potential for sediment and contaminants to enter wetlands and waters. Mitigation Measure HYD/WQ-1 would also be implemented to minimize construction-related effects on wetlands and waters. After construction, surface topography and drainage shall be restored to pre-construction conditions. Where appropriate, revegetation shall be implemented with site-adapted native plant species.	1. N/A 2. Avoid wetlands to the extent feasible. 3. If wetlands cannot be avoided, following construction, restore surface topography and drainage to pre-construction conditions. Additionally, where appropriate, revegetate impacted wetland areas with site-adapted native plant species.	1. If complete avoidance of wetlands is not possible, perform or commission a wetland delineation study for the project site, to be used during implementation of Mitigation Measure BIO-14. 2. Confirm that wetlands are avoided during construction activities to the extent feasible. 3. In the event that wetlands cannot be avoided, confirm that wetland areas are restored to pre-construction conditions.	1. Prior to construction. 2. During construction. 3. Following construction.	

BIO-14	**Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State.** The City shall implement the following measures. Work within areas defined as waters of the U.S. and State that includes placement of fill will require a CWA Section 404 permit and Section 401 Water Quality Certification. All work proposed in jurisdictional waters of the U.S. shall be authorized under these permits, and the work shall comply with the general and regional conditions of the permits. In areas where disturbance to jurisdictional waters or wetlands occurs, the City shall implement mitigation consistent with the terms of a CWA Nationwide Permit and/or the Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (73 Fed. Reg. 19594). Compensatory mitigation may include creation, reestablishment, or enhancement of wetlands in the study area or at an off-site location. Compensatory mitigation may also include purchase of credits at an approved mitigation bank or contribution to an approved in-lieu fee program.	1. Do not initiate work in areas defined as water of the U.S. and State until the City has obtained the appropriate regulatory permits. 2. N/A	1. For work within areas defined as waters of the U.S. and State, obtain appropriate regulatory permits. 2. For areas where wetland impacts occur, provide compensatory mitigation by one of the methods described in the mitigation measure.	1. Prior to initiation of construction activities within waters. 2. At a time acceptable to the regulatory agencies.	
BIO-15	**Install Temporary Trench Plates over Open Trenches.** The City shall implement the following measure. During open-cut construction of pipelines, the City shall install temporary trench plates over open trenches at the end of each work day.	1. Incorporate requirement into project plans and specifications. 2. Cover open trenches with trench plates at the end of each work day.	1. Confirm that requirement is included in plans and specifications. 2. Confirm that contractor is covering trenches appropriately at the end of each work day.	1. During preparation of plans and specifications. 2. During construction.	

Cultural Resources					
CR-1	**Conduct Cultural Resources Awareness Training for Construction Workers Prior to Beginning Work.** The City shall implement the following measures. Before initiation of ground-disturbing activities, the City or its designee shall arrange for construction crews to receive information about the kinds of archaeological materials that could be present and the protocols to be followed should any such materials be uncovered during construction. The training shall include information about the laws pertaining to treatment of cultural resources and emphasize the requirement for confidentiality. The informational materials shall be prepared by a qualified archaeologist, and a qualified archaeologist shall conduct the initial training at the beginning of each project. Subsequent trainings should occur as new personnel work on each project; it is incumbent on the City to ensure that the contractor conveys this information to new employees. This could occur during daily safety meetings by the construction supervisor, or more formal training by a qualified archaeologist.	1. Coordinate with the City to provide workers information about potential buried cultural resources.	1. Arrange for workers to receive information about potential buried cultural resources	1. Prior to construction 2. During construction, if necessary	

Hydrology & Water Quality

HYD/ WQ-1	**Prepare and Implement a Frac-Out Contingency Plan for Trenchless Pipeline Installation Methods.** The City of Modesto's drilling contractor for trenchless pipeline installation activities (e.g., horizontal directional drilling or microtunneling) shall prepare and implement a frac-out contingency plan prior to conducting Proposed Program construction activities involving these methods. At a minimum, the frac-out contingency plan shall include the following components/measures: ▪ Require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions. ▪ Require that a qualified archaeologist and biologist survey for and recommend protection measures for sensitive cultural and biological resources at the location of the entry and exit points and along the boring route. ▪ Include worker training measures to ensure that all field personnel understand their responsibility for timely reporting of frac-outs to their supervisors. Supervisors must then report frac-outs to CDFW as described in the last bullet below. ▪ Maintain necessary response equipment on-site or at a readily accessible location and in good working order. ▪ Include contingency measures to stop work, and effectively isolate and clean up released drilling fluid in the event of a frac-out. Contingency measures should be described for a potential frac-out in a terrestrial and aquatic environment. Example contingency measures include the following (CPUC 2003): ▪ For a terrestrial frac-out: – Isolate the area with hay bales, sand bags, or silt fencing to surround and contain the drilling mud. – Based on consultation with CDFW (see below)	1. N/A 2. Implement all preventative measures identified in mitigation measure. Make accommodations for geotechnical engineer, archaeologist, and biologist to survey area and make recommendations. Coordinate worker training for field personnel. 3. For any frac-outs that occur, notify the appropriate agencies and implement the appropriate measures, as specified in the measure.	1. Incorporate requirements into plans and specifications. 2. Ensure that all preventative measures are implemented. Retain geotechnical engineer and qualified archaeologist and biologist to make recommendations to minimize impacts. Arrange for field personnel to receive training. 3. For any frac-outs that occur, confirm that proper protocols were followed to contain the frac-out and minimize impacts.	1. During preparation of plans and specifications. 2. During construction, if necessary.	

Noise					
NOI-1	**Employ Noise-Reducing Construction and Maintenance Practices.** The following measures will be implemented by the City or its contractor to reduce adverse effects from construction and maintenance noise in locations where noise-sensitive receptors could be adversely affected: ▪ locating stationary equipment as far as practical from noise-sensitive land uses, ▪ using electrified or otherwise quieter equipment when practical, ▪ using sound-control devices on equipment that are more effective than devices originally provided on the equipment, ▪ using noise-reducing enclosures around noise-generating equipment, and ▪ installing temporary barriers between noise sources and noise sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission. When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.	1. Include noise reduction measures in project plans and specifications. 2. Implement and document noise reduction measures. In coordination with the City, develop haul routes that avoid sensitive receptors to the extent feasible.	1. Confirm that noise reduction measures are included in project plans and specifications. 2. Confirm that noise reduction measures are implemented properly. Work with Contractor to identify haul routes that avoid sensitive receptors.	1. During preparation of plans and specifications. 2. During construction.	

NOI-2	**Limit Nighttime Construction Noise.** The City and its contractor shall ensure that no construction activities are conducted in close proximity to a residence outside the hours of 7:00 a.m.–9:00 p.m. on weekdays and 9:00 a.m.–9:00 p.m. on Saturdays, Sundays, and state or federal holidays or that the project has received a variance or special permit following procedures outlined in the applicable noise ordinance to operate outside of these hours.	1. Include measure in project plans and specifications. 2. Do not conduct construction activities in close proximity to a residence outside of the hours specified in the measure. Document compliance with this requirement.	1. Confirm that measure is included in project plans and specifications. 2. Confirm that Contractor follows requirements specified in the mitigation measure.	1. During development of plans and specifications. 2. During construction.	

NOI-3	**Employ Noise-Reducing Methods During Operations.** The City will implement noise-reducing methods so that noise from well operations and emergency generators does not exceed County noise-level standards at adjacent residences. Example measures may include but are not limited to: ▪ using sound attenuation enclosures designed to achieve noise reductions sufficient to comply with City and County standards for noise-generating elements of the operation, when no other feasible control method is available. ▪ locating stationary equipment as far as practical from noise-sensitive land uses, ▪ using electrified or otherwise quieter equipment when practical, ▪ using sound-control devices on equipment that are more effective than devices originally provided on the equipment, ▪ installing permanent barriers between noise sources and noise-sensitive land uses, or taking advantage of existing barrier features (terrain and structures) to block sound transmission, and ▪ limiting operations and maintenance-related trucking to specific routes, times, and speeds that minimize adverse effects to sensitive land uses such as schools and residential areas.	1. N/A 2. If necessary, and if directed by the City, implement noise-reducing measures at new or modified facility sites.	1. For new or modified facilities, conduct site-specific noise analysis to determine if County noise-level standards will be exceeded at adjacent residences during facility operations. 2. If standards will be exceeded, implement noise-reducing measures to reduce noise to below standards.	1. Prior to or during the design phase. 2. Incorporate measures during design phase. Implement measures during construction.	

NOI-4	**Implement Vibration Reduction Measures.** The City of Modesto and/or its contractors shall implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors: ▪ Ensure proper tuning of vibration-causing equipment. ▪ Use vibration damping devices to the extent feasible. ▪ Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 15+ feet from buildings. ▪ Require contractor(s) to ensure that impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ Use electric stationary equipment (e.g., generators) where feasible. ▪ Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 60 feet of residences at any time of day, install a temporary noise and vibration barrier between the	1. Include measures in project plans and specifications. 2. Implement and document vibration-reducing measures.	1. Confirm that measures are included in project plans and specifications. 2. Confirm that measures are implemented properly.	1. During development of plans and specifications. 2. During construction.	

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-209

RESOLUTION APPROVING THE 2017 WATER MASTER PLAN AS COMPLETE

WHEREAS, Council had an approved contract with West Yost & Associates to develop a City Water Master Plan (WMP) to update the City's 2010 Water System Engineer's Report, and

WHEREAS, the WMP evaluates the City's existing and long-term water supply needs utilizing a conjunctive use portfolio of surface and groundwater sources, and

WHEREAS, the WMP establishes water system performance criteria to reliably provide water demands under daily, seasonal, emergency, and water shortage event conditions, and

WHEREAS, the WMP considers necessary measures to deliver safe and reliable water that meets regulatory water quality requirements, and

WHEREAS, the WMP provides the flexibility, system redundancy, and reliability to accommodate possible changing future conditions due to regulation and climatic conditions, and

WHEREAS, the WMP serves as a roadmap in identifying water infrastructure needed to serve both existing and future users via build-out of the City's planned water service area, and

WHEREAS, having a current and comprehensive WMP is a critical step in keeping ahead of the replacement requirements of an aging infrastructure system and the demands of expanding urban growth, and

WHEREAS, the WMP has identified a Capital Improvement Program for water system facilities that will be required for the build-out of the City's Water Service Area, and

WHEREAS, West Yost & Associates has completed the 2017 Water Master Plan.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the 2017 Water Master Plan as complete.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 28th day of April, 2020, by Councilmember Ah You, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-210

RESOLUTION APPROVING THE SUBMISSION OF THE TRANSPORTATION DEVELOPMENT ACT TRANSIT CLAIM TO THE STANISLAUS COUNCIL OF GOVERNMENTS FOR FISCAL YEAR 2019-20 IN THE AMOUNT OF $15,409,739, AND A REGIONAL TRANSIT CLAIM IN THE AMOUNT OF $915,459

WHEREAS, the greatest portion of the City's funding for the Transit Service Program is made available under the Transportation Development Act (TDA), which includes Local Transportation Fund (LTF) funds and State Transit Assistance (STA) funds, and

WHEREAS, the Stanislaus Council of Governments (StanCOG) has informed the Finance Department that TDA funds have been apportioned by the State to StanCOG for allocation to public transit agencies pursuant to Article 4 of Chapter 4 of the California Public Utilities Code (PUC), and

WHEREAS, the City has prepared its TDA claim for Fiscal Year 2020-21 pursuant to these sections of the California PUC, and

WHEREAS, the City's Transit TDA Claim for Fiscal Year 2020-21 is $15,409,739, and

WHEREAS, the City's Transit TDA Claim for Fiscal Year 2020-21 for Regional Projects is $915,459, and

WHEREAS, the total Transit Operating Budget for Fiscal Year 2020-21 is $21,549,739, and

WHEREAS, Council action authorizing submission of the Claim is required by StanCOG pursuant to Section 99233.11 of the California PUC before any TDA funding can be released to the City.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves submission of the TDA transit claim for Fiscal Year 2020-21 to StanCOG in the amount of $15,409,739 and a Regional Transit Claim for $915,459.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-211

RESOLUTION APPROVING A SECOND AMENDMENT TO THE LEASE AGREEMENT WITH STANISLAUS COUNTY FOR STANISLAUS REGIONAL TRANSIT TO USE THE MODESTO TRANSPORTATION CENTER, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO SIGN THE AMENDMENT

WHEREAS, Stanislaus County leases bus bays at the Transportation Center for the Stanislaus Regional Transit (StaRT) bus system, and

WHEREAS, the original lease was for a five-year period effective July 1, 2009, with options for three additional five-year extensions, and

WHEREAS, in 2018, the Stanislaus Council of Government (StanCOG) allowed the City to begin requesting regional Transportation Development Act (TDA) funds for the operation of the Transportation Center and Amtrak Station as they are used by more than one operator, and

WHEREAS, prior to 2018, the City had included the facilities in its transit operation claim, and

WHEREAS, since regional dollars are allocated to the City for transit operations it is appropriate to reduce the lease payment from Stanislaus County to the City, and

WHEREAS, the amended lease agreement provides compensation to the City for these services, and

WHEREAS, the amended lease agreement is $1,000/month for the remainder of the lease term.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a second amendment to the lease agreement with Stanislaus County for Stanislaus Regional Transit to use the Modesto Transportation Center.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to sign the amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-212

RESOLUTION APPROVING A TEN-YEAR LEASE AGREEMENT WITH SAN JOAQUIN JOINT POWERS AUTHORITY, FOR THE USE OF THE AMTRAK RAIL STATION AT 1700 HELD DRIVE, MODESTO FOR A TOTAL AMOUNT OF $1.00 PER YEAR PLUS SHARED UTILITIES COSTS FOR THE TERM OF THE AGREEMENT, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO SIGN THE AGREEMENT

WHEREAS, the Amtrak Station located at 1700 Held Drive, Modesto has been occupied and used by Amtrak for passenger rail transportation service operations since the building opened in 1999, and

WHEREAS, the previous 20-year lease agreement expired in October 2019, and

WHEREAS, a new agreement is needed for them to continue occupancy for rail service operations, and

WHEREAS, the San Joaquin Joint Powers Authority (SJJPA) contacted the City of Modesto Transit staff to advise that they will be assuming control of the property through a lease agreement with the City of Modesto and subleasing it to Amtrak, and

WHEREAS, the SJJPA has been establishing lease agreements along the San Joaquin Valley rail corridor to gain control of the stations serviced by the Amtrak San Joaquins Rail line, and

WHEREAS, Amtrak has informed the City of Modesto that they will be entering a sublease agreement with SJJPA in a separate agreement between the two parties, Amtrak and SJJPA, and

WHEREAS, the station will continue to operate as it has since the initial agreement was established in 1999, and

WHEREAS, the previous agreement was initially for ten years with two five-year options and the annual rent for occupancy was $1 per year for the entire duration of the agreement, and

WHEREAS, for the ten years of the proposed agreement, the SJJPA will pay $1 per year to the City of Modesto for the use of the rail station, and

WHEREAS, in addition, the SJJPA will pay a monthly fee in the amount of $1,600 to share the costs of landscape maintenance and janitorial services. This amount was derived from the current amounts paid by the City for landscaping ($892) plus the janitorial services ($2,249) divided by two and rounded up to $1,600.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a ten-year lease agreement with San Joaquin Joint Powers Authority, for the use of the Amtrak Rail Station at 1700 Held Drive, Modesto for a total amount of $1.00 per year plus shared utilities costs for the term of the agreement.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to sign the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-213

RESOLUTION APPROVING THE IMPLEMENTATION OF A FARE CAPPING PROGRAM WITH TOKEN TRANSIT ON MODESTO AREA EXPRESS

WHEREAS, the City's fixed route transit system currently uses cash, magnetic striped fare cards, and the Token Transit mobile ticketing application for fare payment to allow bus riders to pay for rides on Modesto Area Express (MAX), and

WHEREAS, on June 26, 2018, by Resolution 2018-256, Council authorized an agreement with Token Transit to provide mobile ticketing services for MAX for an amount not to exceed $178,000, and a termination date of June 30, 2023, and

WHEREAS, Token Transit has developed new functionality within the existing program to allow for fare capping services, and

WHEREAS, fare capping allows users to get credit for buying smaller trips and passes and earn their way toward a longer period pass, and

WHEREAS, the fare capping policy can help anyone but can especially assist those with low income ride the bus more often, and

WHEREAS, low-income individuals often only have funds enough for that day or week, and

WHEREAS, this functionality is only available in the Token Transit system, and

WHEREAS, this new fare payment option should promote new ridership. As the MAX system becomes easier to use and understand, the more likely people will utilize the bus for their transportation needs.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves approving the implementation of a fare capping program with Token Transit on Modesto Area Express.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-214

RESOLUTION APPROVING AN INCREASE OF THE DIRECTOR OF UTILITIES AUTHORITY TO ISSUE CHANGE ORDERS ON THE DEL RIO TANK NO. 14, WELL NO. 68, AND PUMP STATION PROJECT FROM 35 PERCENT ($2,628,793) TO 38 PERCENT ($2,854,117) OF THE ORIGINAL CONSTRUCTION CONTRACT PRICE OF $7,510,835 WITH MOUNTAIN CASCADE INC., OF LIVERMORE, CA

WHEREAS, on October 2, 2018, by Resolution No. 2018-432, Council approved a contract with Mountain Cascade Inc. (MCI) of Livermore, CA in the amount of $7,510,835 to construct the Del Rio Tank No.14, Well No. 68 & Pump Station Project, and

WHEREAS, the original amount authorized to the Director of Utilities to issue change orders was 8 percent ($600,867), and

WHEREAS, on April 23, 2019, by Resolution No. 2019-432, Council approved an increase in Director's authority to issue change orders from 8 percent ($600,687) to 35 percent ($2,628,793) of the original construction contract price of $7,510,835 with Mountain Cascade Inc., of Livermore, CA for unforeseen conditions resulting in the water treatment system necessary for the completion and operation of the Del Rio Tank 14, Well No. 68 and Pump Station Project, and

WHEREAS, the project is currently under construction and additional work is needed to complete the project including additional site grading and paving, vehicle impact protection bollards, and unforeseen adjustments needed in the design and construction, and

WHEREAS, an increase in Director's authority from $2,628,793 (35%) to a not-to-exceed amount of $2,854,117 (38%) of the original construction contract price of

$7,510,835 with Mountain Cascade Inc., of Livermore, CA, will be needed to complete the project improvements, and

WHEREAS, the administrative and field inspection costs associated with ensuring the additional change order work conforms to the City's standards of construction and quality.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes an increase in Director's Authority to issue change orders for the Del Rio Tank No. 14, Well No. 68, and Pump Station Project from 35 percent ($2,628,793) to 38 percent ($2,854,117) of the original construction contract price of $7,510,835 with Mountain Cascade Inc., of Livermore, CA.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-215

RESOLUTION APPROVING A FIRST AMENDMENT TO THE AGREEMENT WITH NV5, OF MANTECA, CA, FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE DEL RIO TANK NO. 14, WELL NO. 68, AND PUMP STATION PROJECT IN AN AMOUNT NOT TO EXCEED $199,692, FOR A TOTAL AMOUNT NOT TO EXCEED $1,199,692, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT

WHEREAS, this project will construct a 0.25-million gallon steel water tank, a 1,000 gallon-per-minute (gpm) well production pump, a 2.45 million gallon-per-day booster pump station, a 1.4 acre-foot retention basin, and a 16-inch transmission main installation from the intersection of St. John Road and Country Club Drive, south to Ladd Road, and

WHEREAS, on October 2, 2018, by Resolution No. 2018-432, Council awarded the construction contract to Mountain Cascade Inc. (MCI) of Livermore, CA., in the amount of $7,510,835 for the Del Rio Tank No.14, Well No. 68 & Pump Station Project, and

WHEREAS, due to the limited availability of the City's Construction Administration staff and recent staffing transitions, staff recommended utilizing a consultant to provide construction management, inspection and materials testing services through completion of the construction phase, and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), "Exceptions to Formal Bidding Requirements," this agreement for professional services is exempt from the bidding requirements of Modesto Municipal Code 8-3.203., and

WHEREAS, for the construction management and inspection services, a Request for Proposals (RFP) was issued to the prequalified list of firms for construction management and inspection services for this project, and

WHEREAS, on October 2, 2018, by Resolution No. 2018-433, Council approved an agreement with NV5, of Manteca, CA, for construction management and inspection services for the Del Rio Tank No.14, Well No. 68 & Pump Station Project in an amount not to exceed $1,000,000, plus $120,000 for additional services (if needed), for a total amount not to exceed $1,120,000, and

WHEREAS, the project was scheduled to be complete by January 31, 2020; however, the project schedule has been extended due to unforeseen conditions resulting in the inclusion of a water treatment system necessary for the completion and operation of the Del Rio Tank 14, Well No. 68 and Pump Station Project, and

WHEREAS, the inclusion of a water treatment system has resulted in an extended construction schedule and additional inspections with anticipated completion schedule of August 2020, and

WHEREAS, City staff recommends approving an amendment to the agreement with NV5, to provide additional construction management, inspection and materials testing services.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a First Amendment to the current agreement with NV5 for construction management and inspection services for Del Rio Tank No.14, Well No. 68 & Pump Station Project, in the amount of $199,692 for a total amount not to exceed $1,199,692.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-216

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT PROGRAM BUDGET IN THE AMOUNT OF $325,324 TO BE TRANSFERRED INTO THE PROJECT FROM WATER FUND CIP IN ORDER TO FULLY FUND THE CONTINGENCY AND CONSTRUCTION ADMINISTRATION FOR THE DEL RIO TANK NO. 14, WELL NO. 68, AND PUMP STATION PROJECT

WHEREAS, certain budgetary transactions are necessary in the amount of **$325,324**, in order to fund contingency and construction administration for the Del Rio Tank No. 14, Well No. 68, and Pump Station Project, and

WHEREAS, the Fiscal Year 2019-2020 Capital Improvement Program Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Capital Improvement Program Budget as shown in **Exhibit A**, **attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

EXHIBIT A

The purpose of this action is to amend the budget of Capital Improvement Program Project 100473 – Del Rio Water Tank in the amount of $325,324 to cover expenses associated with the Mountain Cascade Construction Contract and the required City staff time related to administering/managing the project.

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-217

RESOLUTION ACCEPTING THE MELLIS PARK IMPROVEMENTS PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $354,223 TO ANV CONTRACTORS, OF ATWATER, CALIFORNIA

WHEREAS, the existing pavilion, constructed in 1996 out of large wooden cross beams, was designed to shade the picnic tables and provide a vibrant area for both large groups and families to enjoy the park, and

WHEREAS, after sustaining 25+ years of weathering, the structure was deteriorating and was requiring demolition or replacement, and

WHEREAS, due to the high popularity of the park as a picnic destination, staff proposed to replace the wooden beam shade structure with a lighter and more durable, metal design, and

WHEREAS, the newly designed structure plan greatly increased Americans with Disabilities Act compliancy as well as provides longevity to the shade structure, and

WHEREAS, the Mellis Park renovation is one of the projects approved in the 2018/19 CIP budget, and

WHEARAS, as a U.S. Department of Housing and Urban Development (HUD) entitlement community, the City is required to develop an Annual Action Plan that describes proposed activities funded with CDBG, HOME Investment Partnerships, and Emergency Solutions Grant funds, and

WHEREAS, staff reviewed all of the current projects within the Program Year 2018-2019 Annual Action Plan and determined which projects would be able to move forward within the grant deadlines, and

WHEREAS, a park renovation project in Mellis Park was identified as a project that could meet the allocation deadline, and

WHEREAS, bids were advertised on December 21, 2018, and

WHEREAS, bids were publicly opened on January 22, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, ANV Contractors, Inc., of Atwater, California, was the apparent responsible and responsive bidder, and

WHEREAS, on February 12, 2019, by Resolution No. 2019-60, Council awarded a contract to ANV Contractors, Inc., of Atwater, California, California for the construction of the Mellis Park Improvements Project in the amount of $323,390, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of March 18, 2019, and all contract work was completed by May 20, 2019, and

WHEREAS, the total project costs were $449,177 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $450,600 which included $355,729 for the construction contract and contingency with ANV Contractors, Inc., and

WHEREAS, there were five change orders on this project with an overall increase of $30,833, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Mellis Park Improvements Project is hereby accepted as complete from contractor ANV Contractors, Inc., of Atwater, California, CA, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $354,223, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-218

RESOLUTION ACCEPTING THE WYLIE, FLOYD AND CARVER STREET IMPROVEMENTS PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $1,747,740 TO AMERICAN PAVEMENT SYSTEMS, OF MODESTO, CALIFORNIA

WHEREAS, in November 2016, the voters of Stanislaus County approved the county wide, 25-year, half- cent sales tax increase known as Measure L, and

WHEREAS, on July 5, 2017, by Resolution No. 2017-269, Council approved a list of proposed projects including design of the Wylie, Floyd and Carver Street Improvements project to be funded with Measure L tax proceeds in Fiscal Year 2017-18, and

WHEREAS, on September 4, 2018, by Resolution No. 2018-380, Council amended the approved list of projects to be funded with Measure L tax proceeds in Fiscal Year 2018-2019, and

WHEREAS, the amendment to the list of projects allocated $1,700,000 for construction to the Wylie, Floyd and Carver Street Improvements Project, and

WHEREAS, bids were advertised on February 26, 2019, and

WHEREAS, bids were publicly opened on March 2, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and American Pavement Systems, of Modesto, California, was the apparent responsible and responsive bidder, and

WHEREAS, on April 23, 2019, by Resolution No. 2019-179, Council awarded a contract to American Pavement Systems, of Modesto, California for the construction of

the Wylie, Floyd and Carver Street Improvements project in the amount of $1,595,915, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of June 3, 2019, and all contract work was completed by December 17, 2019, and

WHEREAS, the total project costs were $2,244,824 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $2,400,000 which included $1,755,507 for the construction contract and contingency with American Pavement Systems, and

WHEREAS, per Resolution 2019-181, on April 23, 2019, the Directors Authority for Change Orders was increased from $127,673 (8%) to $159,592 (10%), and

WHEREAS, there were seven change orders on this project with an overall increase of $151,825, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Wylie, Floyd and Carver Street Improvements Project is hereby accepted as complete from contractor American Pavement Systems, of Modesto, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $1,747,740, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 5th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-219

RESOLUTION ACCEPTING THE RESIGNATIONS OF TAMMY MAISETTI AND BRAD MORAD FROM THE DOWNTOWN IMPROVEMENT DISTRICT BOARD OF DIRECTORS

WHEREAS, Tammy Maisetti was appointed to serve as a member of the Downtown Improvement District Board of Directors in March 2020, and

WHEREAS, Tammy Maisetti has tendered her resignation from the Downtown Improvement District Board of Directors, and

WHEREAS, Brad Morad was appointed to serve as a member of the Downtown Improvement District Board of Directors in August 2017, and

WHEREAS, Brad Morad has tendered his resignation from the Downtown Improvement Board of Directors.

NOW, THEREFORE, BE IT RESOLVED, that the resignations of Tammy Maisetti and Brad Morad from the Downtown Improvement District Board of Directors.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Madrigal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting~~ City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-220

RESOLUTION AMENDING FISCAL YEAR 2019-2020 ANNUAL OPERATING AND CAPITAL IMPROVEMENT PROJECT FUND BUDGETS

WHEREAS, a financial analysis has been completed and it has been determined that a budget adjustment is required to the Annual and Capital Improvement Budgets of the City of Modesto for Fiscal Year 2019-20.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Fiscal Year 2019-20 Annual Operating and Capital Improvement budget as shown in **Exhibit A**, which is **attached** hereto and incorporated by reference herein.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Madrigal, Ridenour

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-221

RESOLUTION APPROVING AMENDMENT #2 TO THE COOPERATIVE AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) FOR THE STATE ROUTE 132 WEST FREEWAY/EXPRESSWAY - PHASE 1 PROJECT TO MODIFY THE FUNDING TABLE TO CORRECT THE AMOUNT OF STATE HIGHWAY OPERATION AND PROTECTION PROGRAM (SHOPP) FUNDS APPROVED FOR THE PROJECT AND TO APPROVE PAYMENT OF $599,197 FOR DEPARTMENT FURNISHED MATERIALS AND $31,500 FOR CONSTRUCTION ENGINEERING TESTING AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, the State Route 132 West Freeway/Expressway – Phase 1 Project (Project) proposes to construct a two-lane highway on a new alignment in Stanislaus County and the City of Modesto from State Route 99 just south of Kansas Avenue to Dakota Avenue; and

WHEREAS, the California Department of Transportation (Caltrans) required that the City of Modesto enter into the Cooperative Agreement prior to submitting a request for funding authorization to Caltrans; and

WHEREAS, the Cooperative Agreement sets forth the roles and responsibilities of the City and Caltrans with respect to the Project; and

WHEREAS, on August 8, 2018, per Resolution 2018-315, the City Council approved the Cooperative Agreement for the Project; and

WHEREAS, on June 25, 2019, per Resolution 2019-298, the City Council approved Amendment #1 to the Cooperative Agreement for the Project; and

WHEREAS, in August, 2019, City staff was notified by Caltrans that a second amendment to the Cooperative Agreement was needed to correct the amount of State Highway Operation and Protection Program (SHOPP) funds available for the project and

to authorize payment of $599,197 for Department Furnished Materials and $31,500 for Construction Engineering Testing performed by Caltrans; and

WHEREAS, these costs were anticipated when the construction project account was created and sufficient funding is currently available in CIP#101119. The funding source for both of these items is Regional Measure L funds. The Measure L funds were approved for this project via agreement with the Stanislaus Council of Governments (StanCOG) on September 24, 2019 by Resolution 2019-436.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the Second Amendment to the Cooperative Agreement with the California Department of Transportation (Caltrans) for the State Route 132 West Freeway/Expressway-Phase 1 Project to modify the funding table to correct the amount of State Highway Operation and Protection Program (SHOPP) funds approved for the Project and to approve payment of $599,197 for Department Furnished Materials and $31,500 for Construction Engineering Testing.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the Amendment, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Madrigal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-222

RESOLUTION ACCEPTING THE LAKEWOOD NEIGHBORHOOD STREET IMPROVEMENTS PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $2,220,476 TO AMERICAN PAVEMENT SYSTEMS, OF MODESTO, CALIFORNIA

WHEREAS, in November 2016, the voters of Stanislaus County approved the county wide, 25-year, half- cent sales tax increase known as Measure L, and

WHEREAS, on July 5, 2017, by Resolution No. 2017-269, Council approved a list of proposed projects including the Lakewood Neighborhood Street Improvements project to be funded with Measure L tax proceeds in Fiscal Year 2017-18, and

WHEREAS, on March 13, 2018, by Resolution No. 2018-124, Council amended the approved list of projects to be funded with Measure L tax proceeds in Fiscal Year 2017-2018 and necessary budget adjustments, and

WHEREAS, the amendment to the list of projects allocated $649,758 for construction to the Lakewood Neighborhood Street Improvements Project, and

WHEREAS, bids were advertised on May 1, 2018, and

WHEREAS, bids were publicly opened on May 22, 2018, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and American Pavement Systems, of Modesto, California, was the apparent responsible and responsive bidder, and

WHEREAS, on August 8, 2018, by Resolution No. 2018-308, Council awarded a contract to American Pavement Systems, of Modesto, California for the construction of the Lakewood Neighborhood Street Improvements project in the amount of $2,202,576, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of September 10, 2018, and all contract work was completed by May 21, 2019, and

WHEREAS, the total project costs were $2,738,169 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $2,899,758 which included $2,378,782 for the construction contract and contingency with American Pavement Systems, and

WHEREAS, per Policy 1.028, approved by Council Resolution on July 19, 1994, the Directors Authority to approve change orders is 8% of original contract price. There were five change orders on this project with an overall increase of $17,900, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Lakewood Neighborhood Street Improvements Project is hereby accepted as complete from contractor American Pavement Systems, of Modesto, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities and authorize payments totaling $2,220,476, as is authorized.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Madrigal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-223

RESOLUTION AUTHORIZING USE OF THE BOND OPPORTUNITIES FOR LAND DEVELOPMENT (BOLD) PROGRAM; AUTHORIZING THE CALIFORNIA MUNICIPAL FINANCE AUTHORITY TO ACCEPT APPLICATIONS FROM PROPERTY OWNERS, CONDUCT PROCEEDINGS AND LEVY SPECIAL TAXES WITHIN THE TERRITORY OF THE CITY OF MODESTO PURSUANT TO THE MELLO-ROOS COMMUNITY FACILITIES ACT OF 1982, AS AMENDED; AND APPROVING RELATED ACTIONS, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ALL DOCUMENTS

WHEREAS, the California Municipal Finance Authority (the "CMFA") is a joint exercise of powers authority the members of which include numerous cities, counties and other local agencies in the State of California (the "State"); and

WHEREAS, the CMFA provides financing services to its members, and the City of Modesto (the "City") is a member of CMFA; and

WHEREAS, the CMFA has established the Bond Opportunities for Land Development Program (the "BOLD Program") to allow the financing through the levy of special taxes under the Mello-Roos Community Facilities Act of 1982, as amended (the "Act") of certain public facilities and development impact fees that finance public facilities (together, the "Improvements") to be owned by local agencies in the State; and

WHEREAS, the BOLD Program creates an opportunity for new developments to utilize the Act to finance Improvements for construction and/or acquisition by the City, without the necessity of the City creating and administering the community facilities districts ("CFDs"); and

WHEREAS, the City desires to allow the owners of property being developed within its jurisdiction ("Participating Developers") to participate in the BOLD Program and to allow CMFA to conduct proceedings under the Act to form CFDs, to levy special

taxes within such CFDs, and to issue bonds secured by such special taxes to finance Improvements, provided that such Participating Developers voluntarily agree to participate and consent to the levy of such special taxes and the incurrence of such indebtedness; and

WHEREAS, eligible property owners within the jurisdiction of the City may in the future elect to be Participating Developers, and CMFA may conduct proceedings under the Act to form a CFD, levy special taxes within such CFD and issue bonds secured by such special taxes to finance Improvements; and

WHEREAS, the City will not be responsible for the conduct of any proceedings under the Act for the formation of any CFD; the levy or collection of special taxes for any CFD or any required remedial action in the case of delinquencies in any special tax payments; or the issuance, sale or administration of any bonds issued in connection with the BOLD Program; and

WHEREAS, pursuant to Government Code Section 6586.5, notice was published at least five days prior to the adoption of this resolution at a public hearing, which was duly conducted by this City Council concerning the public benefits of the BOLD Program and the financing of the Improvements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Modesto as follows:

1. The use of the BOLD Program in connection with the financing of Improvements is hereby authorized and approved. The appropriate City officials and staff are hereby authorized and directed to allow BOLD Program participation to be available

to property owners who are subject to the payment of fees for new development and/or who are conditioned to install public improvements in connection with new development.

2. The City Council hereby finds and declares that the issuance of bonds by CMFA in connection with the BOLD Program will provide public benefits, including without limitation, savings in bond preparation and certain bond issuance costs and the more efficient delivery of local agency services to residential and commercial development within the City.

3. In connection with the issuance of bonds by CMFA for the BOLD Program, a form of acquisition agreement, joint community facilities agreements or similar agreement will be required to be entered into by the City and CMFA, and the City Manager, the Finance Director or a designee of either of them (each, an "Authorized Officer") is hereby delegated authority to enter into such an acquisition agreement, joint community facilities agreement, or similar agreement for and on behalf of the City.

4. The Authorized Officers are hereby authorized and directed to allow and approve BOLD Program participation available for property owners who are subject to the payment of fees for new development and/or who are conditioned to install public improvements in connection with new development, including signing developer applications or other documents evidencing the official intent of the City to reimburse itself in connection with each project from the proceeds of tax-exempt obligations issued by CMFA as part of the BOLD Program, and to advise such owners requesting participation in the BOLD Program that the City has approved the BOLD Program; provided, that the CMFA shall be responsible for providing applications and processing of documentation and related materials at its own expense.

5. This Resolution shall take effect immediately upon its adoption. The City Clerk is hereby authorized and directed to transmit a certified copy of this resolution to the Secretary of the CMFA.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Madrigal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting ~~City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-224

RESOLUTION APPROVING THE 2020-2025 CONSOLIDATED PLAN AND ACCEPTING HUD PROGRAM FUNDS AWARDED THROUGH THE PROGRAM YEAR 2020-2021 ANNUAL ACTION PLAN, ADOPTING THE ANALYSIS OF IMPEDIMENTS TO FAIR HOUSING CHOICE, APPROVING THE CITIZEN PARTICIPATION PLAN AS REQUIRED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT DEPARTMENT (HUD), AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO NEGOTIATE AND EXECUTE ANY RELATED PROGRAM AGREEMENTS, CONTRACTS, OR OTHER DOCUMENTATION REQUIRED FOR IMPLEMENTATION OF THE 2020-2025 CONSOLIDATED PLAN AND PROGRAM YEAR 2020-2021 ANNUAL ACTION PLAN; TO SUBMIT APPLICABLE DOCUMENTATION AND PROVIDE TECHNICAL ALTERATIONS, AS REQUIRED BY HUD, AND TO INCORPORATE COMMENTS RECEIVED PRIOR TO THE CLOSE OF THE PUBLIC COMMENT PERIOD

WHEREAS, the City of Modesto is an entitlement grantee under the U.S. Department of Housing and Urban Development (HUD) Office of Community Planning and Development (CPD) which allocates the following program funds to the City of Modesto through a formula based allocation: Community Development Block Grant (CDBG), HOME Investment Partnerships (HOME), and Emergency Solutions Grant (ESG); and

WHEREAS, as an entitlement community, HUD requires entitlement grantees adopt a comprehensive, long-term plan known as the Five-Year Consolidated Plan for the use of HUD funds allocated to the City, and

WHEREAS, the Consolidated Plan, analyzes the City's housing and community development needs, with a priority focus on low and moderate-income individuals, households, and neighborhoods, and describes five-year strategies for meeting those needs, and

WHEREAS, the City partnered with Cloudburst Consulting Group Inc, in July 2019 to assist with the Consolidated Plan and the outreach to the community, and

WHEREAS, the City conducted a robust citizen participation marketing process consisting of multiple posts on social media, newspaper publications, notification on the Stanislaus County Continuum of Care (CoC) and other local special interest group list servs, distribution of marketing materials to targeted neighborhood groups, online surveys, and in person presentations and announcements to active neighborhood collaborative groups, and

WHEREAS, the City held fourteen (14) public community meetings, with at least one (1) meeting being in each Council district and Spanish translation was made available, and

WHEREAS, the City facilitated several stakeholder meetings gathering input from the Continuum of Care (CoC) as well as the Stanislaus Homeless Alliance (SHA), and

WHEREAS, several targeted outreach meetings were held to gather input form organizations that specialize in several areas including but not limited to housing, service delivery, organizations addressing special needs, infrastructure, and public works, and

WHEREAS, community outreach was also conducted via survey and a total of two-hundred and twenty-two (222) surveys were collected, and

WHEREAS, the Consolidated Plan's Needs Assessment, Market Analysis, and the community engagement process served to inform the prioritization of projects outlined in the 2020-2021 Annual Action Plan as well as the goals and priority needs that will guide the City's use of HUD funds over the next five (5) years, and

WHEREAS, according to the proposed Consolidated Plan, the primary areas that the City will address with HUD funds are the development of affordable housing, addressing and preventing homelessness, enhancing infrastructure and public facilities, providing public services to low income households, and Economic development, and

WHEREAS, it is important to note that the Consolidated Plan complements the City's Vision, Mission, Goals and Strategies document known as the City's 2020-2025 Strategic Plan adopted by City Council on August 14, 2019, and

WHEREAS, the Program Year (PY) 2020-2021 Annual Action Plan (AAP) represents the first year of the City's 2020-2025 Consolidated Plan and identifies the expected resources to be available and projects to be undertaken, to address the community priority needs as identified in the 2020-2025 Consolidated Plan **attached** in **Exhibit A**, and

WHEREAS, the PY 2020-2021 allocations are $1,900,954 in Community Development Block Grant (CDBG), $164,546 in Emergency Solutions Grant (ESG), and $934,812 in HOME investment partnership (HOME) funds, and

WHEREAS, CDBG funds support a range of eligible activities to benefit low and moderate-income individuals, families, and neighborhoods; these eligible activities include, but are not limited to public services, affordable housing, housing rehabilitation, property acquisition, acquisition or rehabilitation of public facilities, special economic development activities, and program administration in support of the implementation eligible activities, and

WHEREAS, CDBG, ESG, and HOME funds must be allocated to eligible activities to support the goals and objectives identified within the Consolidated Plan to address community needs, and

WHEREAS, projects proposed for PY 2020-2021 are listed in **Exhibit B**, and

WHEREAS, the Regional Analysis of Impediments to Fair Housing Choice (AI) is developed to understand the potential barriers to fair housing choice that residents within Stanislaus County may face and identify impediments that will work to inform future policy and programs., and

WHEREAS, this document was prepared in partnership with the Cloudburst Consulting Group, Inc with the collaboration of Stanislaus Urban County, City of Turlock, and Stanislaus Regional Housing Authority, and

WHEREAS, the AI is included in **Exhibit C**, and

WHEREAS, the Citizen Participation Plan outlines the outreach and participation by low- and moderate-income persons, particularly those living in blighted areas, in areas where HUD funds are proposed to be used and by residents of predominantly low- and moderate-income neighborhoods and encourages participation in all stages of the Consolidated Planning process by all residents, including minorities and non-English speaking persons, as well as persons with mobility, visual, or hearing impairments, and residents of assisted housing developments and recipients of tenant-based assistance, and

WHEREAS, in compliance with the HUD approved waiver for the Citizen Participation Plan requirements, a 30-day public period to review and comment on the draft documents opened April 12, 2020 and will close with a public hearing at the City

Council meeting on May 12, 2020 and citizen participation was conducted completely online and Plan is available on the City of Modesto Website.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the 2020-2025 Consolidated Plan, accepting HUD program funds awarded through the Program Year 2020-2021 Annual Action Plan, adopting the Analysis of Impediments to Fair Housing Choice, and approving the Citizen Participation Plan as required by the U.S. Department of Housing and Urban Development Department (HUD), a copy of which is on file with the City Clerk.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is authorized to negotiate and execute any related program agreements, contracts, or other documentation required for implementation of the 2020-2025 Consolidated Plan and Program Year 2020-2021 Annual Action Plan authorization.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is authorized to submit all applicable documentation and provide technical alterations, as required by HUD and to incorporate comments received prior to the close of the public comment period.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

Exhibit A
2020-2025 Consolidated Plan 2020-2021 Annual Action Plan

Consolidated Plan

Fiscal Year 2020-2024

&

Annual Action Plan

Fiscal Year 2020-2021

Prepared by:
Community and Economic Development Department
Cloudburst Consulting Group

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Executive Summary

ES-05 Executive Summary

Introduction

The City of Modesto is an "entitlement grantee" under the U.S. Department of Housing and Urban Development (HUD) Office of Community Planning and Development (CPD) programs. HUD requires entitlement grantees adopt a comprehensive, long-term plan for the use of its HUD funds known as the Five-Year "Consolidated Plan" (Consolidated Plan) which analyzes the City's housing and community development needs, with a priority focus on low- and moderate- income individuals, households, and neighborhoods, and describes long-term strategies for meeting those needs.

The Consolidated Plan is required by HUD for continued participation in HUD's CPD programs including Community Development Block Grant (CDBG), HOME Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funds. The overall goal of the these CPD programs is to develop viable urban communities by providing promoting integrated approaches that provide decent housing, suitable living environments, and expanding economic opportunities for low- and moderate-income persons.

The Consolidated Plan serves as:

- A planning document, built through a participatory process, for the City of Modesto (City)
- An application for federal funds under HUD's CDBG formula grants programs.
- A strategy to implement HUD's programs; and
- A method to allocate funds to specific projects and activities for the first fiscal year of the Consolidated Plan.

This Consolidated Plan will cover fiscal years 2020 to 2024. It is important to note that in the case of Modesto, the fiscal year begins July 1 and ends on June 30. Therefore, this Consolidated Plan will be in effect from July 1, 2020 to June 30, 2025, cover five (5) full fiscal years. Within this document, when referencing the length of projects, goals, or funding, these refer to fiscal years.

It is important to note that during the development of this Consolidated Plan the City of Modesto was put in a position to react to the unique coronavirus, COVID-19. The outbreak of COVID-19 dramatically shifted economic conditions of jurisdictions throughout the Country. Data reflected in this report does not consider the economic realities that COVID-19 impacted on the communities throughout the County. The City will receive federal funding to address COVID-19 challenges. The City has made an attempt to include allocations and strategies in this Consolidated Plan with the information available during the development of this document. However, if HUD's direction shifts from what is outlined in this Plan, an amendment to this Consolidated Plan and/or Action Plan may need to be conducted at a later time.

The City of Modesto has recently updated its *Vision, Mission, Goals and Strategies* document – the 2020-2025 Strategic plan was adopted by City Council on August 14, 2019. The City has outlined ten (10) goals within three (3) target areas, those target areas are: Quality of life, Economic vitality, and Governance and service delivery. The strategies outlined in this Consolidated Plan and Annual Action Plan align with

the strategies and vision articulated in the City's Planning document. For full view of the City's *Vision, Mission, Goals and Strategies* document, please see: http://modestogov.com/330/Reports-and-PublicationsSummary of the objectives and outcomes identified in the Plan

The City has identified several areas where funds will be focused. Not all areas highlighted here will receive the same level of funding. The Needs Assessment, Market Analysis, and the community engagement process served to inform the prioritization of projects outlined in the 2020 Annual Action Plan as well as the goals and priority needs that will guide the City's use of HUD funds over the next five (5) years. The primary areas that the City will address with HUD funds are:

- Affordable housing development
- Addressing and Preventing homelessness
- Enhance Infrastructure and Public Facilities
- Providing Public Services to Low Income Households (Includes Fair Housing Services)
- Community and Economic development

Evaluation of past performance

The City utilizes resources identified in the Strategic Plan and Annual Action Plan sections of this Plan to carry out programs and activities. The City continues to take an active role in the production and development of affordable housing, addressing the social and economic needs of low- and moderate-income individuals and the special needs populations within the City.

The Community Development Block Grant (CDBG), Emergency Solutions Grant (ESG), and the HOME Investment Partnership (HOME) provided operating funds for many local programs, allowing the City to make progress towards the goals outlined in the Strategic Plan.

Housing programs funded through the CDBG, ESG and HOME Programs assisted in stabilizing neighborhoods by providing affordable housing rehabilitation and enforcing City building codes that are designed to assure the community's housing stock is safe and sanitary.

CDBG and ESG funded public service programs strove to alleviate the problem of gaps in human service needs throughout the City by offering various programs such as emergency rental assistance and homeless case management. In light of continuing decreases in funds and increased construction costs, staff and subrecipients continue to explore alternative strategies to provide decent affordable housing, create economic development opportunities, and ensure suitable living environments.

At least once per year, staff conducts formal onsite monitoring of CDBG, ESG and HOME funded projects implemented by subrecipients. These visits are conducted more frequently if the subrecipient is new or is having difficulty meeting program or contract requirements.

The City is proud to highlight the following projects it took part on via partnerships with local service providers (note: these projects have been completed or currently under development):

Kansas House:

The Kansas House project is a collaborative project in partnership with the City of Modesto, Stanislaus County and the Housing Authority of the County of Stanislaus (HACS). The project will provide Permanent Supportive Housing (PSH) for those who are homeless or at risk of becoming homeless. Placement is based on referrals by service providers, and residents may include single men and women, partners, and single parents with a child or adult siblings.

The HACS acquired the Kansas Street property late 2019 and the total project cost is estimated at $7,600,000 million, including acquisition costs. The City of Modesto contributed $2,500,000 of CDBG funding (derived from NSP program income) toward the acquisition of this property. This project will provide housing opportunities to approximately 200 homeless individuals.

Edwards Estates Homeownership Project:
This project will assist two households at the highest level in the housing continuum through homeownership. In partnership with Great Valley Housing Development corporation, the City provided HOME CHDO funds for the construction of two single family homeownership units to be sold to first time homebuyers. Proceeds from the sale of the first two units will be used to assist in the construction of additional units for a total of up to 35 homebuyer units.

Youth Navigation Center:
The City was proud to partner with the Center for Human Services, a local youth service provider, for the acquisition of property to establish a stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness. The Youth Navigation Center will create a space where existing services, currently at different sites, will be relocated and new services developed, creating a clear pathway for youth/young adults.

Mellis Park Improvements Project
The City awarded CDBG funds for public improvements Mellis Park located in one of Modesto's low-income census area. Improvements included: removal and replacement of the picnic area including picnic structure, concrete paving, drinking fountain and barbeque units to accommodate a ADA accessible recreational facility which included ADA tables, ADA parking stalls, ADA drinking fountain, ADA curb ramp, safety lighting, and accessible concrete paths to park facilities

Summary of citizen participation process and consultation process
The City offered a variety of engagement methods for both stakeholders and the public to participate in the Consolidated Plan process. The City also took special consideration to include low- and moderate-income communities; hosting community meetings in low- and moderate-income census tracts. The City takes an active role in gathering public feedback and input into the Consolidated Plan. The details of the engagement process are outlined in the next section, Process, and are highlighted below:

- Public community meetings
- Community survey
- Stakeholder meetings and presentations

- Stakeholder interviews (via phone, in-person, and email)

The public community meetings were district-based, having at least one meeting within each of Modesto's six districts. Meeting times were typically held in the evening to accommodate participation of the greatest number of households. At each meeting Spanish translation was made available and email/phone follow-up conversations were offered to anyone who had additional input after the meeting had ended.

The community survey was disseminated in both English and Spanish through City channels. The survey link was placed on the City website and shared with faith-based groups, service providers, nonprofits and stakeholders throughout the City.

Summary of public comments

Please see Appendix A – Public Comments

Summary of comments or views not accepted and the reasons for not accepting them

All comments made at public and stakeholder meetings were accepted and integrated where possible into the Consolidated Plan process. No comments or input were left out of the Appendix A – Public Comments.

Summary

The City makes every effort to coordinate and align this Consolidated Plan with the strategic plans of other organizations that share the mission of fulfilling public needs, especially serving those low- and moderate-income households. This Consolidated Plan will outline the needs of communities and will culminate in the Strategic Plan where those needs are met with goals and strategies to address the needs identified in this Consolidated Plan. The City conducted a robust outreach effort within the City and ensured any individual or organization that wished to voice there individual needs, the needs of their community, or the needs of a population they serve were included.

The Process

PR-05 Lead & Responsible Agencies

Describe agency/entity responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source

Agency Role	Name	Department/Agency
Lead Agency	Modesto, CA	Community and Economic Development Department
CDBG Administrator	Modesto, CA	Community and Economic Development Department
HOME Administrator	Modesto, CA	Community and Economic Development Department
ESG Administrator	Modesto, CA	Community and Economic Development Department

The City is the lead agency responsible for preparation of the Consolidated Plan and for administration of each grant program and its associated funding source(s). Primary oversight of the City's HUD entitlement grant programs comes from the Citizens' Housing and Community Development Committee (CH&CDC). This committee is appointed by the City Council and is comprised of representatives from the City Council, Planning Commission, Housing Rehabilitation Loan Committee, Human Relations Commission and/or Citizens Redevelopment Advisory Commission and several citizens-at-large. Generally, the citizens-at-large represent low-income and racial minority groups. The CH&CDC makes funding recommendations to the City Council regarding HUD CDBG, HOME, ESG, and/or State funded programs related to housing and community development.

The CH&CDC meets approximately once a month. These are meetings that are publicly noticed, are open to the public and are generally held at Tenth Street Place, 1010 Tenth Street, Modesto, California. Public comments are both encouraged and welcomed.

To avoid a perceived conflict of interest, any CH&CDC member who is also a member of a board of directors or is employed by an agency that applies for or receives CDBG, ESG, HOME, or other HUD funding , is ineligible to vote on funding decisions involving their respective agencies.

Consolidated Plan Public Contact Information

The following are various ways in which an interested party can contact the City of Modesto CEDD staff with comments regarding the City's Consolidated Plan:
Telephone: (209) 577-5211
Hearing Impaired: Dial 711, and ask for 209-577-5211
Email: housing@modestogov.com
In person: 1010 Tenth Street, Suite 3100, Modesto, California
Mail: City of Modesto,
Community Development Division,
P.O. Box 642.
Modesto, California 95353

PR-10 Consultation

Introduction

The City follows the Citizen Participation Plan the City Council has approved as the guide for engaging with citizens and consultation with respective entities. The City of Modesto encourages citizen participation in the Consolidated Plan process and views itself as an active partner in the process; directly engaging with the public and facilitating opportunities for citizens and stakeholders to engage with the process.

The City continuously reviews and improves delivery systems, including feedback loops. This section will outline the efforts made by the City to include public and stakeholder input into the Consolidated Plan process

Provide a concise summary of the jurisdiction's activities to enhance coordination between public and assisted housing providers and private and governmental health, mental health and service agencies.

The City is an active member of several committees and working groups that represent organizations in housing and social services. For example, the City regularly attends the Stanislaus Community System of Care (CSOC) which is the local Stanislaus County Continuum of Care (CoC) meetings (note: the CSOC and CoC may be referenced interchangeably throughout this document). The CoC is comprised of service providers from multiple sectors including but not limited to housing providers, private and governmental health, mental health, youth services, senior services, and lived experience). These meetings are held monthly and work to address potential issues and gaps in the service delivery system and create a transparent and collaborative service delivery system for the entire County.

The City also has both inter/intradepartmental coordination through regular meetings and discussions. The Community Development Division (CDD) regularly meets with sub-recipients and partners of HUD-funded programs. Similarly, the City also engages in Memorandums of Understanding (MOUs) to clearly dictate program goals and reporting requirements to ensure all governmental and non-governmental organizations involved in HUD-funded programs understand expectations.

The City works closely with the Housing Authority of the County of Stanislaus (HACS) as well as the Stanislaus County Affordable Housing Corporation (STANCO). This working relationship is evident through consistent productive partnerships on projects and regular communication to address needs and shifting trends.

The City works closely with the Stanislaus County Department of Behavioral Health and Recovery Services (BHRS) in the system delivery of housing services. BHRS provides Housing Support Services Program provides an array of support services for individuals facing barriers that include low income, severe mental illness, substance abuse, and other disabling conditions. The program offers a combination of affordable housing and support services designed to help individuals and families use housing as a platform for wellness and recovery following a period of homelessness, hospitalization or incarceration. The goal of Housing Support Services is to assist individuals in obtaining employment, independent living skills, recovery and increased self-sufficiency. In addition, BHRS provides Employment Support Services to individuals with psychiatric disabilities who are working towards Employment and Housing goals. The program provides an opportunity for individuals with severe mental health disabilities to work in the community. Often times, BHRS and City HUD funding resources are leveraged together when partnering with local affordable housing developers such as the HACS and STANCO.

The City also coordinates with the Stanislaus County Community Services Agency (CSA) which is responsible for the administration of multiple housing and homeless programs associated with the administration of the General Assistance, CalWORKs, Welfare to Work, Child Welfare, and Adult Services programs. The housing and homeless programs include the Housing Assistance Program (HAP), the Transitional Housing Plus Program (THP+), the Housing Support Program (HSP), the Housing Disability Advocacy Program (HDAP), the Homeless Emergency Aid Program (HEAP), and Homeless Housing, Assistance, and Prevention Program. As with BHRS, the City partners with housing developers and CSA in the delivery of services and/or affordable housing projects to serve the target populations.

Describe coordination with the Continuum of Care and efforts to address the needs of homeless persons (particularly chronically homeless individuals and families, families with children, veterans, and unaccompanied youth) and persons at risk of homelessness.

The City is an active member of the Stanislaus County CoC as well as the Stanislaus Homeless Alliance (SHA). The CoC and the SHA support all service delivery mechanisms as they relate to working to end and address homelessness. Both the CoC and the SHA are further described in section NA-40 of this Consolidated Plan.
The City regularly coordinates with the CoC, the SHA, as well as individual stakeholders including during the development of this Consolidated Plan. Coordination with the CoC consists of:

- Meetings with the CoC at large as well as the CoC subcommittees such as the CoC Advisory Council, Community Projects & Grant Review Committee, HMIS Governance Committee, Point in Time Housing Inventory Count Committee, Homeless Populations and Subpopulations Committee, Funding and Resource Committee, Housing Committee, and the Planning and Development Committee.
- The City of Modesto currently leads weekly Coordinated Entry meetings in an effort to fill vacant housing units in the community.
- The City regularly coordinates with service providers including but not limited to Community Housing and Shelter services, BHRS, CSA, the HACS, STANCO, and County Veterans Services in efforts to address the needs of homeless persons (particularly chronically homeless individuals and families, families with children, veterans, and unaccompanied youth) and persons at risk of homelessness. Coordination with these entities occurs via monitoring meetings, CoC meeting interactions, client service referrals, and or/program planning.

Describe consultation with the Continuum(s) of Care that serves the jurisdiction's area in determining how to allocate ESG funds, develop performance standards and evaluate outcomes, and develop funding, policies and procedures for the administration of HMIS.

Consultation with the CoC occurs by having members of the CoC participate on the City's CDBG/ESG application scoring committee to determine how to best allocate CDBG and ESG program funds. Award recommendations are then vetted through the CoC and CH&CDC committees for endorsement and forward to City Council.

To develop performance standards and evaluate outcomes of projects and activities assisted by ESG funds, the City of Modesto uses performance measures captured annually by HMIS to evaluate the outcomes of projects assisted with ESG funds. The performance measures will help evaluate the performance to determine the most effective services and assist with future allocation of ESG funds.

The City collaborates with the CoC to implement the Homeless Management Information System (HMIS). HMIS allows agencies and providers to identify and document gaps in service as well as maintaining accurate data regarding housing and service needs as seen from the community. The CoC

encourages greater participation from non-HUD funded organizations into HMS by providing CDBG funding for acquisition of necessary HMIS equipment and technical assistance.

These include length of homelessness, returns to homelessness, number of sheltered homes persons, employment and income growth for persons, homeless for the first time, and exit and retention to permanent housing.

The City participates in monthly HMIS Subcommittee meetings. These meetings serve to provide guidance and information to end users with regards to system implementation according to HUD's HMIS Data and Technical Standards. The subcommittee reviews system updates and changes, data quality, system performance, and any HUD or related updates. In addition, ongoing training is provided with focus on User Policies and Responsibilities, federal reporting, data quality, coordinated entry, along with agency office hours and one on one support.

The City is also part of the Community of Practice (CoP) Initiative. This initiative provided an opportunity for the community to access HUD technical assistance through an online, group learning, peer-to-peer collaborative approach. This collective approach provided a better understanding of the current strengths and challenges within the COC and provided resources and expertise to improve system process.

The City led the recent Data Quality Plan update with a focus on data quality for both federally funded and non-federally funded projects to ensure accurate reporting, and an overall picture and transparency of homelessness within the COC. All organizations participating in HMIS are required to adhere to the Data Quality Plan. The implementation of the plan provides the COC an understanding of program performances and assists with the determination that the appropriate strategies and resources are deployed.

Describe Agencies, groups, organizations and others who participated in the process and describe the jurisdictions consultations with housing, social service agencies and other entities

	Agency/Group/Organization	Parent Resource Center
	Agency/Group/Organization Type	Services – Children Services – Education Child Welfare Agency
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs Economic Development
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the	The agency was consulted regarding priority needs and shifting service trends over the past five (5) years. Anticipated outcomes of the consultation are integration of needs and priorities into the Consolidated Plan to ensure

	consultation or areas for improved coordination?	community needs are reflected through goals and projects outlined in this plan.
2	**Agency/Group/Organization**	**Stanislaus County**
	Agency/Group/Organization Type	Other government - County
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homelessness Strategy Market Analysis
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The agency was consulted regarding priority needs and shifting service trends over the past five (5) years. Anticipated outcomes of the consultation are integration of needs and priorities into the Consolidated Plan to ensure community needs are reflected through goals and projects outlined in this plan.
3	**Agency/Group/Organization**	**Housing Authority of the County of Stanislaus**
	Agency/Group/Organization Type	Housing PHA
	What section of the Plan was addressed by Consultation?	Public Housing Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Housing Authority was consulted via email, phone call, and offered support with data collection. The Housing Authority and the City share many affordable housing goals, and the outcome of this consultation is further collaboration on goals and strategies outlined in the Consolidated Plan.
4	**Agency/Group/Organization**	**Opportunity Stanislaus**
	Agency/Group/Organization Type	Services – Employment Services – Education Regional Organization
	What section of the Plan was addressed by Consultation?	Non-Homeless Special Needs Economic Development
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Opportunity Stanislaus was consulted via a telephone call. The outcome of this consultation is clearly identifying needs and areas of collaboration for workforce development in Modesto and the County.
5	**Agency/Group/Organization**	**Modesto Public Works Department**
	Agency/Group/Organization Type	Other government - Local

	What section of the Plan was addressed by Consultation?	Housing Need Assessment Economic Development
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Public Works Department was consulted via email and in City meetings regarding community needs and strategies. Transportation needs were identified, most notably for disabled youth, seniors, and low-income individuals.
6	**Agency/Group/Organization**	**California Rural Legal Aid (CRLA)**
	Agency/Group/Organization Type	Services – Fair Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	CRLA was consulted via telephone regarding community needs and strategies to address barriers to housing CRLA client's face. Most notably, the cost of housing and low vacancy rate is giving leverage to property owners over low- and moderate-income households that may be more vulnerable.
7	**Agency/Group/Organization**	**Modesto Police Department**
	Agency/Group/Organization Type	Other government - Local
	What section of the Plan was addressed by Consultation?	Homelessness Needs – Chronically homeless Homelessness Strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The City Police Department was consulted via email and in City meetings regarding community needs and strategies. The primary needs identified are access to supportive services, specifically mental health services and substance abuse services. The Homeless Engagement and Response Team (HEART) from Modesto Police Department continue to work with service providers in Modesto to deliver holistic services and attempt to divert individuals from the criminal justice system.
8	**Agency/Group/Organization**	**South Modesto Partnerships**
	Agency/Group/Organization Type	Other – Community Agency
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Market Analysis
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the	The South Modesto Partnership was consulted via the public meeting that took place in South Modesto districts as well as email. Meetings and email correspondence identified community needs, conditions, and strategies.

	consultation or areas for improved coordination?	
9	**Agency/Group/Organization**	**Project Sentinel**
	Agency/Group/Organization Type	Services – Fair Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Project Sentinel was consulted via a telephone conference. The meeting consisted of identifying primary needs of Project Sentinel clients as it pertains to fair housing and services.
10	**Agency/Group/Organization**	**Stanislaus Homeless Alliance (SHA)**
	Agency/Group/Organization Type	Regional organization Planning organization Publicly funded institution/System of care
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homeless Needs – Chronically homeless Homeless Needs – Families with children Homeless Needs – Veterans Homeless Needs – Unaccompanied youth Homelessness Strategy Anti-poverty strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The City consulted with the SHA and all its partner members in several ways. The City facilitated a meeting with the entire group, going over Consolidated Plan overview and then discussing system level needs, gaps, and strategies moving forward to address homelessness and housing in the City.
11	**Agency/Group/Organization**	**Stanislaus County System of Care (CoC)**
	Agency/Group/Organization Type	Regional organization Planning organization Publicly funded institution/System of care
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homeless Needs – Chronically homeless Homeless Needs – Families with children

		Homeless Needs – Veterans Homeless Needs – Unaccompanied youth Homelessness Strategy Anti-poverty strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The City consulted with the CoC and all its partner members in several ways. The City facilitated a meeting with the entire group, going over Consolidated Plan overview and then discussing system level needs, gaps, and strategies moving forward to address homelessness and housing in the City.
12	**Agency/Group/Organization**	**Modesto Department of Information Technology**
	Agency/Group/Organization Type	Other government – Local Services – Broadband Internet Service Providers
	What section of the Plan was addressed by Consultation?	Market Analysis
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The City IT Department was consulted via email about the broadband needs and the projected systems moving forward impacting households and their access to broadband.
13	**Agency/Group/Organization**	**Stanislaus County Office of Emergency Services**
	Agency/Group/Organization Type	Agency – Emergency Management
	What section of the Plan was addressed by Consultation?	Market Analysis
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The County Office of Emergency Services was consulted via email, discussing disaster relief plans, emergency planning, and existing strategies on addressing the variety of possible natural disasters the region faces.
14	**Agency/Group/Organization**	**Stanislaus County Affordable Housing Corporation**
	Agency/Group/Organization Type	Housing Regional organization Planning organization
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Public Housing Needs Market Analysis

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Stanislaus County Affordable Housing Corporation was consulted via telephone conference and discussed needs of public housing residents as well as the needs for services of all low- and moderate-income households in the communities served.
15	**Agency/Group/Organization**	**Sutter Health**
	Agency/Group/Organization Type	Health Agency
	What section of the Plan was addressed by Consultation?	Housing Need Assessment
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The County Office of Emergency Services was consulted via email, outlining the greatest needs, highlighting what is working well, and what f populations are seeing an increased need for services.

Identify any Agency Types not consulted and provide rationale for not consulting

The City sought wide input from agencies and organizations serving the community in any capacity. No agency or organization was specifically left out of the consultation process.

Describe other local/regional/state/federal planning efforts involved in preparing the Plan

Name of Plan	Lead Organization	How do the goals of your Strategic Plan overlap with the goals of each plan?
General Plan	City of Modesto	The plan outlines community growth strategies and the need to include housing and services among those strategies
City Strategic Plan	City of Modesto	This plan highlights the key areas the City plans to address, including quality of life, economic development goals, and the creation of a homelessness and housing plan.
Housing Element	City of Modesto	The goals overlap where needs are identified: additional affordable housing.
Plan to Address Homelessness in Stanislaus County	County CoC	The goal of addressing and ending homelessness is a shared goal between the City and the CoC
Public Housing Agency (PHA) Plan	Stanislaus County Housing Authority	Both include the need to increase affordable housing stock and integrate quality services

Describe cooperation and coordination with other public entities, including the State and any adjacent units of general local government, in the implementation of the Consolidated Plan

In addition to those organizations and plans listed above, the City regularly coordinates with other public institutions such as schools and hospitals in efforts to increase service delivery systems and/or better understand needs of the communities in which they serve.

The City will be coordinating with the State of California as the State rolls out new funding sources such as the Permanent Local Housing Allocation (PLHA) that will assist in addressing local housing and homelessness needs. The City will align these and any other resources made available by the State with HUD funds to maximize the impact on local needs.

PR-15 Citizen Participation

Summary of citizen participation process/Efforts made to broaden citizen participation
Summarize citizen participation process and how it impacted goal-setting

The City conducted a robust citizen participation marketing process consisting of multiple posts on social media, newspaper publications, notification on CoC and other local special interest group list servs, distribution of marketing materials to targeted neighborhood groups, online surveys, and in person presentations and announcements to active neighborhood collaborative groups.

The City held a total of fourteen (14) public community meetings, with at least one (1) meeting being each Council district. Each community meeting was held at a public space and Spanish translation was made available. These meetings consisted of a Consolidated Plan overview, and then allowed for conversation about needs, priorities within the community, and any changes or shifts that are happening that may be addressed through HUD-funded programs.

The City also facilitated several stakeholder meetings gathering input from the Continuum of Care (CoC) as well as the Stanislaus Homeless Alliance (SHA). These meetings consisted of a Consolidated Plan overview and then also set aside time to discuss needs in the service delivery system, potential gaps, and strategies to address the goal of ending homelessness.

There was also targeted outreach for organizations that are involved in housing, service delivery, organizations addressing special needs, infrastructure and public works. This targeted outreach resulted

in email and phone communication gathering input on needs and priorities within the respective organization.

A community survey was made available to the community, asking for input on priorities within the community. The survey was designed specifically for Consolidated Plan input and reflects the needs of the community from the citizens' perspective.

A summary of all meetings as well as the community survey are included in Appendix A – Public Comments.

NOTE: The live public community meetings to introduce each of the draft documents to the public were canceled due to the COVID-19 pandemic. Draft documents were made available for online review and advertised via social media, local newspaper, and housing, CoC, and community list servs.

Citizen Participation Outreach

Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of comments received
Public Meeting	Other – District 1 10/29/19 Fire House #6	See Appendix A	See Appendix A
Public Meeting	Other – District 2 11/7/19 W. Modesto King Kennedy	See Appendix A	See Appendix A
Public Meeting	Other – District 2 11/01/19 S. Modesto The Center	See Appendix A	See Appendix A
Public Meeting	Other – District 2 10/30/19 W. Modesto Housing Authority Trunk or Treat	See Appendix A	See Appendix A
Public Meeting	Other – District 3 10/28/19 Trinity United Presbyterian Church	See Appendix A	See Appendix A
Public Meeting	Other – District 3 10/30/19 Stand Down Veteran Event	See Appendix A	See Appendix A
Public Meeting	Other – District 4 11/6/19 Airport Neighborhood – Healthy Start	See Appendix A	See Appendix A
Public Meeting	Other – District 5 11/13/19 Stanislaus Veteran's Center	See Appendix A	See Appendix A
Public Meeting	Other – District 6 11/13/19	See Appendix A	See Appendix A

	Fire House #9		
Public Meeting	Non-targeted/broad community 11/20/19 Boy Scout Clubhouse – Enslen Park	Community wide public meeting	See Appendix A
Public Meeting	Non-targeted/broad community	CoC meeting and attendance of all regularly attending organizations	See Appendix A
Public Meeting	Non-targeted/broad community	SHA meeting and attendance of all regularly attending organizations	See Appendix A
Public Hearing	Non-targeted/broad community 04/16/20 Tenth Street Place	Citizens' Housing and Community Development Committee	See Appendix A
Public Hearing	Non-targeted/broad community 05/12/20 Tenth Street Place	City Council	See Appendix A
Survey	Non-targeted/broad community	See Appendix A	See Appendix A

Needs Assessment

NA-05 Overview

Needs Assessment Overview

The Needs Assessment examines needs related to affordable housing, special needs housing, community development and homelessness for the City of Modesto.

The Needs Assessment identifies those needs with the highest priorities which form the basis for the Strategic Plan section and the programs and projects to be administered.

Below are highlights from each section within the Needs Assessment. Please see each section for further detail.

NA-10- Housing Needs Assessment

- Of all households in Modesto, 36% are paying more than 30% of their monthly incomes towards housing costs (including utilities)
- Of those Modesto households earning 0-80% (29,570) of the area median income, 68% are cost burdened (20,108).

- Low-income renter households experience housing problems at higher rates when compared to low-income owner households.
    - Nearly 50% of all renter-households earn less than 80% AMI and experience a housing problem; 17% of owner-households earn less than 80% AMI and experience a housing problem

NA-15-30 - Disproportionately Greater Need

- Considering cost burden, Black/African American and Pacific Islander households experience a disproportionate greater need as compared to other race and ethnic groups in Modesto
    - A disproportionate greater need is defined as a group that experiences a housing problem at a rate of greater than ten percentage points.

NA-35 - Public Housing

- There is a total of 647 public housing units
    - Of those units, 72 are qualified as accessible units
- The greatest needs identified among those public housing units are grab bars, ramps for entry, and lower level units

NA-40 - Homeless Needs Assessment

- The 2019 PIT Count reported 809 unsheltered and 591 sheltered persons experiencing homelessness
- The Salvation Army added 50 beds to its original Berberian Emergency Shelter for a total of 206 beds
- The Salvation Army has recently added 182 beds in coordination with the closure of the Modesto Outdoor Emergency Shelter (MOES)
- An on-site referral service center is in development at the Salvation Army, with the aim of providing the array of CoC services to those experiencing homelessness as well as those at-risk of homelessness
- The Kansas House project, currently being renovated, will add 103 permanent supportive housing units to house homeless individuals who exited from MOES.

NA-45 - Non-Homeless Special Needs Assessment

- About 14% of the Modesto population is aged 65 or older, this ratio is expected to increase over the lifecycle of this Consolidated Plan
- Some of the most common needs brought up within public meetings were:
    - Affordable units near transportation/work opportunities
    - Additional affordable housing units that accommodate larger families (5 members or more)

NA-50 - Non-Housing Community Development Needs

- Through survey and public consultations, the following non-housing needs were identified (not an exhaustive list).
    - Homeless facilities and service centers
    - Park and community programming for youth and seniors
    - Childcare support
    - Public Facilities

NA-10 Housing Needs Assessment

Summary of Housing Needs

The data throughout this document is generated from the United States Census Bureau and the Department of Housing and Urban Development (HUD). The Comprehensive Housing Affordability Strategy (CHAS) dataset is a custom tabulation developed by the Census Bureau, derived from American Community Survey (ACS) data. The most recent CHAS data used in this document - the 2012-2016 5-year estimate -- are determined for each jurisdiction that receives HUD funding. Because 2016 is the latest available CHAS dataset, this document will utilize 2016 data throughout. Utilizing 2016 throughout the document will make for clearer comparisons and make for a consistent narrative across all sections of the Consolidated Plan.

Because CHAS data is derived from ACS data, Census definitions dictate the definitions of the variables discussed in these tables:
Small Family Household: A household with two-four members
Large Family Household: A household with five or more members
Elderly: Ages 62-74
Frail Elderly or Extra Elderly: Ages 75+
Household: All people living in a housing unit. Members of a household can be *related* or *unrelated*.
Family: Related individuals living in the same household
Nonfamily: Unrelated individuals living in the same household

The term Area Median Income (AMI) and HUD Area Median Family Income (HAMFI) are interchangeable when the terms are being used to explain CHAS data derived from ACS data. For consistency throughout this document, only the term AMI will be used. It is important to note that within this document, AMI refers to the entire City of Modesto. Throughout this document data tables compare populations based on income ranges. These income ranges are categorized based on AMI and are used by HUD to determine eligibility to certain programs.
Of the programs Modesto receives HUD funds for, each program targets household income as a percentage of the area median income (AMI) at slightly different ranges.

- CDBG -> 0%-80% AMI
- HOME -> 0%-60% AMI
- ESG -> 0%-30% AMI

HUD defines the following income brackets as low-moderate income.

- Extremely Low Income = <30% AMI
- Low Income = 30-50% AMI
- Moderate Income 50-80% AMI

HUD entitlement programs, CDBG, ESG, and HOME, operate under federally established income limits. The following table provides the 2016 income limits subject to annual adjustments by HUD.

2016 HUD Income Limits: Modesto, CA

Household Size	30% of Median Very Low Income	50% of Median Low Income	80% of Median Moderate Income	100% of Median
1	$12,400	$20,650	$33,000	$41,300
2	$16,020	$23,600	$37,700	$47,200
3	$20,160	$26,550	$42,400	$53,100
4	$24,300	$29,450	$47,100	$58,900
5	$28,440	$31,850	$50,900	$63,700
6	$32,580	$34,200	$54,650	$68,400
7	$36,550	$36,550	$58,450	$73,100
8	$38,900	$38,900	$62,200	$77,800

Source: U.S. Department of Housing and Urban Development (HUD); huduser.gov

The 2016 Income limits are highlighted here because the Comprehensive Housing Affordability Strategy (CHAS) data that is used throughout this Needs Assessment section is 2012-2016 data. By using the same years dataset, better comparisons and assumptions can be made. The tables throughout this section utilize the 30%, 50%, 80%, and 100% AMI categories; the above table offers context to those numbers, highlighting the actual income of households that are experiencing housing problems. To offer a comparison showing the growth of HUD Income Limits from 2016, the 2019 income limits are highlighted below. The housing and non-housing issues addressed in this Consolidated Plan will be addressing present issues, so although it is clear to make comparisons using 2016 data, it is also important to recognize the households and their incomes projects and activities within this Consolidated Plan will work to address.

2019 HUD Income Limits: Modesto, CA

Household Size	30% of Median Very Low Income	50% of Median Low Income	80% of Median Moderate Income	100% of Median
1	$13,650	$22,700	$36,300	$45,400
2	$16,910	$25,950	$41,500	$51,900
3	$21,330	$29,200	$46,700	$58,400
4	$25,750	$32,400	$51,850	$64,800
5	$30,170	$35,000	$56,00	$70,000
6	$34,590	$37,600	$60,150	$75,200
7	$39,010	$40,200	$64,300	$80,400

8	$42,800	$42,800	$68,450	$85,600

Source: U.S. Department of Housing and Urban Development (HUD); huduser.gov

Modesto General Characteristic Changes

	Base Year: 2000	Most Recent Year: 2016	% Change
Change in Population	188,856	208,512	10%
Change in Number of Households	67,179	75,377	12%
Change in Median Household Income	$56,743 (2016 Dollars)	50,996	-10%

Source: 2000 Census & 2012-2016 ACS

As of 2016, Modesto had a population of just under 210,000. This is a 10% increase from 2000 and a 3% increase from 2011 (the last time the Consolidated Plan was submitted). This modest increase matches Stanislaus County's growth rate over the same period. Considering the change in median household income, Modesto household wages have generally not kept pace with inflation. When adjusting for inflation, the median household income has decreased by 10% from 2000 to 2016. This rate is very similar to the County and other cities within the County; their median household incomes mostly falling between 0% to 15% between 2000 and 2016 when adjusting for inflation.

The following tables identify the percentage of households in Modesto within each income bracket. The HUD Area Median Family Income (HAMFI) is a calculation of median income completed by HUD. Throughout this document Area Median Income (AMI) and HAMFI may be considered interchangeable.

Number of Households Table

	0-30% HAMFI	>30-50% HAMFI	>50-80% HAMFI	>80-100% HAMFI	>100% HAMFI
Total Households	8,525	8,885	12,160	6,680	34,925
Small Family Households	3,100	3,085	5,070	2,820	17,370
Large Family Households	700	1,160	1,890	925	3,875
Household contains at least one person 62-74 years of age	1,414	1,985	2,785	1,510	7,935
Household contains at least one person age 75 or older	1,070	1,510	1,755	855	2,955
Households with one or more children 6 years old or younger	1,645	1,844	3,204	1,214	5,390

Source: 2012-2016 CHAS

The following tables identify the percentage of households in Modesto within each income bracket. The HUD Area Median Family Income (HAMFI) is a calculation of median income completed by HUD. Throughout this document Area Median Income (AMI) and HAMFI may be considered interchangeable.

Housing Needs Summary Tables

The following tables identify housing needs by both income bracket and by renter/owner. The housing problems are identified as follows:

1. Units lacking complete kitchen facilities;
2. Units lacking complete bathroom facilities;
3. Housing cost burden of more than 30 percent of the household income (for renters, housing costs include rent paid by the tenant plus utilities and for owners, housing costs include mortgage payments, taxes, insurance, and utilities); and
    a. A cost burden over 50% is considered severely-cost burdened
4. Overcrowding which is defined as more than one (1) person per room, not including bathrooms, porches, foyers, halls, or half-rooms.
    a. Overcrowding that is more than 1.5 persons per room, is considered severely overcrowded

The tables below outline those renter-households and owner-households that experience one of the housing problems described above. Among renters and owners, cost burden and severe cost burden is the greatest housing problem experienced. For renter households with 0-50% AMI, severe cost burden is very likely, while for 30% cost burden, those renter households earning 50-80% are most likely to experience cost burden.

Owner Housing Problems

	Owner				
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**>80-100% AMI**	**Total**
Substandard Housing – No complete plumbing or kitchen facilities	15	-	4	-	70
Severely Overcrowded – >1.51 people per room	40	4	60	50	310
Overcrowded - 1.01-1.5 people per room	25	50	245	150	820
Housing cost burden greater than 50% of income	1,275	1,285	1,055	265	4,060
Housing cost burden greater than 30% of income	165	705	1,670	1,235	6,360
Zero/negative Income	170	-	-	-	170

Source: 2012-2016 CHAS

Renter Housing Problems

	Renter				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
Substandard Housing – No complete plumbing or kitchen facilities	245	105	80	100	745
Severely Overcrowded – >1.51 people per room	245	210	225	25	745
Overcrowded - 1.01-1.5 people per room	355	480	495	180	2,050
Housing cost burden greater than 50% of income	4,050	3,165	745	85	8,065
Housing cost burden greater than 30% of income	700	1,495	3,880	935	7,545
Zero/negative Income	435	-	-	-	435

Source: 2012-2016 CHAS

The tables below outline severe housing problems experienced by both renters and owners. The severe housing problems are:

1. Units lacking complete kitchen facilities;
2. Units lacking complete bathroom facilities;
3. Housing cost burden of more than 50 percent of the household income (for renters, housing costs include rent paid by the tenant plus utilities and for owners, housing costs include mortgage payments, taxes, insurance, and utilities); and
4. Overcrowding which is defined as more than one (1.5) persons per room, not including bathrooms, porches, foyers, halls, or half-rooms.

Severe Owner Housing Problems

	Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
Having 1 or more housing problems	1,525	2,045	3,030	1,695	11,615
Having no housing problems	140	730	1,950	2,025	26,520
Household has negative income, but no housing problems	170	-	-	-	170

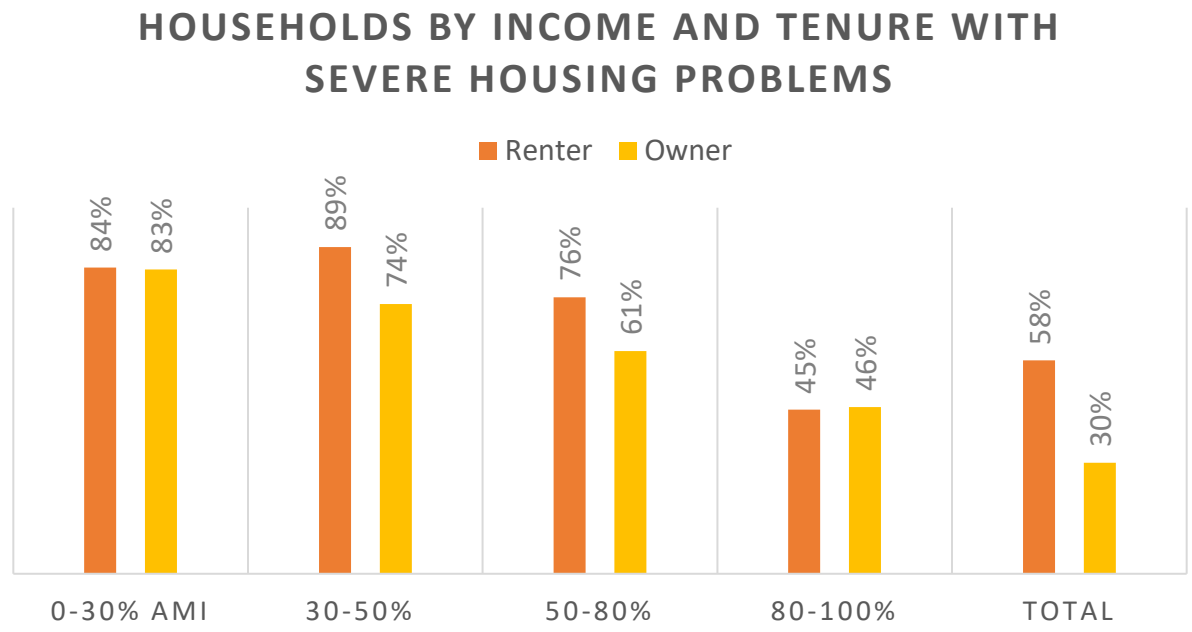
Source: 2012-2016 CHAS

Severe Renter Housing Problems

	Renter				
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**>80-100% AMI**	**Total**
Having 1 or more housing problems	5,600	5,455	5,425	1,325	19,150
Having no housing problems	660	655	1,755	1,630	13,280
Household has negative income, but no housing problems	435	-	-	-	435

Source: 2012-2016 CHAS

The graph below outlines the chart above, households experiencing severe housing problems. It is mostly notable that renter households experience severe housing problems at nearly double the rate of owner households. This discrepancy is mostly found in the 30-80% income range for renter households. Both renter and owner households that earn less than 30% of the area median income experience problems above an 80% rate.



Source: 2012-2016 CHAS

The two tables below highlight 30% cost burden for both renter and owner households. Each table identifies household subtypes. The subtypes are:

Small Family Household: A household with two-four members
Large Family Household: A household with five or more members
Elderly: Ages 62-74
Other: Non-family households, most typically single-person households

Owner Cost Burden > 30%

	Owner			
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**Total**
Small Related	400	515	995	1,910
Large Related	20	260	665	945
Elderly	780	1,040	895	2,715
Other	254	200	280	734
Total need by income	1,454	2,015	2,835	6,304

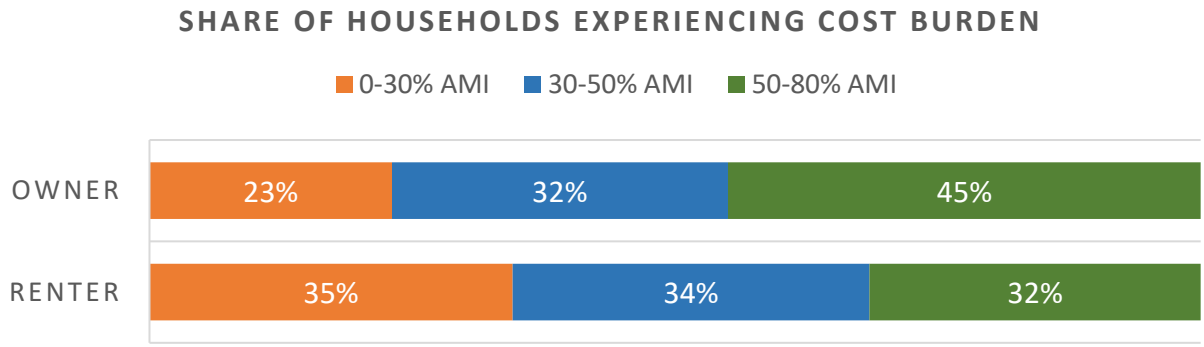
Source: 2012-2016 CHAS

Renter Cost Burden > 30%

	Renter			
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**Total**
Small Related	2,335	2,260	2,350	6,945
Large Related	560	805	610	1,975
Elderly	1,005	1,020	890	2,915
Other	1,620	1,335	1,185	4,140
Total need by income	5,520	5,420	5,035	15,975

Source: 2012-2016 CHAS

The graph below highlights the cost burden experienced by households earning less than 80% AMI in Modesto. While renter households are relatively evenly distributed across income brackets, a plurality of low- moderate-income owner households experiencing cost burden are earning 50-80% of the area median income.



Source: 2012-2016 CHAS

The two tables below highlight severe cost burden for both renters and owners, further broken down by household subtype. Severe cost burden is when a household is paying more than 50% of their income towards housing (including utilities). The household subtypes are:

Small Family Household: A household with two-four members
Large Family Household: A household with five or more members
Elderly: Ages 62-74
Other: Non-family households, most typically single-person households

Owner Severe Cost Burden > 50%

	Owner			
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**Total**
Small Related	375	375	435	1,185
Large Related	10	125	210	345
Elderly	630	690	290	1,610
Other	250	110	170	530
Total need by income	1,265	1,300	1,105	3,670

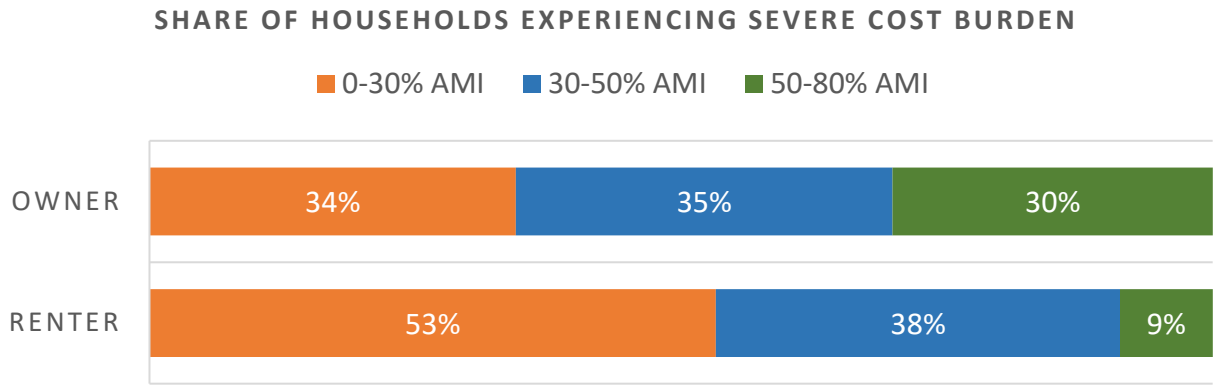
Source: 2012-2016 CHAS

Renter Severe Cost Burden > 50%

	Renter			
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**Total**
Small Related	2,210	1,450	335	3,995
Large Related	530	485	130	1,145
Elderly	695	575	165	1,435
Other	1,365	915	155	2,435
Total need by income	4,800	3,425	785	9,010

Source: 2012-2016 CHAS

The graph below shows that of all renter households experiencing severe cost burden (greater than 50% of household income towards housing costs), those renter households earning less than 30% of the area median income make up the majority. In looking at owner households experience severe cost burden, those households are more evenly distributed across income brackets.



Source: 2012-2016 CHAS

The tables below highlight overcrowding among both renter and owner households. Although not a problem as common as cost burden, this issue is still indicative of a housing supply that does not offer affordable units large enough for those families that may require more than two bedrooms.

Owner Crowding (More than one person per room)

	Owner				
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**>80-100% AMI**	**Total**
Single family households	65	25	220	155	465
Multiple, unrelated family households	0	34	80	45	159
Other, non-family households	0	0	0	0	0
Total need by income	65	59	300	200	624

Source: 2012-2016 CHAS

Renter Crowding (More than one person per room)

	Renter				
	0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**>80-100% AMI**	**Total**
Single family households	575	600	575	160	1,910
Multiple, unrelated family households	45	95	125	35	300
Other, non-family households	10	4	24	10	48
Total need by income	630	699	724	205	2,258

Source: 2012-2016 CHAS

The two tables below identify those renter and owner households with children present, further identifying those households by income. Low- to moderate-income households with children are more likely to be renter households as indicated in the tables below.

Owner Households with Children Present

Owner			
0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**Total**
155	434	979	1,568

Source: 2012-2016 CHAS

Renter Households with Children Present

Renter			
0-30% AMI	**>30-50% AMI**	**>50-80% AMI**	**Total**
1,490	1,410	2,225	5,125

Source: 2012-2016 CHAS

Describe the number and type of single person households in need of housing assistance.

According to the 2016 American Community Survey (ACS) there are about 17,000 single-person households in Modesto. About 55% of the single-person households are renter households. Of all renter households, 29% are single-person, while of all owner households, 20% are single-person households.

The tables above show that approximately 40% of all households in Modesto earn less than 80% AMI. Also, from the tables above; it is known that of those low- and moderate-income households approximately 75% experience at least one housing problem. We can apply these rates to the single-person households identified above in order to estimate the number of single-person households that are in need of housing assistance.

Given the 17,000 single-person households in Modesto, we can conservatively estimate that 40% are low- and/or moderate-income households, 6,800 households. Of those 6,800 single-person households we can then assume that approximately 75% experience at least one housing problem and are in need

of housing assistance. Assuming these estimates we can conclude that 5,100 single-person households are in need of housing assistance.

Estimate the number and type of families in need of housing assistance who are disabled or victims of domestic violence, dating violence, sexual assault and stalking.

Through data provided by the Modesto Police Department, in 2019 there were a total of 201 cases of domestic violence that involved someone already experiencing homelessness. Of those 201 cases, 17 had documented as having at least one child as part of the case. These households experiencing homelessness and fleeing a domestic violence situation need a variety of housing and supportive services to regain stability. This is especially true of those households experiencing homelessness, fleeing domestic violence, and with children. This number does not include those households that were not already experiencing homelessness.

The number and type of families living with a disability are discussed in detail in the section below, NA-45. There is no dataset available that estimates the number of individuals experiencing dating violence, sexual assault, and stalking and also in need of housing assistance.

What are the most common housing problems?

The tables above outline that overwhelmingly the most common housing problem experienced by households in Modesto is cost burden, both at 30% and at 50% cost burden.

Of all households in Modesto, 36% are households that experience cost burden (>30% household income towards housing costs). This numbers both go up significantly to 68% when only considering those households earning 80% AMI or less.

Overcrowding is a housing problem experienced by a smaller number of households; however, this housing problem has increased over time. Overcrowding is often seen in housing markets that are tight where lower income households may be put into positions where they rent a unit that is affordable but does not adequately fit their household.

Are any populations/household types more affected than others by these problems?

In Modesto low- and moderate-income renter households experience housing problems at higher rates. In the City 50% of renter households earn less than 80% AMI ***and*** experiencing a housing problem. While 17% of all owner households are low-income households experiencing a housing problem.

Small family households make up the majority of the households experiencing housing problems followed by elderly households. The rate of housing problems experienced by elderly households is however greater than small family households, meaning those elderly households make up a smaller portion of households throughout the City, however they do experience housing problems at a higher rate.

Describe the characteristics and needs of Low-income individuals and families with children (especially extremely low-income) who are currently housed but are at imminent risk of either

residing in shelters or becoming unsheltered 91.205(c)/91.305(c)). Also discuss the needs of formerly homeless families and individuals who are receiving rapid re-housing assistance and are nearing the termination of that assistance

The fewer financial resources a household has, the greater their risk of homelessness. Throughout the City, those households earning less than 50% AMI are more likely to be in unstable work situations more prone to intermittent work schedules or part-time wages without benefits. A household with little financial resources is a medical emergency or a layoff at work away from being unsheltered or unstably housed. These households, both with working members and those households on disability or fixed income with total financial resources that do not allow them to save money towards future economic development opportunities or the funding of emergencies are at the greatest risk of becoming homeless.

The success of those receiving assistance for housing placement comes from the dedication of case management. During the case management, which last from six months to a year depending on the program, teaches recipients life skills including but not limited to budgeting, basic household maintenance, and personal grooming. Along with teaching and reinforcing these skills, it is most beneficial to get families engaged in a support system that fosters the skills for long term success. One local program incentivizes this behavior through a step-down approach to the financial benefits and requiring a dollar for dollar match. For every dollar provided in rental assistance the recipient is required to put an equal amount in savings. This sets the household up to have a year of rental savings.

As Households are nearing the end of their RRH assistance, they are encouraged through learned behaviors over the course of their case management to stay engaged with the system to ensure wrap-around services are being utilized its maximum potential.

If a jurisdiction provides estimates of the at-risk population(s), it should also include a description of the operational definition of the at-risk group and the methodology used to generate the estimates:

The Stanislaus County System of Care (SCSOC) uses HMIS to collect and track data on housing and services to persons experiencing homelessness and at-risk of homelessness. The SCSOC utilize HUD's official definition of at-risk for homelessness released in January 2012. There are three categories to the definition: 1. Individuals and Families 2. Unaccompanied Children and Youth 3. Families with Children and Youth.

For a complete list of defining characteristics for each category please see the following link -> https://files.hudexchange.info/resources/documents/AtRiskofHomelessnessDefinition_Criteria.pdf

Specify particular housing characteristics that have been linked with instability and an increased risk of homelessness

The household characteristics that are most closely linked to housing instability and increased risk of homelessness are cost burden and household income. Those households that are both low-income *and* cost burdened are the most vulnerable because these households have the least capacity for saving income towards addressing emergency situations that may arise. This issue is compounded in the extremely tight housing market in Modesto.

NA-15 Disproportionately Greater Need: Housing Problems

Introduction

According to HUD, disproportionate need refers to any need for a certain race/ethnicity that is more than ten (10) percentage points above the demonstrated need for the total households within the jurisdiction at a particular income level. The tables and analyses below identify the share of households by race/ethnicity and income level experiencing one or more of the four housing problems outlined by HUD guidelines. When the ten-percentage point threshold is reached, that number is highlighted in yellow.

The four housing problems are:

1. Lacks complete kitchen facilities
2. Lacks complete plumbing facilities
3. More than one person per room
4. Cost Burden greater than 30%

Disproportionate need for each race/ethnicity is determined by calculating the share of the total number of households with one or more housing problems from each race/ethnicity and comparing that figure to the share of all Modesto households at that income level that experience the problem. (Share of Race/Ethnicity = "# of households for that race/ethnicity with one or more housing problem / total # of households for that race/ethnicity). The "Share" column identifies what percentage of the population in that row is experiencing a housing problem. A group experiencing housing problems ten percentage points above *Jurisdiction as a whole* is considered to be experiencing a disproportionate need.

0%-30% of Area Median Income

Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	7,125	800	605	84%
White	3,255	575	385	77%
Black / African American	470	-	25	95%
Asian	470	30	80	81%
American Indian, Alaska Native	110	20	-	85%
Pacific Islander	55	-	-	100%
Hispanic	2,625	110	105	92%

Source: 2012-2016 CHAS

Among those Modesto households earning 0-30% AMI, Black/African American and Pacific Islander households experience a disproportionate need.

30%-50% of Area Median Income

Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	7,500	1,385	0	84%
White	3,675	955	0	79%
Black / African American	435	135	0	76%
Asian	350	45	0	89%
American Indian, Alaska Native	40	8	0	83%
Pacific Islander	-	-	0	
Hispanic	2,770	205		93%

Source: 2012-2016 CHAS

Among those Modesto households earning 30-50% AMI, there are no race or ethnicity groups that experience a disproportionate need.

50%-80% of Area Median Income

Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	8,455	3,705	0	70%
White	3,820	1,970	0	66%
Black / African American	430	80	0	84%
Asian	595	90	0	87%
American Indian, Alaska Native	15	-	0	100%
Pacific Islander	115	29	0	80%
Hispanic	3,325	1,475	0	69%

Source: 2012-2016 CHAS

Among those Modesto households earning 50-80% AMI, Black/African American, Asian, American Indian/Alaska Native, and Pacific Islander households experience a disproportionate need.

80%-100% of Area Median Income

Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	3,020	3,655	0	45%
White	1,615	2,040	0	44%
Black / African American	105	40	0	72%
Asian	175	170	0	51%
American Indian, Alaska Native	-	20	0	0%
Pacific Islander	-	25	0	0%
Hispanic	990	1,315	0	43%

Source: 2012-2016 CHAS

Among those Modesto households earning 80-100% AMI, Black/African American households experience a disproportionate need.

Discussion

Those race or ethnicity groups experiencing a disproportionate rate of housing problems are as follows:

0-30% AMI Range

- Black / African American
- Pacific Islander

30-50% AMI Range

- None

50-80% AMI Range

- Black / African American
- Asian
- American Indian, Alaska Native
- Pacific Islander

80-100% AMI Range

- Black / African American

NA-20 Disproportionately Greater Need: Severe Housing Problems

Introduction

Note that the tables below identify *severe* housing problems, as opposed to the tables above that identified non-severe housing problems. Severe housing problems differ from non-severe in two instances. Those differences are underlined below:

The four *severe* housing problems are:

1. Lacks complete kitchen facilities
2. Lacks complete plumbing facilities
3. More than 1.5 persons per room
4. Cost Burden greater than 50%

According to HUD, disproportionate need refers to any need for a certain race/ethnicity that is more than ten (10) percentage points above the demonstrated need for the total households within the jurisdiction at a particular income level. The tables and analyses below identify the share of households by race/ethnicity and income level experiencing one or more of the four housing problems outlined by HUD guidelines. When the ten-percentage point threshold is reached, that number is highlighted in yellow.

Disproportionate need for each race/ethnicity is determined by calculating the share of the total number of households with one or more housing problems from each race/ethnicity and comparing that figure to the share of all Modesto households at that income level that experience the problem. (Share of Race/Ethnicity = "# of households for that race/ethnicity with one or more housing problem / total # of households for that race/ethnicity). The "Share" column identifies what percentage of the population in that row is experiencing a housing problem. A group experiencing housing problems ten percentage points above *Jurisdiction as a whole* is considered to be experiencing a disproportionate need.

0%-30% of Area Median Income

Severe Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	6,255	1,670	605	73%
White	2,840	990	385	67%
Black / African American	420	55	25	84%
Asian	340	160	80	59%
American Indian, Alaska Native	100	30	0	77%
Pacific Islander	55	0	0	100%
Hispanic	2,380	355	105	84%

Source: 2012-2016 CHAS

Among those Modesto households earning 0-30% AMI, Black/African American, Pacific Islander, and Hispanic households experience a disproportionate need considering severe housing problems.

30%-50% of Area Median Income

Severe Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	11,200	21,275	0	34%
White	7,260	13,885	0	34%
Black / African American	1,065	2,155	0	33%
Asian	1,560	2,440	0	39%
American Indian, Alaska Native	59	180	0	25%
Pacific Islander	0	55	0	0%
Hispanic	645	1,805	0	26%

Source: 2012-2016 CHAS

Among those Modesto households earning 30-50% AMI, no households experience a disproportionate need considering severe housing problems.

50%-80% of Area Median Income

Severe Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	2,905	9,255	0	24%
White	1,045	4,745	0	18%
Black / African American	175	335	0	34%
Asian	295	390	0	43%
American Indian, Alaska Native	10	4	0	71%
Pacific Islander	0	139	0	0%
Hispanic	1,290	3,500	0	27%

Source: 2012-2016 CHAS

Among those Modesto households earning 50-80% AMI, Black/African American, Asian, and American Indian/Alaska Native households experience a disproportionate need considering severe housing problems.

80%-100% of Area Median Income

Severe Housing Problems	One or more housing problems	No housing problems	No income & no housing problems	Share
Jurisdiction as a whole	855	5,825	0	13%
White	375	3,290	0	10%
Black / African American	45	95	0	32%
Asian	40	305	0	12%
American Indian, Alaska Native	0	20	0	0%
Pacific Islander	0	25	0	0%
Hispanic	370	1,940	0	16%

Source: 2012-2016 CHAS

Among those Modesto households earning 50-80% AMI, Black/African American households experience a disproportionate need considering severe housing problems.

Discussion

Those race or ethnicity groups experiencing a disproportionate rate of severe housing problems are as follows:

0-30% AMI Range

- Black / African American
- Pacific Islander
- Hispanic

30-50% AMI Range

- None

50-80% AMI Range

- Black / African American
- Asian
- American Indian, Alaska Native

80-100% AMI Range

- Black / African American

NA-25 Disproportionately Greater Need: Housing Cost Burdens

Introduction

According to HUD, disproportionate need refers to any need for a certain race/ethnicity that is more than ten (10) percentage points above the demonstrated need for the total households within the jurisdiction at a particular income level. The tables and analyses below identify the share of households by race/ethnicity and income level experiencing one or more of the four housing problems outlined by HUD guidelines. When the ten-percentage point threshold is reached, that number is highlighted in yellow.

The four housing problems are:

1. Lacks complete kitchen facilities
2. Lacks complete plumbing facilities
3. More than one person per room
4. Cost Burden greater than 30%

Disproportionate need for each race/ethnicity is determined by calculating the share of the total number of households with one or more housing problems from each race/ethnicity and comparing that figure to the share of all Modesto households at that income level that experience the problem. (Share of Race/Ethnicity = "# of households for that race/ethnicity with one or more housing problem / total # of households for that race/ethnicity). The "Share" column identifies what percentage of the population

in that row is experiencing a housing problem. A group experiencing housing problems ten percentage points above *Jurisdiction as a whole* is considered to be experiencing a disproportionate need.

Housing Cost Burden

Housing Cost Burden	<=30%	30-50%	>50%	No/negative income	Share
Jurisdiction as a whole	42,030	15,020	13,465	670	40%
White	25,960	7,710	6,545	440	35%
Black / African American	1,015	670	875	25	60%
Asian	2,525	850	865	80	40%
American Indian, Alaska Native	195	45	120	0	46%
Pacific Islander	190	200	55	0	57%
Hispanic	11,180	5,140	4,660	115	47%

Source: 2012-2016 CHAS

Discussion

Black / African American and Pacific Islander households experience cost burden at a disproportionate rate compared to the jurisdiction as a whole. While 40% of all households in Modesto experience cost burden, 60% of African American households and 57% of Pacific Islander households experience cost burden.

NA-30 Disproportionately Greater Need: Discussion

Are there any Income categories in which a racial or ethnic group has disproportionately greater need than the needs of that income category as a whole?

There are several instances where a racial or ethnic group experience disproportionate housing needs in Modesto. All of those instances are highlighted above in sections NA-15 through NA-25 in the discussion part of each section.

If they have needs not identified above, what are those needs?

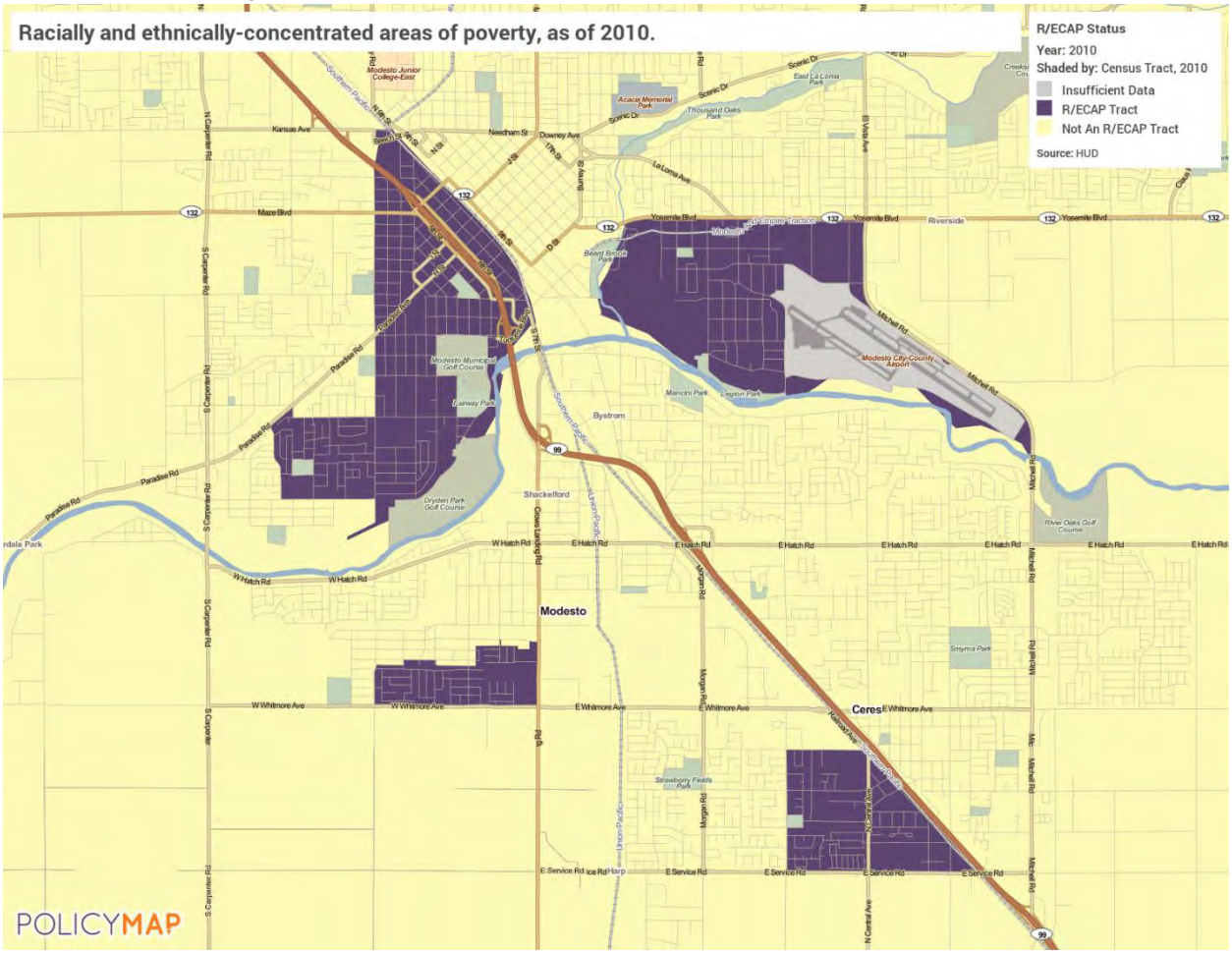
No other needs are identified. Special needs populations are addressed in section NA-40 of this Consolidated Plan.

Are any of those racial or ethnic groups located in specific areas or neighborhoods in your community?

According to 2010 Census data, there are five (5) Racial/Ethnic Concentrated Areas of Poverty (R/ECAP) census tracts within Stanislaus County, one of which is completely within Modesto bounds, while the four remaining are completely in or at least partially within County bounds near Modesto.

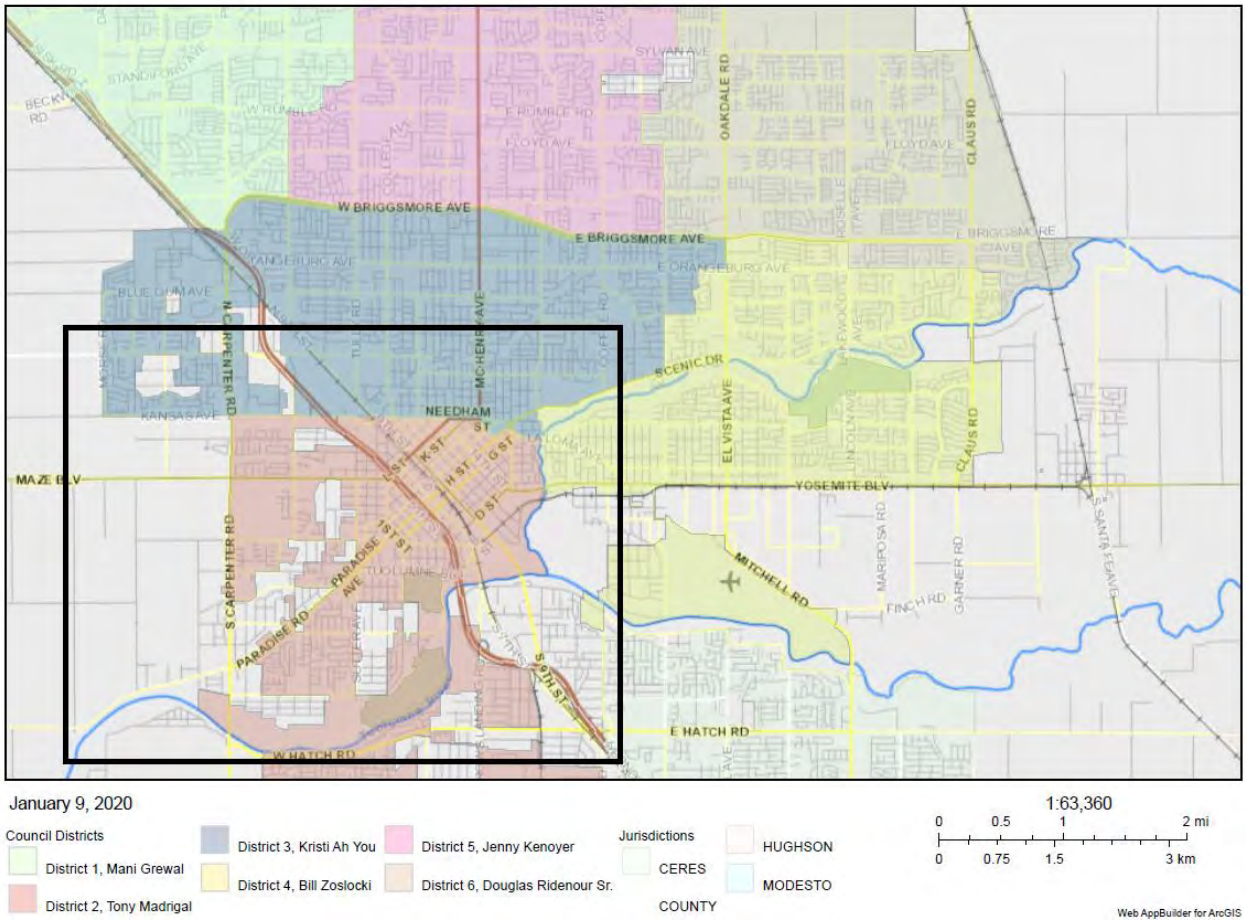
These R/ECAP census tracts are defined as: Census tracts where more than half the population is non-White and 40% or more of the population is in poverty OR where the poverty rate is greater than three times the average poverty rate in the area.

Modesto Area R/ECAPs



It is important to note that the R/ECAP census tracts are located all near the County pockets that exist within Modesto. The map below makes clear where those County pockets are in relation to the map that highlights the R/ECAPS near Modesto. The black box within the map below corresponds to the geography of the R/ECAP map above.

Modesto Map – County Pockets



NA-35 Public Housing

Total Vouchers in Use

	Public Housing	Vouchers					
		Total	Project -based	Tenant -based	Special Purpose Voucher		
					Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
# of units/vouchers available	647	647	242	4170	231	230	25
# of Accessible Units	72	72					

***includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition**

Source: Housing Authority of Stanislaus County (HASC)

Characteristics of Residents

Characteristics	Public Housing	Vouchers			
		Project – based	Tenant -based	Special Purpose Voucher	
				Veterans Affairs Supportive Housing	Family Unification Program
# Homeless at admission	1.3%	5.6%	1.3%	100%	100%
# of Elderly Program Participants (>62)	26%	40.4%	37.6%	48%	11%
# of Disabled Families	31%	33.3%	52.3%	40%	10.9%
# of Families requesting accessibility features	12%	N/A	10%	N/A	N/A
# of HIV/AIDS program participants	N/A	N/A	N/A	N/A	N/A
# of DV victims	N/A	N/A	N/A	N/A	N/A

Source: Housing Authority of Stanislaus County (HASC)

Race of Residents

Race	Public Housing	Vouchers				
		Project -based	Tenant -based	Special Purpose Voucher		
				Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
White	87.9%	93.6%	79.1%	78%	92.6%	N/A
Black/African American	4.5%	5.2%	14%	18.6%	5.4%	N/A
Asian	7.1%	.8%	4.9%	.6%	2%	N/A
American Indian, Alaska Native	.5%	.4%	1.4%			N/A
Pacific Islander						N/A
Other			.6%			N/A

Source: Housing Authority of Stanislaus County (HASC)

Ethnicity of Residents

Ethnicity	Public Housing	Vouchers				
		Project - based	Tenant - based	Special Purpose Voucher		
				Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
Hispanic	64.8%	40%	27.6%	22.7%	37.4%	N/A
Not Hispanic	35.3%	60%	72.4%	77.3%	62.6%	N/A

Source: Housing Authority of Stanislaus County (HASC)

Section 504 Needs Assessment: Describe the needs of public housing tenants and applicants on the waiting list for accessible units:

The Housing Authority of the County of Stanislaus has identified the following needs to be the greatest among those tenants and applicants on the waiting list for accessible units:

- Grab bars
- Ramps for front and rear home entry
- Walk in showers
- ADA toilets
- Lower level units
- Service animal permitted

What are the number and type of families on the waiting lists for public housing and section 8 tenant-based rental assistance? Based on the information above, and any other information available to the jurisdiction, what are the most immediate needs of residents of public housing and Housing Choice voucher holders?

The Housing Authority County of Stanislaus (HACS) reported the following number of households on each program's waiting list:

- Public Housing Waiting List: 8,000 households
- Section 8 Waiting List: 10,000 households

The HACS does not have specific information as to the type of families or demographics.

The HACS has identified the following needs to be the most immediate needs of residents:

- Community engagement
- Transportation assistance
- Workforce assistance
    - vocational training
    - resume building
    - job search assistance
- Childcare
- Financial literacy
- Credit counseling/repair

How do these needs compare to the housing needs of the population at large?

The needs outlined above are similar to those needs identified to the population at large, excluding the need for affordable housing. The population at large has also indicated a need for support in increasing wages from employment, childcare, and transportation assistance as well, based on input received at the community meetings.

NA-40 Homeless Needs Assessment

Introduction

The City will continue to partner with local service providers and agencies with the goal of reducing and ending homelessness via street outreach, homeless prevention, and rapid rehousing. In addition, the City will work with the Community System of Care on addressing the emergency shelter and transitional housing needs of homeless persons as well as continuing to find creative approaches to addressing homelessness and special needs populations.

The Strategic Plan to end homelessness in Modesto is a county-wide effort led by the Stanislaus County Continuum of Care, known as the Stanislaus Community System of Care (SCSOC). As of 2017, the Stanislaus County Housing and Support Services Collaborative (which acted as the Continuum of Care) and the Homelessness Action Council merged efforts in an effort to eliminate duplication of efforts and to coordinate available resources. The SCSOC is staffed by a 25 member Council representing all major sectors of the County including government (City, County), service providers, public, homelessness advocates, and three reserved spots for individuals with lived experience.

The SCSOC meets monthly and continually work to coordinate services and improve relationships and the homelessness service system. The SCSOC has been utilizing a Homeless Management Information System (HMIS) since 2012.

In January 2019, the SCSOC adopted the *Plan to Address Homelessness in Stanislaus County*, a guiding document to coordinate services and organize around common principles. The plan outlines five (5) core strategies:

1. Outreach and Engagement
    a. Improve outreach with a focus on engaging those not currently involved with the system of care
2. Coordinated Access
    a. Fully implement and sustain a countywide coordinated entry system
3. Creation and Access to Housing
    a. Increase affordable housing options and improve access to temporary, transitional, and permanent supportive housing options
4. Supportive Services
    a. Increase availability and alignment of services and resources
5. Strengthening the System of Care
    a. Increase community awareness and participation among county civic and government leaders

Please see the following link to view the entire plan -> https://csocstan.com/blog/plan-to-end-homelessness-in-stanislaus-county/

The following tables are all numbers from the most recent Point in Time (PIT) Count, 2019.

Modesto 2019 Point-In-Time Count

(The tables below reflect data for the City of Modesto only)

Population	Estimate the # of persons experiencing homelessness on a given night	
	Unsheltered	**Sheltered**
Persons in Households with Adult(s) and Child(ren)	52	201
Persons in Households with Only Children	2	2
Persons in Households with Only Adults	755	388
Chronically Homeless Individuals	162	67
Chronically Homeless Families	129	61
Veterans	57	45
Unaccompanied Child	24	27
Persons with HIV	14	1
Total	**809**	**591**

Data Source: 2019 PIT Count

Modesto Homelessness by Race/Ethnicity

Race:	Unsheltered	Sheltered
White	616	414
Black or African American	69	104
Asian	15	10
American Indian, Alaska Native	36	16
Pacific Islander	6	8

Data Source: 2019 PIT Count

Ethnicity:	Unsheltered	Sheltered
Hispanic	170	229
Non-Hispanic	599	361

Data Source: 2019 PIT Count

If data is not available for the categories "number of persons becoming and exiting homelessness each year," and "number of days that persons experience homelessness," describe these categories for each homeless population type (including chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth):

The PIT count does identify the number of persons becoming homelessness in a year for each category. As for those exiting homeless each year, the CoC system performance measures identify the number and location of exit from homelessness each year. The chart below highlights those individuals as well as those individuals that exit homelessness and return to homelessness.

Modesto Homelessness by Race/Ethnicity

	Total # of persons exiting homelessness to a permanent housing destination	Return to homelessness in:			Total Returns to homelessness within 2 years
		Less than 6 months	6-12 months	13-24 months	
Exit from Street Outreach	2	0	1	0	1
Exit from Emergency Shelter	650	93	35	65	193
Exit from Transitional Housing	86	8	4	4	16
Exit from Safe Haven	219	7	10	9	26
Exit from Permanent Housing	957	108	50	78	236
Total Returns to Homelessness		216	100	156	472

Source: Stanislaus County CoC 2018 System Performance Measures

Estimate the number and type of families in need of housing assistance for families with children and the families of veterans.

Based on the 2019 PIT Count, in Modesto there were:

- 253 persons in households with adult(s) and child(ren)
  - Of those 253 persons, 52 were unsheltered
- 190 chronically homeless families
  - Of those 253 families, 129 were unsheltered
- 102 veterans
  - Of those 102 veterans, 57 were unsheltered

Describe the Nature and Extent of Homelessness by Racial and Ethnic Group.

It is important to note that not at all individuals counted in the 2019 PIT count identified their race or ethnicity, so the tables below do not all add up to all of those individuals counted in the 2019 PIT Count. Within Modesto the following tables show the percentage of those counted in the 2019 PIT Count by race and ethnicity.

Race:	Unsheltered	Sheltered
White	48%	32%
Black or African American	5%	8%
Asian	1%	1%
American Indian, Alaska Native	3%	1%
Pacific Islander	0%	1%

Data Source: 2019 PIT Count

Ethnicity:	Unsheltered	Sheltered
Hispanic	13%	17%
Non-Hispanic	44%	27%

Data Source: 2019 PIT Count

Describe the Nature and Extent of Unsheltered and Sheltered Homelessness.

In Modesto approximately half of those individuals experiencing homelessness during the 2019 PIT Count were counted as unsheltered. Specifically, in Modesto 43% of those counted in the 2019 PIT were counted as unsheltered. In looking at who those unsheltered individuals are, persons in households with only adults make up the vast majority of those unsheltered individuals. Of those unsheltered in Modesto, 93% were persons in households with adults only.

In 2019 there was a temporary outdoor emergency shelter established to address the growing need; the Modesto Outdoor Emergency Shelter (MOES). This shelter closed in December 2019. To protect the individuals that could no longer be able to stay at the MOES, 182 new low barrier shelter beds were added at the newly opened Access Center Emergency Shelter which is located adjacent to the Salvation Army Berberian Shelter. The Berberian Shelter side also increased their capacity by an additional 50 beds for a total of 206 available beds at the Berberian Shelter. This is being funded through private donations, the City of Modesto, Stanislaus County Foundation investments, and HEAP funds.

Discussion

Homelessness in Modesto and Stanislaus County has experienced an increase since the development of the last Consolidated Plan in 2014-2015. The 2014 PIT Count reflected 1,156 homeless individuals in Modesto, while the 2019 PIT count identified 1,400 homeless individuals. The largest shift in sub-populations since 2014 has been the increase in unsheltered homelessness. Accounting for about 40% in 2014, the 2019 PIT count identified that 58% of homeless individuals were unsheltered.

NA-45 Non-Homeless Special Needs Assessment

Introduction

There are a variety of subpopulations of households that are not homeless but still may require specialized supports to maintain an independent living situation. The subpopulations covered in this section will be: persons with disabilities, elderly, youth, persons with HIV/AIDS, victims of domestic violence, and farmworkers. The facilities and services available to these subpopulations are discussed in greater detail in the Market Analysis (MA-35) section of this Consolidated Plan.

Describe the characteristics of special needs populations in your community:

Persons with Disabilities:

The tables below outlines the number of individuals with the associated disability type.

Disability by Type

Disability Type	# of persons	% of Total Population
Hearing Difficulty	9,121	4.4%
Vision Difficulty	6,266	3.0%

Cognitive Difficulty	11,982	6.2%
Ambulatory Difficulty	16,285	8.4%
Self-Care Difficulty	7,110	3.7%
Independent Living Difficulty	12,509	8.1%

Source: 2017 ACS

Of disability categories outlined in the above table, those individuals aged 65 and above makeup the majority of those experiencing hearing and ambulatory difficulty. Vision difficulty is experienced more commonly among all age ranges, skewing slightly higher among older populations.

Elderly:

According to the 2017 American Community Survey (ACS), about 14% of the population in Modesto are over the age of 65. When considering special needs for the elderly, several key elements are at play:

- This age group is more likely to be on a fixed income, with fewer opportunities to increase income
- The elderly population is often more susceptible to injury and illness
- Those over the age of 65 are more likely to need services associated with a disability, particularly a physical disability that then limits the types of housing available

Retirement homes do offer an alternative type of housing that may deliver on the needed services; however, these homes are not affordable to many, and many elderly individuals prefer to "age in place." A complicating factor to those elderly individuals that desire to age in place is their ability to upkeep their home to a condition that is both suitable in general and then suitable for any special need they may have. Home repair programs, social programming, and transportation are critical to this demographic.

What are the housing and supportive service needs of these populations and how are these needs determined?

With all of the special needs populations, needs are mostly determined by local agencies, government and non-government alike. Some examples of these agencies are Disability Resource Agency for Independent Living (DRAIL), the County Area Agency on Aging, The County Aging and Veteran Services Agency, Catholic Charities, Society of Disabilities, Stanislaus County Affordable Housing Corporation, Behavioral Health, Modesto Independent Living Center, among others.

The local agencies best understand the populations they serve, and their needs are discussed in regularly scheduled meetings.

Some of the needs regularly brought up in meetings are as follows:

- More affordable housing units for those earning less than 50% - 80% AMI
- Affordable units near transit/work opportunities to make for reasonable commutes

- Units that can accommodate varying family sizes; namely studios or units built for a single occupant, and also families that are greater than five

Discuss the size and characteristics of the population with HIV/AIDS and their families within the Eligible Metropolitan Statistical Area:

California recently became the first state in the nation to allow pharmacies to dispense HIV prevention drugs without a doctor's prescription through passage of S.B 159. This law will allow California residents to obtain both the pre-exposure and post-exposure prescriptions at a pharmacist's discretion. Stanislaus County has seen an uptick in the number of residents living with HIV; going from 560 active cases in 2013 to 776 cases in 2017 (California HIV Surveillance Report – 2017).

NA-50 Non-Housing Community Development Needs

Describe the jurisdiction's need for Public Facilities:

The need for public facilities has increased as the City has continued to grow; and the need for certain kinds of facilities has grown more given the kinds of populations that have grown most notably in Modesto.

- ❖ Homeless Facilities (i.e. shelters)
    - The Modesto Outdoor Emergency Shelter (MOES) was closed at the end of 2019. This is a need that has been consistently brought up in community meetings and ranks the highest within community survey results.
    - As a result of MOES closing, the newly opened Access Center Emergency Shelter added 182 beds to provide low barrier emergency shelter to those individuals who were in MOES.
    - Salvation Army Berberian Shelter increased its capacity with another 50 additional beds for a total of 206 beds.
    - Stanislaus County began operation of a service referral center, known as the Access Center, that will be located at the Salvation Army Berberian Shelter site. The center is staffed by service providers that are part of the CoC – the aim is to address those experiencing homelessness or at-risk of becoming homeless with services at a single location.
    - The Salvation Army also has a formal partnership with the local Veterans Administration, providing transitional housing and associated services.
    - In partnership with the City of Modesto and other entities, the Center for Human Services will open a Youth Navigation Center. The Youth Navigation Center will be in Modesto and will be a one stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness.
- ❖ Parks/Recreational Facilities

- There is a desire from community members for additional programming in recreational centers for youth and seniors. Specifically, after-school programming for youth and social activities for seniors
- The City of Modesto assisted with ADA improvements and replacement of a shade structure in Mellis Park in West Modesto, a low income census tract in the community
- During the community input process, a Community Center was brought up as a need for South Modesto

❖ Childcare Center/Facility

- This need was expressed through survey results and several community meetings. Modesto is the economic center of the County and many families live here for work. As housing becomes tighter and more expensive, low- and moderate-income families will find this support increasingly useful.

How were these needs determined?

These needs were highlighted in the City-wide survey as well as community/public meetings that focused on community needs on both housing and non-housing issues. Also, local plans and regional strategic plans support the needs listed above. Finally, as with all community needs, local organizations (government and non-government) that work directly with the community are consulted regularly to discuss changing or developing needs within the community.

Describe the jurisdiction's need for Public Improvements

Similar to public facilities' needs, public improvement needs grow as the City and the County continue to grow.

❖ Sidewalks, curbs, gutters, & bus stops

- This was the top need identified in the community survey and regularly came up in public meetings that were held in areas consisting of large numbers of County pockets. Bus stop improvements often came along with sidewalk improvements and on nearly every occasion this came up, it was on connection with County pockets within Modesto. Bus stop improvements specifically were making them wheelchair accessible especially near bus stops where those utilizing a wheelchair need accessible sidewalks to access bus stops. Also, rain/wind covers for bus stops throughout the City was often brought up in public meetings.

❖ Storm drain improvements

- This need is similar to the one above in that most often this need was referenced in conjunction with County pockets.

❖ Accessibility improvements

- This need is most often referenced in conjunction with sidewalks and curb cuts as well as bus stops and building access.

There were two additional needs that were regularly brought up in public meetings or added often enough in write-in comments within the survey to acknowledge here:

1. Tree maintenance
    a. Tree maintenance is a need throughout the City; it is noted that Mayor Ted Brandvold indicated that this is the need his office most often receives.
2. Garbage dumping
    a. In many public meetings it was a concern of residents that illegal garbage dumping is taking place.

How were these needs determined?

These needs were highlighted in the City-wide survey as well as community/public meetings that focused on community needs on both housing and non-housing issues. Also, local plans and regional strategic plans support the needs listed above. As with all community needs, local organizations (government and non-government) that work directly with the community are consulted regularly to discuss changing or developing needs within the community.

Describe the jurisdiction's need for Public Services

The Continuum of Care (CoC) for the County continues to develop efficiencies and build relationships across organizations to limit service gaps in the system of care. The needs outweigh the available resources in the City; however, some of the highest-level needs are:

- Homelessness prevention services
    - The number of individuals experiencing homelessness in Modesto and Stanislaus County has grown over the past several years. There are many factors contributing to this: tight housing market, changes in laws/regulations, limited shelter beds, among others.
    - In several consultations homelessness prevention came up as an important part of providing supportive services and having clients engage in such services. This is because from the view of several service providers, the most difficult individuals to engage with services now form a large portion of those identified in the 2019 PIT Count and having those individuals stably housed is critical when considering their engagement with supportive services.
- Substance abuse services
    - This was the second highest vote-getter in the community survey. The community considers there to be a close connection between the increase in homelessness throughout the region and substance use. Understanding that making substance abuse recovery services more readily available will support the initiatives working to end homelessness in the City and Region.
- Workforce development
    - This need was identified as being targeted specifically to those individuals experiencing homelessness, however it is understood that this need encompasses those experiencing homelessness and also those that are at-risk of becoming homeless due to economic circumstances. It is expected that the City will continue to grow, increasing pressure on the housing market, it will be imperative that those that work in the City are able to

afford homes within the City. Workforce development has the potential to assist those households earning less than 80% AMI to increase their financial circumstances.

How were these needs determined?

Public service needs were identified through outreach to agencies and stakeholders providing services within the City as well as the City-wide community survey.

Housing Market Analysis

MA-05 Overview

Housing Market Analysis Overview:

The data used throughout the Housing Market Analysis is derived from the 2012-2016 American Community Survey (ACS). This is the data that HUD prepopulates tables with and the years also used the Needs Assessment section.

The following gives a brief overview of the Market Analysis results, with more detailed information included in each corresponding section.

MA-10: Number of Housing Units

- As of 2016, Modesto has 75,377 housing units, 74% of which are single-family homes
- Rental homes have a varying range of sizes; 23% are one-bedrooms or studios, 38% are 2-bedroom homes, and 39% of rental homes have 3 or more bedrooms.
- Of all owner-occupied homes, 87% are homes with 3 or more bedrooms.

MA-15: Cost of Housing

- The housing market for both owners and renters has steadily risen following the housing crisis in the early 2010's.
- The lowest point for home values according to Zillow came in November 2011, reaching $122,100.
- As of late 2019, the median rental rate in Modesto is $1,495 and the median home value is $306,913.
- Since 2010, the rental market is up nearly 70% and home values are up an estimated 110%.

MA-20: Condition of Housing

- Just over 50% of all renter-occupied housing units have at least one housing condition (cost burden, over-crowding, or substandard condition).
- 31% of owner-occupied housing units have a housing condition in Modesto
- Considering the age of the housing stock in Modesto, 55% of owner-occupied housing was built before 1980, while 61% of renter-occupied housing was built before 1980.

MA-30: Homeless Facilities

- There a number of organizations within the Continuum of Care (CoC) that operate beds at varying level of services:

    - Emergency Shelter beds -> 734 (511 in Modesto)
    - Transitional Shelter beds -> 214 (202 in Modesto)
    - Permanent Supportive Housing beds -> 620 (615 in Modesto)
- There is a total of 1,568 beds combining emergency shelter, transitional shelter, and permanent supportive housing beds; of those, 1,328 are located in Modesto.
    - There are some beds within each category that prioritize those that are chronically homeless, veterans, or unaccompanied youth.

MA-35: Special Needs Facilities and Services

- Primary needs for those special-needs populations are accommodations for mobility such as wheelchairs, grab bars, and adequately wide hallways and entry ways.
- There is a need for additional incentive to have those receiving services for substance abuse disorders to remain stably housed in housing circumstances that allow maximum support and wrap-around services as needed.
- The consultation with the CoC identified several types of services that are in need throughout the County:
    - Those individuals with mental health and/or addiction issues need supportive services at each step of their process across the spectrum of housing options
    - Successes were identified in households exiting transitional housing into permanent housing when connected with employment opportunity/trainings
- Specifically, life skills, budgeting and financial literacy, and mental health supports were listed as the top kinds of services needed

MA-40: Barriers to Affordable Housing

- Development fees
    - Zoning change feeds, impact fees, land dedications, school district fees, and site improvement requirements all may contribute to the lack of available affordable housing within the City
        - The City plans regularly investigates policies and works with the appropriate departments and stakeholders to mitigate those policies and fees that may minimize affordable housing developments
- State of California SB2 Planning Grants Program (PGP): The City will utilize State SB2 PGP program funds to develop an Affordable Housing plan to identify opportunity sites for affordable housing; funds will also be used to of exploring zoning code amendments to facilitate housing development.

MA-45: Non-Housing Community Development Assets

- The Modesto, and the larger Stanislaus County, expects the economy to continue to grow and unemployment rates to continue trending downward.
    - The industries with the largest employment in Modesto are:
        - Trade, Transportation, and Utilities
        - Education
        - Health Care and Social Assistance

        - Government
        - Retail Trade
        - Manufacturing
    - Those industries expected to see the greatest growth through 2026 are:
        - Education
        - Health Care and Social Assistance
        - Leisure and Hospitality
        - Transportation, Warehousing, and Utilities
- The unemployment rate has fallen for several years in a row, reaching 13.6% in Modesto for all workers in 2016
    - The unemployment rate for certain age groups is far less:
        - Ages 35-44 -> 8.5%
        - Ages 45-54 -> 8.1%
        - Ages 55-59 -> 5.3%
        - Ages 60-64 -> 5.5%

MA-60: Broadband Needs of Housing

- Broadband competition in Modesto is similar to other cities of similar size and employer makeup.

MA-10 Housing Market Analysis: Number of Housing Units

Introduction

In order to draw a fair comparison between CHAS calculations and conditions presented in the Needs Assessment, the following sections utilize 2012-2016 ACS five-year estimates. The 2016 dataset is used because the 2016 CHAS data is the latest release, 2017 data is expected to be release in late 2020. Throughout this section there are datapoints that reflect 2018 or 2019 to supplement the 2016 data that corresponds to the Needs Assessment section.

Based on such figures, single-unit detached properties make up the large majority of Modesto's housing stock. Multi-family units of five or more units make up about 14% of the housing market in the City, which it typical in moderately dense cities. Single-unit attached homes are those homes that may share an outside wall, commonly referred to as a "townhouse" or "rowhouse." Meanwhile, manufactured housing, such as mobile homes and RVs, make up about 2% of total stock. Such housing is often found in more economically and environmentally vulnerable areas.

The table below indicates the number of housing units located in each building type. For example, there are 7,541 housing units located in buildings where there are between 2-4 units in the building.

Residential properties by number of units

Property Type	Number	%
1-unit detached structure	52,945	70.2%
1-unit, attached structure	3,191	3.4%
2-4 units	7,541	10.0%
5-19 units	5,310	7.1%
20 or more units	5,392	7.2%
Mobile Home, boat, RV, van, etc.	1,609	2.1%
Total	75,377	100.0%

Source: 2012-2016 ACS

Looking at renter households, just under a quarter of all renter households are in units that have one bedroom or less (23.5%). A large share of renter-occupied units are in homes that have two bedrooms or more.

Renter Unit Size by Tenure

	Renters	
	Number	**%**
No bedroom	1,653	5.0
1 bedroom	6,067	18.5
2 bedrooms	12,334	37.5
3 or more bedrooms	12,815	39.0

Source: 2012-2016 ACS

Looking at owner households, the large majority have three bedrooms or more, with only 13.2% of all owner households having two bedrooms or less.

Owner Unit Size by Tenure

	Owners	
	Number	**%**
No bedroom	173	0.05
1 bedroom	159	0.04
2 bedrooms	4,700	12.3
3 or more bedrooms	33,272	86.9

Source: 2012-2016 ACS

Describe the number and targeting (income level/type of family served) of units assisted with federal, state, and local programs.

Located within Modesto, there are 202 transitional housing units, 804 permanent supportive housing units, and 754 affordable housing units. These federally assisted units vary in type from beds located within emergency shelters to multi-family units in Modesto spread across eighteen (18) separate properties.

As described in the 2015-2023 Housing Element, Modesto supports a variety of multi-family affordable housing units through new construction as well as acquisition and rehabilitation. The targeting for the City-assisted units are income-based, focusing on supporting those households that are earning below

80% AMI. The Stanislaus County Affordable Housing Corporation (STANCO) also supports units throughout the City. STANCO, through partnerships with local service providers, targets those with needs beyond financial support and integrates behavioral health supports into housing. For a full list of the units that STANCO supports, please see section MA-30.

The HACS operates several complexes within Modesto that all target low- and moderate-income households. More specifically, several complexes are for seniors where there are units with 1- to 3-bedroom units. The housing authority also has complexes that are specifically geared for small and/or large families. Units in the Brighton Village complex in Modesto are 3-bedroom with a minimum of three persons and a maximum of seven persons.

Provide an assessment of units expected to be lost from the affordable housing inventory for any reason, such as expiration of Section 8 contracts.

The Housing Authority of the County of Stanislaus is the largest landlord of multifamily and senior housing for low- and moderate-income populations within the City. The Housing Authority owns and manages over 1,400 rental units in Modesto. As of June 2019, 60 of those units were deemed "high-risk" according to the California Housing Partnership. These units are Parkview Christian Estates (60 units); both are Section 8 contract and deemed at-risk due to their latest affordability year ending soon, 2021 and 2020 respectively. Cameron Villa Apartments (68 units) were previously considered "high-risk" but secured Low Income Housing Tax Credits award for the rehabilitation of this project increasing its affordability by 30 years.

Does the availability of housing units meet the needs of the population?

Based on data within the Needs Assessment section, the community survey results, and feedback from public community meetings, the availability of affordable housing units does not currently meet the needs of the population. Indicative of the growing housing costs in the City and throughout the County, the number of cost-burdened households has increased as housing costs have increased. This points to a need for affordable housing of varying sizes throughout the City to meet the need of those cost-burdened families. As indicated in the 2015-2023 Housing Element, the following highlights several of the primary housing needs:

- Shortage of housing supply in California
- Affordable housing units are being lost as they are sold in the private market
- Limited availability of large rental units for large-households
- Increase in single-parent households indicates a future need for one and two bedroom units that are affordable on a single income
    - This need also points to the need for childcare support
- The overall high rates of cost-burden, and particularly those that are renting, indicate that there are limited affordable options for low-income renter households of all sizes and even fewer options for those households to purchase a home
- In the extremely tight housing market, affordable housing is being lost to units being sold given a large increase in home values.

Describe the need for specific types of housing

The immediate need is for rental housing that is affordable for families and individuals earning 80% AMI or less. As indicated in the Housing Element, overcrowding among large-households indicates a need for additional affordable rental units that can accommodate households with 5+ members. Similarly, an increase in single-parent households indicates a need for small and affordable units where a single income and the cost of childcare still make the units affordable.

The expected growth in Modesto, 60% over the next 10 years and 100% over 20 years, paired with the relative affordability of the region compared to the Bay Area, indicates the need for housing units that can accommodate a growing elderly population. According to the State of California demographic projections, the population that is 70+ years old are expected to grow by 37% between 2020 and 2030 within Stanislaus County. As Modesto is the center of the County for primary healthcare services and social support services, it can be expected that Modesto will experience an increased need for housing that is suitable to elderly households.

In all public meetings the need for more affordable units of all sizes across the entire City was regularly heard.

MA-15 Housing Market Analysis: Cost of Housing

Introduction

The cost of housing in Modesto has steadily risen since about 2012. Like other cities across the county, recovery from the mortgage crisis of 2008 has been slow. According to Zillow data, the Modesto housing market peaked in March and April of 2006, with the Zillow Home Value Index reaching $355,000. The lowest point in the housing market according to the same Zillow Index came in November of 2011, at $122,100. As costs edge back to pre-housing crisis levels, affordable housing will be at the forefront of development needs and will also be a City priority.

The tables below reflect Zillow housing data within the City, giving a timeline of changes from 2000 to current conditions. While the cost of owning a home has fluctuated by over 100% since 2000, the rental market has been more stable, although still seeing a substantial increase of nearly 70% since 2000.

Cost of Housing

	Base Year: 2000	2010	2016	2018	% Change (2000-2018)
Median Home Value	$126,000	$282,500	$208,000	$265,100	110.4%
Median Contract Rent	$551	$819	$852	$929	68.6%

Source: 2000 Census, 2006-2010 ACS, & 2012-2016 ACS

Zillow Data	2000	2005	2010	2015	2019	% Change (2010 to 2019)
Zillow Home Values	127,400	327,200	139,700	2013,800	306,913	119.7%
Zillow Rental Values	-	-	1,244	1,246	1,495	20.1%

Source: Zillow

The table below highlights the ranges of rent typically being paid in Modesto as of 2016. The table shows that most renters in Modesto are paying above $1,000 in rent each month, given that the table's data is from 2016, and the rents have risen since then, it can be assumed that a greater percentage of Modesto renters are paying more than what the table may show. It is also important to note that the fair market rent (FMR) for a 2-bedroom unit is near $1,000, about 45% below the median rental value according to Zillow.

Gross Rent Paid

Rent Paid	Number	%
Less than $500	367	1.3%
$500-999	3,696	13.1%
$1,000-1,499	9,513	33.8%
$1,500-1,999	7,568	26.9%
$2,000 or more	7,028	24.9%

Source: 2012-2016 ACS

The table below is a calculation made by HUD to determine the number of units deemed affordable for each income bracket. Affordability in this instance means that a household is not paying more than 30% of monthly gross incomes towards housing costs including utilities.

Housing Affordability

% Units affordable to Households earning	Renter	Owner
30% HAMFI	1,145	No Data
50% HAMFI	3,210	1,770
80% HAMFI	15,265	5,919
100% HAMFI	No Data	10,132
Total	**19,620**	**17,821**

Source: 2012-2016 ACS

The table above identifies the number of units that are affordable to each income bracket. Understandably, those with the lowest income have the fewest housing options that are affordable. There is a total of 17,410 households in Modesto earning 50% AMI or less. Although there is not data as to the number of units affordable to owners at 30% AMI; the data still indicates a severe shortage of homes that are affordable especially for those low-income households in Modesto.

The Fair Market Rent and HOME rents outlined below are HUD calculations that work to inform payment standards for the Housing Choice Voucher program among other HUD programs. The Fair Market Rent (FMR) is the basis for determining the maximum monthly subsidy for a family receiving housing assistance through a HUD program. Keep in mind that about 60% of those households renting in Modesto are in units that are two-bedrooms or less. The FMR rate and the High and Low HOME rents

seemingly are operating at a value that is slightly less than what a unit rents for in Modesto.

2016 Monthly Rent

Monthly Rent ($)	Efficiency (no bedroom)	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
Fair Market Rent	$634	$717	$936	$1,337	$1,615
High HOME Rent	$634	$717	$889	$1,018	$1,116
Low HOME Rent	$542	$581	$697	$806	$900

Source: HUD Fair Market Rent – Huduser.gov

Considering the table above and comparing the fair market rent (FMR) to the median 2016 contract rent of $852, the data shows that the median contract rent falls between the FMR for a 1-bedroom and 2-bedroom unit. However, there is a discrepancy between Zillow data and ACS data, with Zillow data showing higher rental values; above $1,200 where ACS shows $852.

Is there sufficient housing for households at all income levels?

As noted in the Needs Assessment, particularly the cost burden data, there is not sufficient affordable housing for those households earning less than 80% AMI; particularly those renter households. According to the Stanislaus County Regional Housing Needs Assessment (RHNA), Modesto accounts for 6,361, or 30%, of the 21,330 new units needed to accommodate population and job growth throughout the County. Similarly, the RHNA identifies that in Modesto 39.88% of those units should be made affordable, meaning that 2,537 affordable units were deemed to be needed in Modesto at the creation of the most recent RHNA. When referring to the RHNA, affordable means affordable for those low- and -very low-income households, meaning those households earning less than 50% AMI.

As outlined in the RHNA, the need for net new housing units by income bracket is as follows:

- Very-low income -> 1,546 units
- Low-income -> 991 units
- Moderate-income -> 1,100
- Above moderate-income -> 2,724

These numbers indicate a significant need for affordable housing among all income brackets, however especially a need on the edges of the spectrum, those very low-income households and those above moderate-income households.

How is affordability of housing likely to change considering changes to home values and/or rents?

Housing prices are expected to increase as the City continues to grow and the region also continues to bring in new businesses and households which increase pressure on the housing market. This concern of affordable housing shortage is potentially exacerbated by a regional housing crisis occurring in the San Francisco Bay Area. As housing is more affordable in Modesto and Stanislaus County as compared to the Bay Area, the housing market is able to more readily be occupied by those households earning wages from the Bay Area, which are typically much higher than Modesto wages. This effect has the potential to

continue to drive housing prices up. As a result, housing will become increasingly more unaffordable to households working in Modesto.

How do HOME rents / Fair Market Rent compare to Area Median Rent? How might this impact your strategy to produce or preserve affordable housing?

The HOME and FMR rental rates are slightly below the median rental rates according to Zillow data. Zillow aggregates all rental types, so the $1,508 may skew a bit higher than what rental rates for one- and two-bedroom units. According to rentjungle.com the average 2-bedroom unit is $1,245 as of March 2020 and rentcafe.com indicates that the average rent in Modesto is $1,257.

2020 Rental Rates

	Rental Cost
One-Bedroom FMR (2020)	$885
Two-Bedroom FMR (2020)	$1,105
Three-Bedroom FMR (2020)	$1,567
Zillow Average (All unit sizes)	$1,508
Rentjungle.com (two-bedroom)	$1,245
Rentcafe.com (all units sizes)	$1,257

Source: HUD FMR; Zillow Housing Data; Rentjungle.com; Rentcafe.com

The rental rates table highlights the differences that exist between the fair market rent (FMR) and the current rate in Modesto. The market is difficult for both renters and owners at this point in time. That being the case, homebuyers that are unable to obtain financing or are unable to find an affordable unit to purchase are relegated to the rental market. The rental market then gets increasingly tight for those renters. This rental market that is becoming increasingly unaffordable for those earning less than 80% AMI is a reason the City prioritizes limited resources for affordable rental housing.

MA-20 Housing Market Analysis: Condition of Housing

Describe the jurisdiction's definition for "substandard condition" and "substandard condition but suitable for rehabilitation

According to HUD, substandard housing conditions within the City of Modesto include the following:

- Violation of State building and housing codes;
- Lack of adequate plumbing, kitchen, or heating facilities; and
- Overcrowding conditions (defined as being occupied by more than one person per room, including living and dining rooms but excluding bathrooms and kitchen).

A housing unit is considered to be in “Standard Condition” if the unit:

- Is structurally sound and provides adequate shelter from the weather elements and a securable interior environment
- Has operable indoor plumbing (a minimum of one of each: wash basin, water closet, bathing facilities, kitchen sink)
- Has an adequate, safe electrical system
- Has a sanitary food preparation facility
- Has no presence of environmental health concerns such as mold and lead
- Meets and or exceeds HUD Housing Quality Standards (HQS).

A housing unit is considered to be in "substandard condition but suitable for rehabilitation" if the housing unit:

- Does not meet one or more of the conditions required for a dwelling to be in "standard condition" and the cost to bring the dwelling into compliance does not exceed 75 percent of the value of the house and property.
- Has been declared unfit or unsafe for occupancy by a government agency and the cost to bring the dwelling into compliance does not exceed 75 percent of the value of the house and property.

The table below highlights both owner-occupied and renter-occupied households and their rate of experiencing housing conditions. The table shows that renter households are more likely to experience a housing condition as defined above. While 58% of renter-occupied homes in Modesto have a housing condition, 31% of owner-occupied units experience such housing conditions.

Condition of Units

Condition of Units	Owner-Occupied		Renter-Occupied	
	Number	**%**	**Number**	**%**
With one selected Condition	11,339	30%	16,907	51%
With two selected Conditions	277	1%	2,174	7%
With three selected Conditions	0	0%	69	0%
With four selected Conditions	0	0%	0	0%
No selected Conditions	26,688	70%	13,719	42%
Total	**38,304**		**32,869**	

Source: 2012-2016 ACS

Despite renter-occupied homes having more housing conditions to report, the age of the housing stock is relatively similar when comparing owner-occupied and renter-occupied homes. Renter-occupied homes are very slightly more likely to be built before 1979; while 61% of renter-occupied homes are

built prior to 1979, 55% of owner-occupied homes are built before 1979.

Year Unit Built

Year Unit Built	Owner-Occupied		Renter-Occupied	
	Number	**%**	**Number**	**%**
2000 or later	5,646	15%	2,709	8%
1980-1999	11,907	31%	9,935	30%
1950-1979	17,863	47%	16,867	51%
Before 1950	2,888	8%	3,358	10%
Total	**38,304**		**32,869**	

Source: 2012-2016 ACS

Considering the age of housing stock in Modesto, lead-based paint is a primary risk when looking at homes built before 1979. Lead-based paint was banned in 1978, therefore in looking at the tables above and below we can get a sense of the amount of homes in Modesto that may be at risk of still having lead-based paint.

The table below identifies that renter-occupied homes are slightly more likely to have risk of lead-based paint present. Of the nearly 41,000 homes in Modesto built before 1980, nearly half are renter-occupied homes. The difference the table outlines is that of all renter-occupied homes in Modesto, 62% are built before 1980, whereas of all owner-occupied homes, 54% are built before 1980. Of all those homes built before 1980 with children present, just over half are renter-occupied homes.

Risk of Lead-Based Paint Hazard

Risk of Lead-Based Paint Hazard	Owner-Occupied		Renter-Occupied	
	Number	**%**	**Number**	**%**
Total Number of Units Built Before 1980.	20,751	54%	20,225	62%
Housing units built before 1980 with children present	3,537	10%	4,535	14%

Source: 2012-2016 ACS & 2012-2016 CHAS

Vacant Units

	Total
Available for Rent	1,123
Rented, not occupied	150
For sale only	432
Sold, not occupied	170
For seasonal, recreational, or occasional use	161
Other vacant	1,281
Total	3,317

Source: 2018 American Community Survey

Data identifies a total of 3,317 vacant units within Modesto. This number includes both renter and owner units, however, no specific data set is available to estimate the number of rental units that are currently available in the market. American Community Survey data from 2018 suggests that of all

vacant units in the City, about one-third are available to rent. The number reflected by the ACS data is perceived to be high locally, given the extremely tight housing market.

Describe the need for owner and rental rehabilitation based on the condition of the jurisdiction's housing.

Generally, the housing stock across the City is well maintained. However, certain neighborhoods are impacted by deferred maintenance. The 2016 City of Modesto Housing Element estimated 15,000 housing units in need of rehabilitation and 500 housing units require complete replacement. Many areas with older housing stock correspond with areas of higher concentrations of low- and moderate-income households. Those low- and moderate-income owner households are more likely to defer maintenance due to financial constraints. Those landlords renting to low- and moderate-income households are more apt to defer maintenance because the return on investment may not be economical. Renter occupied units tend to be older; although there is nearly an equal amount of owner-occupied housing units in the City; a greater proportion of renter-occupied housing was built pre-1980. Another important note to consider is that renter-occupied housing is often less likely to be rehabilitated in a tight housing market. In a tight housing market, landlords are able to consistently fill vacancies, which minimizes incentives for a renter-occupied rehabilitation.

This is particular importance where there are concentrations of households earning less than 80% AMI. As the Needs Assessment points out, these households experience housing problems at higher rates, meaning they are more vulnerable to substandard housing because their options are more limited than other households throughout the City. There is a need for landlords to be reminded of code requirements and upkeep standards, especially in those neighborhoods where households are most likely to be low and moderate-income.

On September 24, 2019 the City of Modesto Council approved the creation of the Rental Housing Safety Program. The program will support efforts to maintain the supply of safe, decent, and sound affordable housing through conservation and rehabilitation of existing housing stock. The program will require property owners to ensure basic safety items such as:

- Hot and cold running water
- Electrical power (No generators)
- Heat
- Functioning sewer system
- Safe entry door
- Safe exits
- No mold or other infestations
- Smoke and Carbon Monoxide Detectors
- Functioning Mechanical Systems
- Properly Functioning Windows
- Water heaters properly secured

- Address numbers legible from the street
- Stairways in good condition
- Roofs free of tarps

Property owners will be required to conduct an annual inspection of their rental unit and make repairs as necessary, then certify that the unit meets minimum standards of the program. Up to ten (10) percent of all rental units in the self-certification program will be selected for inspections.

In a community meeting held in District 4, hosted by the Airport Neighborhood Collaborative, a concern was raised of rental units in the District being in disrepair and the property owners indicating to tenants that rent would be increased if repairs were complete. This concern highlights a need for code enforcement in ways that protect tenants.

The City's Housing Division has partnered with the Neighborhood Preservation Unit for referrals of any homes that have code violations that may be able to benefit from the City's Homeowner Rehabilitation Program.

Estimate the number of housing units within the jurisdiction that are occupied by low or moderate income families that contain lead-based paint hazards.

According to the tables above, the American Community Survey (ACS) and the Comprehensive Housing Affordability Strategy (CHAS) data estimate that nearly 21,000 owner-occupied units and 20,000 renter-occupied units were built before 1980. Knowing that 42% of all households in the City are considered low- moderate-income we can apply this percentage to all housing units across the City to estimate the number of low- moderate-income households that are living in units built before 1980, thus at greater risk of being exposed to lead-based paint hazards.

Assuming 42% of owner-occupied and renter-occupied housing units in the City are low and/or moderate-income households we can determine the following:

- An estimated 8,820 owner-occupied households in the City are both low and/or moderate-income and also live in a housing unit built before 1980
- An estimated 8,400 renter-occupied households in the City are both low and/or moderate-income and also live in a housing unit built before 1980

MA-25 Public And Assisted Housing

Totals Number of Units

	Public Housing	Vouchers				
		Project -based	Tenant -based	Special Purpose Voucher		
				Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
# of units/vouchers available	647	242	4,170	231	230	25
# of accessible units	72					

Source: Stanislaus County Housing Authority Housing Inventory Report

Describe the supply of public housing developments:

There are 647 public housing units, most of which are scattered throughout the City. Of these public housing units, most of the structures were developed in the 1950's.

Describe the number and physical condition of public housing units in the jurisdiction, including those that are participating in an approved Public Housing Agency Plan

There are a total of 647 housing units controlled by the Housing Authority of the County of Stanislaus (HACS). Physical condition of the public housing units: Good/Fair. Most of the public housing units were built in the 1950's as this includes normal wear and tear, or only slight defects which are normally corrected during the course of regular maintenance and inspections.

Public Housing Condition

Public Housing Development	Most Recent Inspection Score
Scattered Site	91
Scattered Site	85
Scattered Site	88
Cameron Villa Apartments	91
El Casa Verde	92
Marple Manor	88
Ashwood Village	87
Parkview Christian Estates	65
Vinewood Apartments	94
Orangeburg Manor	76
Ralston Tower	87
Colonial Farms	74

Source: Huduser.gov / Physical Inspection Scores

Describe the restoration and revitalization needs of public housing units in the jurisdiction:

In Consultation with the Housing Authority of the County of Stanislaus, they have described the greatest restoration needs to be plumbing, electrical, and exterior painting throughout the stock of housing controlled by HACS.

Describe the public housing agency's strategy for improving the living environment of low- and moderate-income families residing in public housing:

HACS is currently working on supportive housing programs that include transitional housing to help people prepare for independent living and permanent supportive housing for people with long-term or chronic service needs. Maintain transitional and supportive housing for people who have bene homeless or at risk of homelessness.

The Family Self-Sufficiency Program is a five-year voluntary program designed to help families achieve self-sufficiency by providing case management and referrals to supportive social services not limited to:

1. Child Care/Transportation/Budgeting/Counseling
2. Education (H.S. diploma, GED, Community College and Four-Year institutions)
3. Job Search and Work Skills/Legal Services
4. Parenting Skills/Health/Food & Nutrition
5. Career Guidance Counseling
6. Communication Skills/Stress Management
7. Drug & Alcohol Counseling
8. Stress Management/Self-Esteem/Motivation
9. Homeownership

The Family Self-Sufficiency program works in conjunction with the Program Coordinating Committee to create an effective delivery system of supportive services to provide critical tools to help families on their path to self-sufficiency. This committee has been established to create an established partnership and linking services with the intention of assisting residents by offering up to date possible resources, moving along the housing continuum, available in the county.

The HACS' efforts to improving the living environment of low- and moderate-income families residing in public housing include creating housing opportunities among the entire housing continuum. An example of this is the Edwards Estates Homeownership Project. This project consists of the construction of 35 single family homeownership units to be sold to first time homebuyers. This project will provide the opportunity to public housing residents become homeowners.

MA-30 Homeless Facilities and Services

Introduction

Homeless facilities and services are coordinated through the Continuum of Care in the County, the Stanislaus Community System of Care (SCSOC). The agencies that are part of the SCSOC provide several types of housing and services:

- Emergency shelter for families, adult individuals, and youth
- Rapid Re-Housing (RRH) for families and adult individuals

- Transitional housing for families and adult individuals
- Permanent Supportive Housing (PSH) for adult individuals

Available homelessness resources are summarized below in the table and then listed in detail following the table.

Facilities Targeted to Homeless Persons

	Emergency Shelter Beds		Transitional Housing Beds	Permanent Supportive Housing Beds	
	Year Round Beds	**Voucher / Seasonal / Overflow Beds**	**Year Round Beds**	**Year Round Beds**	**Under Development**
Households with Adult(s) and Child(ren)	37	39	50	249	
Households with Only Adults	313	96	125	315	
Total Beds	734	155	202	804	140
Subset of Total Bed Inventory (where available)					
Chronically Homeless Households	N/A	N/A		272	
Veterans	0	0	16	227	
Unaccompanied Youth	22		16		

Source: HUD 2018 Continuum of Care Homeless Assistance Programs: Housing Inventory Count Report (HIC)

Describe mainstream services, such as health, mental health, and employment services to the extent those services are use to complement services targeted to homeless persons

- **AspiraNet** provides vocational education and job training through its California Department of Education Workability program
- **Behavioral Health and Recovery Services (BHRS)** administers Stanislaus County's behavioral health and recovery services. (Inpatient, PSH Supportive Service, Street Outreach, Telecare, ACCESS Team)
- **Central Valley Opportunity Center (CVOC)** is a nonprofit employment training and service provider serving the counties of Stanislaus, Merced, and Madera.
- **Community Services Agency (CSA) - STANWORKS** oversees the County's Welfare-To-Work program which helps CalWORKS customers find and keep a job. CalWORKS is a State welfare program that gives cash aid and services to eligible needy California families.
- **Community Services Agency (CSA) – Welfare-To-Work program** also includes assisting with job training to upgrade persons to higher paying jobs. This agency's mission is to protect children and adults, who are at risk, preserve families, provide temporary economic assistance, promote personal responsibility in the areas of job readiness and self-sufficiency, and practice program and system integrity through innovative and effective business strategies
- **Disability Resource Agency for Independent Living (DRAIL)** is a nonprofit corporation that provides to persons with disabilities.

- **Downtown Streets Team:** a program that is designed to provide homeless individuals skills and attributes that are necessary to move toward employment, housing, and overall a better quality of living, but which are, through the experience of homelessness, often suppressed.
- **Employment Development Department (EDD)** is a State agency that provides services to Individuals in Californian under Unemployment Insurance, State Disability Insurance, workforce investment, and Labor Market Information programs. , and assisting disadvantaged recipients in becoming self-sufficient.
- **Golden Valley Health Center (Corner of Hope Homeless Outreach Program)** provides free health services including dental, vision, general medical and mental health services.
- **Health Services Agency (HSA)** in partnership with local hospitals and physician groups supplements and promotes a health delivery system that ensures that Stanislaus County residents have access to quality health care.
- **Homeless Employment Litter Program:** This project will result in the employment of homeless individuals to pick up litter around our city streets and state highways around Modesto.
- **Interfaith Ministries of Greater Modesto** serves hundreds of individuals and families in the City, with emergency food and clothing.
- **Job Corps,** administered by The U.S. Department of Labor, is a no-cost education and vocational training program for persons between the ages of 16 and 24 who qualify as low income
- **National Alliance on Mental Illness (NAMI)** provides employment assistance, by providing informational resources, detailing vocational programs available to persons with a mental illness, legal protections, and health coverage options.
- **Opportunity Stanislaus** provides Workforce Investment Act services to the residents of Stanislaus County.
- **The Salvation Army Modesto Corps** provides an array of services to the homeless, including Emergency shelter and the new Access Center Low Barrier Shelter.
- **Stanislaus County Department of Aging & Veterans Services** provides assistance and advocacy to the men and women who served in the Armed Services of America, their dependents, and survivors and the general public in obtaining benefits and entitlements from the U.S. Department of Veterans Affairs, Department of Defense, and State and local agencies.
- **TeleCare Corporation** manages one of Stanislaus County's Regional Service Teams, providing outpatient and intensive community support mental health services to an estimated 350 to 400 adults living in eastern Modesto. .
- **Turning Point** (Empowerment Center) offers programs in seven California counties to assist persons with a mental illness.
- **The United Samaritans Foundation** operates four mobile food service trucks from their facilities in Turlock, Hughson, and Modesto, delivering nutritious lunches to nine Stanislaus communities five days per week.
- **The Valley Mountain Regional Center** provides a variety of resources to children and adults with developmental disabilities in Stanislaus, San Joaquin, Amador, Calaveras, and Tuolumne counties.
- **The U.S. Department of Veterans Affairs** provides numerous benefits and services to veterans and their families including health care, vocational rehabilitation, education, and home loans.

List and describe services and facilities that meet the needs of homeless persons, particularly chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth. If the services and facilities are listed on screen SP-40

Institutional Delivery Structure or screen MA-35 Special Needs Facilities and Services, describe how these facilities and services specifically address the needs of these populations.

- **Bennett Place** contains 18 units that are reserved for persons who have a serious mental illness (SMI) or serious emotional disturbance (SED) and are homeless or at risk for homelessness.
- **The Berberian Emergency Shelter** provides up to 206 cold weather beds to unaccompanied homeless adult men and women and up to 30 year-round beds to homeless persons with special medical needs.
- **The Berberian Transitional Living Facility** provides 20 beds for homeless male and female veterans and 20 beds for unaccompanied homeless males and females for up to 24 months.
- **Catholic Charities** provides a variety of programs and services with a new office location as of 2019 in Modesto. Catholic Charities provides transportation services, housing and case management services, low-cost healthcare, and childcare as well as immigration and legal services.
- **Children's Crisis Center of Stanislaus County (CCC)** provides childcare and shelter services to abused, neglected, and at-risk children in the community.
- **Community Housing and Shelter Services (CHSS)** provides opportunities to households with and without children to obtain and maintain permanent housing.
- **Community Impact of Central Valley (CICV)** provides services to individuals with HIV/AIDS through the Housing Opportunities for Persons with AIDS Program (HOPWA).
- **Cricket, Guardian, Marsha's, Sawyer, and Verda's Houses** provides shelter for children who may be involved in a family crisis or a conflict situation.
- **Family Promise of Greater Modesto** provides shelter at church sites and case management support for finding permanent affordable housing.
- **Haven Women's Center of Stanislaus County** provides shelter services and outreach to homeless women and children in the South Stanislaus County area and within the City. Services include those for victims of domestic violence.
- **Homeless Prevention and Rapid Re-Housing Program (HPRP)** provides rental assistance in conjunction with intensive case management.
- Housing Authority of the County of Stanislaus administers 222 Shelter Plus Care Certificates and HUD-VASH vouchers which help provide permanent supportive housing to homeless veterans.
- **Hutton House** is an emergency shelter for runaway, homeless, and youth in crisis who are ages 13-17.
- **Low Barrier Youth Shelter/Youth Access Center** a one stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness.
- **Meadow Glen** is a 32-unit permanent rental supportive housing serving very low-income foster youth aged out of foster care.
- **Miller Pointe** is a 15-unit permanent rental housing project serving very low-income households.
- **Mission Emergency Shelter** provides beds for temporary shelter to house up to 100 unaccompanied adult men and women and up to 90 women and children for a maximum stay of fourteen days.
- **The Modesto Men's Gospel Mission and Women's Mission** provides a limited stay of seven nights on the floor, and three nights out, and also serves two meals a day.

- **New Life Program Residential** is an on-site program, operated by the Modesto Gospel Mission, for up to 41 unaccompanied adult men and women who need specialized help to return to societal living. This program is operated by the Modesto Gospel Mission.
- **Pathways** is a transitional living and support services program that focuses on youth who have "aged out" of the foster care placement system.
- **The Salvation Army Modesto Corps** provides an array of services to the homeless.
- **Salvation Army Veteran Emergency Shelter:** provides shelter services to homeless individuals who are U.S. Veterans.
- **Stanislaus County Affordable Housing Corporation (STANCO)** operates eight properties for permanent affordable housing and conducts outreach to place people in supportive housing. STANCO also operates 33 transitional beds for homeless families with children and 37 beds for unaccompanied adult homeless males and females.
    - **STANCO Transitional Housing**
    - California – 36 beds and 4 units
    - Garden Gate – 3 beds and 1 unit
    - Ricardo – 3 beds and 1 unit
    - Locust – 3 beds and 1 unit
    - Garvey – 13 beds
    - REST House - 5 beds
    - **STANCO Permanent Supportive Housing**
    - 24 beds
- **Turning Point Community Programs** provides integrated, cost-effective mental health services, employment and housing for adults, children and their families that promote recovery, independence and self-sufficiency.
- **Turning Point Respite Center at Garden Gate** provides a safe home-like environment for up to 12 homeless mentally ill persons nightly.

MA-35 Special Needs Facilities and Services

Introduction

Services made available to those populations with specific needs are an important component of keeping households stably housed, minimizing risks of homelessness or becoming precariously housed. The services throughout the City are increasingly delivered with efficiency and coordination as the Stanislaus Community System of Care (the County Continuum of Care) improves its systems and communication across service providers.

Including the elderly, frail elderly, persons with disabilities (mental, physical, developmental), persons with alcohol or other drug addictions, persons with HIV/AIDS and their families, public housing residents and any other categories the jurisdiction may specify, and describe their supportive housing needs

Considering each sub-population, below are the specific needs:

Elderly, frail elderly, and persons with physical, mental, and developmental disabilities:

- In rental units, reasonable modifications that address mobility needs such as grab bars, ramps instead of stairs, and/or adequately wide hallways and doors for wheelchair access should it be required
- Access to organized social activities; whether this be through public transit or shuttle services provided by senior centers
- Affordable and quality in-home care, both physical care such as nurses and non-physical care such as social workers and/or case managers
- Those persons with developmental and/or mental disabilities need a variety of housing options with varying levels of independence, access to differing levels of supportive services.

Persons with HIV/AIDS and their families

- The Community Impact of Central Valley (CCIV) provide services to individuals with HIV/AIDS through the HOPWA program. Persons with HIV/AIDS are significantly more vulnerable to becoming homeless during their lifetime.
    - Those persons with HIV/AIDS are in need of ongoing medical care, and thus need access to affordable housing options within reasonable distance to location of care.
    - From this need, stems the need for rental assistance, security deposit assistance, mortgage assistance, payment for utilizes, and food provisions.

Persons with Alcohol or other drug addictions

- In several consultations with community stakeholders, the concern of substance abuse and drug addiction was brought up in conjunction with the increase in visible homelessness
    - It is felt by stakeholders that there needs to be more incentives for those seeking treatment to remain in treatment and then more robust wrap-around services upon an individual leaving treatment

The Stanislaus County Behavioral Health and Recovery Services (BHRS) offers over thirty years of experience in the delivery of community mental health and substance abuse services. Services offered at Stanislaus Recovery Center include adult assessments, residential, withdrawal management (social model), intensive outpatient treatment for substance use and co-occurring disorders. SRC is an intricate part of the continuum of care in Stanislaus County's Behavioral Health & Recovery Services. The City will continue to partner with BHRS wherever the opportunity arises.

Describe programs for ensuring that persons returning from mental and physical health institutions receive appropriate supportive housing

Residential care facilities provide supportive housing for persons with disabilities. The types of facilities available in the City include:

- Group Homes: Facilities of any capacity and provide 24-hour non-medical care and supervision to children in a structured environment. Group homes provide social, psychological, and behavioral programs for troubled youths.

- Adult Residential Facilities: Facilities of any capacity that provide 24-hour nonmedical care for adults ages 18 through 59, who are unable to provide for their own daily needs. Adults may be physically handicapped, developmentally disabled, and/or mentally disabled.
- Residential Care Facilities for the Elderly: Facilities that provide care, supervision and assistance with activities of daily living, such as bathing and grooming. They may also provide incidental medical services under special care plans. These facilities are regulated by the State Department of Social Services (DSS).
- Permanent Supportive Housing (PSH): These are multi-family buildings where service providers and housing providers work together to provide permanent housing, case management and health care services to the most vulnerable populations within the community. These programs are regulated by Stanislaus County Behavior Health and Recovery Services (BHRS).

Specify the activities that the jurisdiction plans to undertake during the next year to address the housing and supportive services needs identified in accordance with 91.215(e) with respect to persons who are not homeless but have other special needs. Link to one-year goals. (91.220(2))

The "91.215(e)" above references how a jurisdiction plans to prioritize housing and supportive services to persons who are not homeless but may require supportive housing such as elderly, persons with disabilities, and public housing residents.

The City understands that those households that are most vulnerable need additional supports to obtain stability in housing. The City proposes to utilize ESG funds to support emergency shelter activities within the CoC and the coordinated entry system that matches the right services to the households given their individual circumstance, this includes taking into consideration special needs in both housing and supportive services. The City uses CDBG funds to support non-homeless special needs populations through public services that are funded through a request for proposal (RFP) process.

MA-40 Barriers to Affordable Housing

Describe any negative effects of public policies on affordable housing and residential investment.

There are a number of codified policies in Modesto that may contribute to the current lack of affordable housing.

Development Fees:

- Zoning Change Fee
    - Should a development or housing unit be proposed for a site where it is not consistent with the General Plan and/or should a project be proposed for a site it is not currently permitted by zoning, a fee of up to $5,231 is required depending on the zoning change needed.
    - These costs could potentially stifle the development of housing in areas where it may otherwise be reasonable

        - Given a low supply of housing affordable to low- and/or moderate-income households, these costs may inhibit housing choice for those households
- Impact Fee, land dedications, site improvements
    - The costs to integrate necessary infrastructure (streets, sidewalks, storm drains, etc.) are bore by the developer, but are ultimately passed on to the consumer
    - These costs contribute to pricing out low- and/or moderate-income households for affordability reasons
    - The City may provide fee waivers in some cases and/or fee deferrals in others allowing construction to move forward with less up-front costs
- School district fees
    - School fees range from $2.97 to $4.66 per square foot; with an average of $3.82 per square foot
    - These may add significant costs to larger developments, contributing to the pricing out of low- and/or moderate-income households

The City of Modesto regularly analyzes City building codes, market constraints, and housing/non-housing development policies, be it through the Consolidated Plan process, the Analysis of Impediments update, or the Housing Element update. The City acknowledges that outdated building codes and land use policies inhibit the development of housing for all income levels and the City understands the importance of regularly analyzing how local policies and ordinances impact the housing market for those households earning less than 80% of the area median income.

To assist in mitigating barriers to affordable housing, the City will utilize State SB2 PGP program funds to develop an Affordable Housing plan to identify opportunity sites for affordable housing; funds will also be used to of explore zoning code amendments to facilitate housing development.

MA-45 Non-Housing Community Development Assets

Introduction

The County Seat of Stanislaus County, Modesto has industry centered in food processing and manufacturing (due to the agricultural San Joaquin Valley surrounding the City), healthcare, and businesses services. These industries are also expected to grow over the next decade, indicating that many of the businesses in these sectors will continue to expand and bring in additional job opportunities to the region. The unemployment rate has fallen steadily since recovery from the housing crisis in the late 2000's early 2010's. Although wage growth has not kept pace with housing costs, as unemployment shrinks and businesses expand and compete for labor, the region is hopeful that wages will increase as unemployment decreases.

Economic Development Market Analysis

Business Activity

The largest employers in Modesto are predominantly food/manufacturing, healthcare, and government.

The table below highlights those largest employers in Modesto.

Employer	Industry	# Of Employees
Manufacturing		
E. & J. Gallo	Winery	6,700
Del Monte Foods Inc	Fruit Products	2,010
Stanislaus Foods	Canning	1,875
Foster Farms Dairy	Dairy Products	850
Frito Lay	Snack Products	637
Pacific Southwest Containers	Container Manufacturing	430
Non-Manufacturing		
Stanislaus County	County Government	4,480
Modesto City Schools	Education District	3,556
Doctors Medical Center	Health Care	2,600
Memorial Medical Center	Health Care	2,400
Save Mart Supermarkets	Retail Grocer	1,650
City of Modesto	City Government	1,500
Stanislaus County Office of Education	Education District	1,300
Sylvan School District	Education District	917
Modesto Junior College	Education Institution	842
Vituity	Medical Billing/Coding	800
Storer Coachways	Transportation	500
Modesto Irrigation District	Water & Electric Utility	450
Costco	General Merchandise	210

Source: Stanislaus County Economic Development Strategy 2019-2024 (http://www.stancounty.com/ceo/econ-dev/pdf/ceds.pdf)

The table below outlines the types of industries located in Modesto and how many employees are working in that industry as of 2016. The table goes further and underscores the projected employment in each industry to 2026. The more fight-hand column in the table below shows the expected percentage of growth in any given industry.

Industry	2016 Employment Estimate	Projected 2026 Employment	Projected Numeric Change 2016-2026	Percentage Change (%)
Trade, Transportation, and Utilities	37,100	40,700	3,600	9.7
Educational Services (Private), Health Care, and Social Assistance	31,100	40,700	9,600	30.9
Health Care and Social Assistance	29,500	38,900	9,400	31.9
Government	27,600	29,000	1,400	5.1
State and Local Government	26,800	28,000	1,200	4.5
Local Government	24,800	25,800	1,000	4
Retail Trade	22,700	23,600	900	4

Manufacturing	21,800	21,800	0	0
Leisure and Hospitality	18,700	21,900	3,200	17.1
Nondurable Goods Manufacturing	15,600	15,600	0	0
Local Government Education	15,500	16,300	800	5.2
Total Farm	14,900	15,200	300	2
Professional and Business Services	14,600	16,000	1,400	9.6
Self-Employment	13,300	14,300	1,000	7.6
Food Manufacturing	9,400	9,200	-200	-2.1
Other Local Government	9,300	9,500	200	2.2
Mining, Logging, and Construction	9,000	10,300	1,300	14.4
Transportation, Warehousing, and Utilities	8,200	10,600	2,400	29.3
Administrative and Support and Waste Management and Remediation Services	7,500	8,200	700	9.3
Durable Goods Manufacturing	6,200	6,200	0	0
Wholesale Trade	6,100	6,500	400	6.6
Other Services	5,400	6,000	600	11.1
Financial Activities	5,300	5,600	300	5.7
General Merchandise Stores	5,000	5,100	100	2
Food and Beverage Stores	4,300	4,400	100	2.3
Clothing and Clothing Accessories Stores	2,300	2,200	-100	-4.3
State Government	2,000	2,200	200	10
State Government Education	1,700	1,900	200	11.8
Educational Services (Private)	1,600	1,800	200	12.5
Information	1,000	1,000	0	0
Federal Government	800	1,000	200	25
Other State Government	300	300	0	0
Private Household Workers	200	200	0	0
Total Nonfarm	171,500	192,800	21,300	12.4
Total Employment	199,900	222,500	22,600	11.3

Source: State of California Employer Development Department (EDD)

Employment Growth

Within the next ten years, the largest industry employment gains in the Modesto Metropolitan Statistical Area (MSA) by percentage growth are projected to be: Health Care and Social Assistance; Private Educational Services; Transportation, Warehousing, and Utilities; the Federal Government; and Leisure and Hospitality. By number of employees, Health Care and Social Assistance; Private Educational Services; and Trade, Transportation, and Utilities are projected to have the largest gains.

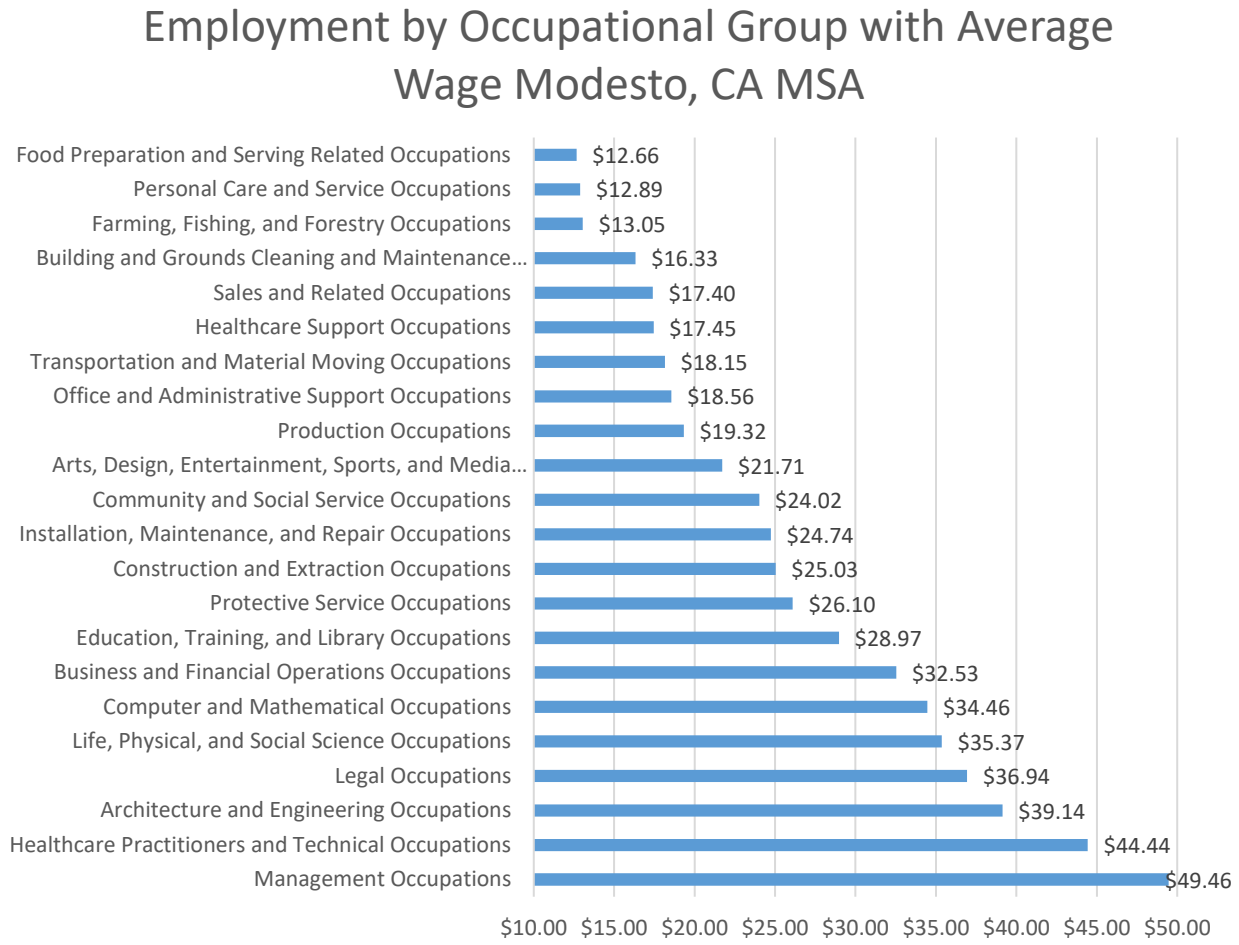
The gain in jobs will come with uneven local income gains. Those sectors projected to have the largest gains in employment are service sectors jobs, more typically lower-paying jobs, and those high-education jobs such as legal, engineering, and medical which typically pay higher-end wages. Steadily

lower unemployment rates will support wage growth in service sector jobs, however the housing market is currently outpacing wage growth.

Healthcare and social assistance, the industry with the largest projected gains, has several occupational groups with a wide average wage range. Jobs in Personal Care and Service Occupations, including personal home care aides and home health aides, pay, on average, $12.89 per hour or $26,810 per year. These jobs will nationally account for 70 percent of all new jobs in the next ten years, a ratio that will likely occur in Modesto as well given the projected growth of the elderly population.

Healthcare Practitioners and Technical Occupations will likely also grow within the City and include doctors, dentists, registered nurses, and physical therapists. These jobs currently pay $44.44 per hour or $92,430 per year. (Bureau of Labor Statistics) These jobs will continue to grow, especially with Kaiser Permanete, Doctors Medical Center, Memorial Hospital, and Valley Children's Regional Center employing high numbers in this occupation group.

The table below shows the average wage for the different types of occupations and industries within Modesto. Those with the highest average wages are those with higher education levels. Those industries with the largest expected growth are healthcare, education, technologies, transportation, and warehousing. The average wages among those industries are in the top 50% of the wages outlined in the table below.



Source: Bureau of Labor Statistics May 2018 OES Estimates

The table below shows that as of 2016, there was about 97,000 people in the Modesto civilian labor force, with an unemployment rate of 13.6%. The unemployment rate steadily decreases with age, reaching the lowest rate of 6.5% among those 55-59 years of age. As the economy continues to improve, the unemployment rate among all age groups is expected to continue to decline. This low rate of unemployment should support wage growth.

Labor Force

Total Population in the Civilian Labor Force	98,215
Civilian Employed Population 16 years and over	88,099
Unemployment Rate	10.3%
Unemployment Rate for Ages 16-19	32.1%
Unemployment Rate for Ages 20-24	18.1%
Unemployment Rate for Ages 25-29	11.2%
Unemployment Rate for Ages 30-34	11.2%
Unemployment Rate for Ages 35-44	8.5%
Unemployment Rate for Ages 45-54	8.1%
Unemployment Rate for Ages 55-59	5.3%
Unemployment Rate for Ages 60-64	5.5%
Unemployment Rate for Ages 65-74	4.3%
Unemployment Rate for Ages 75+	5.3%

Source: 2014-2018 ACS

The table below identifies the largest occupation sectors in Modesto. Those top sectors outlined below reflect the tables above showing the industries throughout Modesto. Those largest sectors are reflective of both manufacturing and non-manufacturing jobs.

Occupations by Sector

	Number of People
Management, business and financial	23,900
Farming, fisheries and forestry occupations	1,996
Service	16,350
Sales and office	21,884
Construction, extraction, maintenance and repair	9,308
Production, transportation and material moving	12,196

Source: 2012-2016 ACS

The table below highlights the commute times experienced by those working in Modesto. An estimated nearly 70% of all persons working in Modesto take less than 30 minutes to commute to and from work each day.

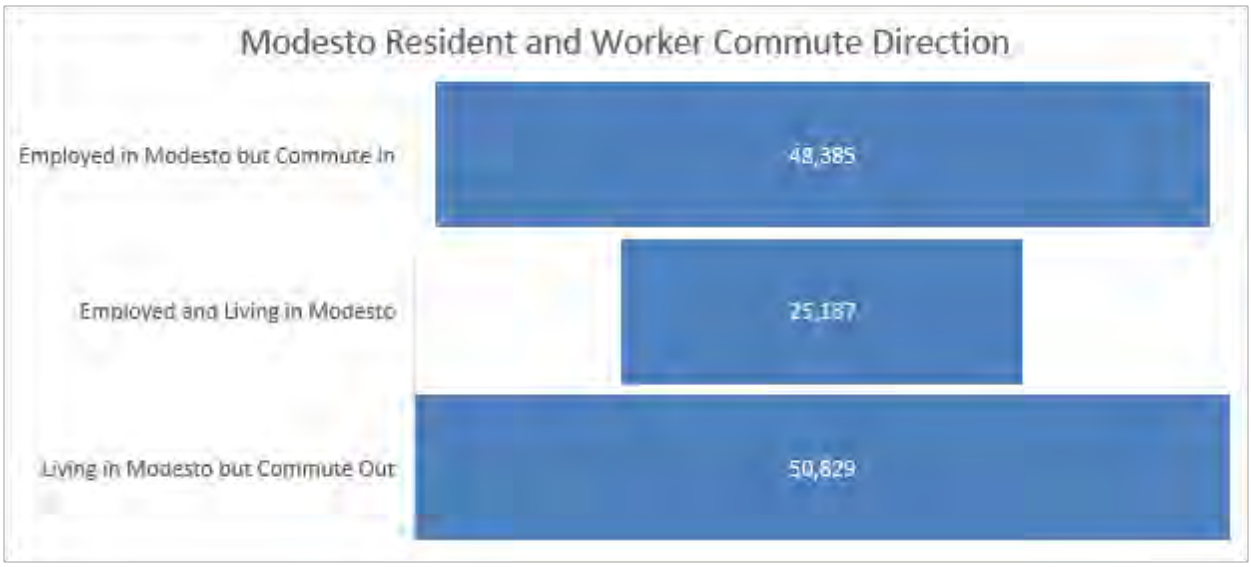
Travel Time

Travel Time	Number	Percentage
< 30 Minutes	53,977	69%
30-59 Minutes	14,759	19%
60 or More Minutes	9,018	12%
Total	**77,753**	

Source: 2012-2016 ACS

According to the graphic below, despite the large number of employers within Modesto, more than double the number of Modesto residents commute out of the City daily than stay within the City to

work. About an equal number of people commute into the City for work as commute out, indicating an imbalance in the types of housing or neighborhoods within the City to nearby employment.



Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics 2017

Of those residents commuting out, almost half are workers making more than $3,333 per month as shown below. This is most likely indicative of those workers commuting to the Bay Area and elsewhere for higher paying jobs and commuting back to a home in Modesto for more affordable housing relative to the areas where high-tech jobs have increased the housing market substantially.

Resident Wages: Residents Who Commute Out for Employment

Income	Number	Percent
Workers Earning $1,250 per month or less	8,677	17.1%
Workers Earning $1,251 to $3,333 per month	18,225	35.9%
Workers Earning More than $3,333 per month	23,927	47.1%

Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics 2017

The table below shows the population in Modesto that are in the labor force. The table breaks down the parts of the labor force by education attainment. The table shows that the rate of unemployment get lower given more education. In this case, about 5% of those with a bachelor's degree or higher are unemployed; while 10% of those with some college or associate's degree are unemployed and 14% of those with a high school education are unemployed. This does not necessarily indicate that more education is always the solution for unemployment, rather a quality match of training and skills to the available jobs is important to consider.

Educational Attainment by Employment Status (Population 16 and Older)

Educational Attainment	In Labor Force		
	Civilian Employed	Unemployed	Not in Labor Force
Less than high school graduate	8,562	2,267	7,264
High school graduate (includes equivalency)	17,847	2,730	8,511
Some college or Associate's degree	26,459	2,952	9,581
Bachelor's degree or higher	15,621	880	3,123

Source: 2012-2016 ACS

The table below shows Modesto residents by age and educational attainment. Of those aged 25 to 65, the majority of the population has a high school degree or higher.

Educational Attainment by Age

	Age				
	18–24 yrs	25–34 yrs	35–44 yrs	45–65 yrs	65+ yrs
Less than 9th grade	172	1,140	2,014	5,253	3,911
9th to 12th grade, no diploma	2,279	2,829	2,385	4,472	2,818
High school graduate, GED, or alternative	7,696	8,052	7,101	14,035	7,446
Some college, no degree	9,034	10,123	6,894	12,989	6,643
Associate's degree	877	2,345	2,004	4,679	2,258
Bachelor's degree	948	3,361	3,527	6,150	3,242
Graduate or professional degree	39	1,200	1,605	3,781	1,781

Source: 2012-2016 ACS

The table below outline the median earnings by workers in Modesto when considering their education levels. As is true in most cities, the greater an individual's education, the greater their earning power. This is also true in Modesto where hose with bachelor's degree earn about 80% more than those with a high school diploma.

Educational Attainment – Median Earnings in the Past 12 Months

Educational Attainment	Median Earnings in the Past 12 Months
Less than high school graduate	20,206
High school graduate (includes equivalency)	29,963
Some college or Associate's degree	35,774
Bachelor's degree	55,080
Graduate or professional degree	76,549

Source: 2012-2016 ACS

The table below shows the level of education as a portion of the entire population. Comparing California, to Stanislaus County, to Modesto, the table shows that just over half of all Modesto residents

have a high school diploma or some college with no degree. There is a near equal number of Modesto residents with less than a high school education than there are those with a bachelor's degree or higher.

Education of Population 25 years and over	California	Stanislaus County	Modesto
Less than 9th grade	9.90%	12.20%	9.20%
9th to 12th grade, no diploma	8.00%	10.20%	9.30%
High school graduate (includes equivalency)	20.60%	28.10%	27.30%
Some college, no degree	21.70%	25.20%	27.30%
Associate's degree	7.80%	7.80%	8.40%
Bachelor's degree	20.10%	11.10%	12.10%
Graduate or professional degree	11.90%	5.40%	6.20%

Source: 2012-2016 ACS

Based on the Business Activity table above, what are the major employment sectors within your jurisdiction?

The "Management, business and financial" and "Sales and office" employment sectors are the largest within Modesto.

Describe the workforce and infrastructure needs of the business community:

The following Economic Development Focus and Priorities were identified by the City of Modesto in the Stanislaus County Comprehensive Economic Development Strategy 2019-2024

Strengthen Infrastructure for Core Business Clusters

Ensure critical infrastructure is in place and that plans anticipate industry growth and demand trends:

- Water and Wastewater for Industrial Users including Food and Beverage
- Improve Rail and Road transport for manufacturers and distribution services
- Improve Air transport for specialty manufacturing and executive needs
- Competitive city-wide High-Speed Networking and Internet Services. 20 Gbps Fiber Optic Network to support Business, Government services and future connectivity initiatives.

Support Economic Recovery and Resilience

Support Manufacturing and Export

- Recruit companies in NAICS sectors that complement and/or advance core clusters
- Leverage eleven Federally designated Opportunity Zones
- Improve network and internet availability and reliability with redundant fiber optic network
- Support Job "InSourcing" – keep sustainable jobs in USA

- Support public and private workforce development initiatives to increase skilled labor supply in specific competencies and roles identified by anchor businesses
- Support venture incubation including UC Merced Modesto Venture Lab and private training and co-working programs
- Develop a plan and promote development of a Tech/Venture Zone
- Support repurposing and reuse of reclaimed brownfield land
- Support higher quality of life developments
- Develop a new downtown master plan emphasizing infill, densification, affordable housing and transit-centered development
- Continue development of master plan for Tuolumne River Regional Park. Regional Park will enhance recreation and travel destination opportunities and improve management and mitigation of regional flood hazard along Modesto's main riparian corridor

Describe any major changes that may have an economic impact, such as planned local or regional public or private sector investments or initiatives that have affected or may affect job and business growth opportunities during the planning period. Describe any needs for workforce development, business support or infrastructure these changes may create.

The City has been actively seeking and supporting programs that create economic growth in various sectors. Below are some of the activities that will have a significant impact over the foreseeable future.

Major changes with economic impact: investments or initiatives, public or private

Construction

- State of California – New County Courthouse - $279million construction project funded by State of California to open 2023. This is creating jobs in both the construction and extended services being offered at the new site.

Transportation

- San Joaquin Joint Powers Authority – Ace Rail Extension commuter service through Modesto funded by SB132 and renovation of Modesto Transit Center with service to begin by end 2022. SJJPA funding $0.4million for parking lot reconfiguration. $3.9milion planned in two Phases refurbish and modernize Modesto transit center – Phase 1 $2.2million to refurbish building and landscaping - $1.2million from StanCOG, $1million Federal; Phase 2 - $1.7million to add parking and walkway. (Adam Barth quoted in ModestoBee 2/18/18).
- SR-132 Highway transit upgrade in two phases $82million and $132million to help connect Modesto commerce to I-5 freeway ($ per Caltrans district 10 site).
- Measure L local roadway, bicycle and pedestrian transportation projects FY19-20 - $ 7,182,734 funded by special sales tax
- Modesto bus fleet modernization – 5 electric buses FY19-FY20 plus charging stations. (Public Works for best total $investment figure)

Private investment

- Entekra – New offsite home construction manufacturing center, $35million capital investment, 250 new jobs
- Canopy Growth - New contract bottling and cbd/hemp infused product manufacturing center, Phase 1 of 2 plant purchase $17million + capital improvements 100-150 new jobs
- Sovena Oils – New food oil plant coming online 2020, $9million investment, 30 employees.

Brownfield remediation

- 40 acres owned by FMC Corporation on Graphics Way (should be early-mid 2020 that the final remediation action plan is accepted by the California Water Board). Zoned for commercial development.

Workforce development needs arising from investments and initiatives above

- VOLT Institute-Workforce development assistance - plant maintenance mechanics for new manufacturing centers. This program is filling an essential need creating job placement opportunities within a livable wage job sector for the unemployed and underemployed.
- Downtown Streets Team and Ready to Work (RTW) are creating jobs and labor activities for chronically homeless individuals to assist with cleaning streets and receive on the job training and support to get them to a level of placement though another permanent job.

How do the skills and education of the current workforce correspond to employment opportunities in the jurisdiction?

Despite better skill/education within Modesto's current workforce than the surrounding County, more workforce training will be needed to align the City with local and regional models for economic growth, particularly in business, healthcare and education; Modesto currently has a smaller percentage of college graduates than the California average. The Stanislaus County Comprehensive Economic Development Strategy notes that "The communities of Stanislaus will need to continue to diversify and strive to better prepare and develop the workforce with the skills and technology awareness to make our locations attractive to new clusters and expanded, non-agricultural employment sectors." The Economic Development Strategy's educational priorities of "Developing specialized education including higher education, career technical education, and workforce development" and "Supporting the development of college level program infrastructure" will help both local economic growth and wage potential within Modesto.

Describe any current workforce training initiatives, including those supported by Workforce Investment Boards, community colleges and other organizations. Describe how these efforts will support the jurisdiction's Consolidated Plan.

Opportunity Stanislaus is a primary workforce development organization in the County and in Modesto. There have been recent successes in development of training initiatives through partnership with the private sector. Opportunity Stanislaus developed the VOLT Institute, located in Modesto, to offer training for maintenance and technology positions. VOLT was developed in consultation with local businesses to address their needs for machine maintenance and continuing education among their workforce. After initial success and continued discussions with local businesses, VOLT has recently began offering a course on programmable logic controls in partnership with the Automation Group. The Continuing Education (CEs) and multi-day workshops VOLT offers also contributes to a workforce that is directly linked to local companies that are looking to hire. A large portion of those attending VOLT are already employed and the additional training may increase wages or offer opportunities to move laterally into a position with higher earning potential. VOLT does offer scholarships to those in need on a case-by-case basis.

Modesto Junior College (MJC) has a Workforce Development Team that is made available to organizations and businesses to customize trainings to meet workforce needs. MJC offers options across the range of sectors currently working in Modesto and works to pair students to available jobs through internship programs. MJC offers a variety of course lengths, from certificates and CEs to two- and four-year degrees.

Both VOLT and MJC work to contribute to this Consolidated Plan by placing their efforts in wage growth and employment stability. Providing quality and affordable housing is one aspect of minimizing cost burden and housing problems experienced by residents, however these efforts need to be paired with an employment angle as well. VOLT and MJC offer programs and often direct placement opportunities to employment that produces stability and wages that may allow a household to obtain market-rate rent or homeownership.

The Stanislaus County Workforce Development team partners with local school districts and the junior college to work towards continuity in workforce development. Offering free workshops and trainings, Stanislaus County Workforce Development works to connect local residents to available training and educational opportunities that will realistically lead to job placement.

The City currently contracts with the “Downtown Streets Team” (DST), a program that is designed to help “Team Members” (clients) activate skills and attributes that are necessary to move toward employment, housing, and overall a better quality of living, but which are, through the experience of homelessness, often suppressed. These include things like maintaining a schedule, teamwork, accountability, self-confidence and more. DST team members rebuild all of these as well as regain a sense of pride in and stewardship of their community. In addition, Team Members gain valuable experience that they can list at the top of their resume to overcome long experience gaps.

Does your jurisdiction participate in a Comprehensive Economic Development Strategy (CEDS)?

Yes, the City of Modesto was a development partner for the Stanislaus County Comprehensive Economic Development Strategy 2019-2024

If so, what economic development initiatives are you undertaking that may be coordinated with the Consolidated Plan? If not, describe other local/regional plans or initiatives that impact economic growth.

The Stanislaus County Comprehensive Economic Development Strategy outlines several Modesto initiatives that will work to support this Consolidated Plan

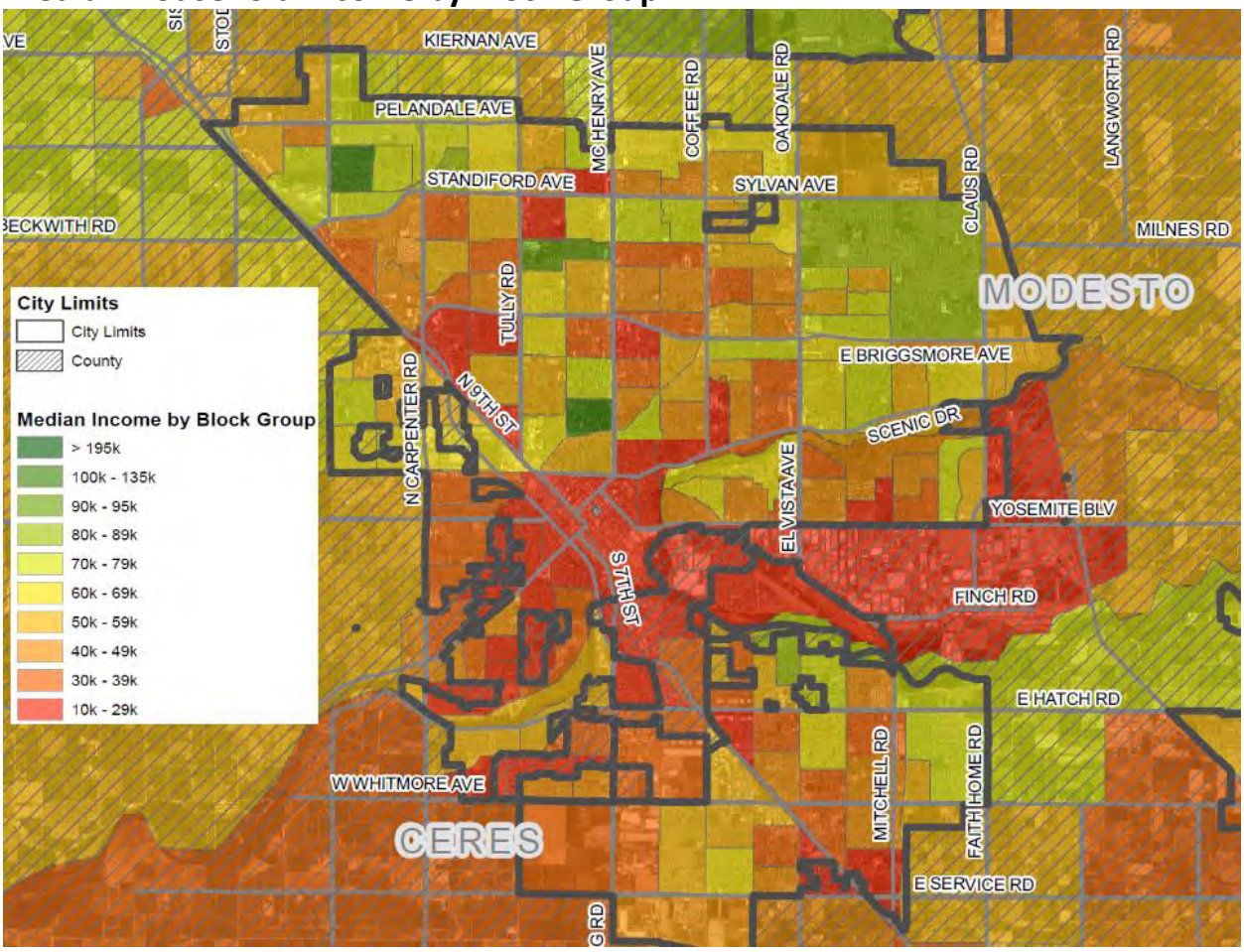
- Update to Modesto General Plan
    - By clearly outlining the economic plan for the future, it can more easily be incorporated to development plans such as this one.
    - The Modesto General Plan update is discussed in more detail in the Strategic Plan of this document.
- The Downtown Mater Plan (DMP) is currently under development. A City Council workshop was held on December 17, 2019 and the draft DMP is expected to be completed in the first quarter of 2020.
- The City plans to continue development of the Tuolumne Regional Park Plan
- LinkModesto: Fiber Network Infrastructure Master Plan was finalized in 2017 with the goal of developing a city-wide fiber network providing low-cost, effective, and resilient information and communication technologies for Modesto.
    - The support of this infrastructure from the City will encourage new business and support existing businesses through an increase in technology capacity.
- Support and promote passenger rail service improvements and general public transportation growth
    - An improved public transportation system will work to minimize traffic congestion as well as allow employees to move more freely across the city, in turn potentially increasing housing options.

MA-50 Needs and Market Analysis Discussion

Are there areas where households with multiple housing problems are concentrated? (include a definition of "concentration")

While there is no data source that geographically identifies where households with multiple housing problems are, a map showing median income by block group will offer where concentrations of low- and moderate-income households may be. Because cost burden is the most widely experienced housing problem, the map below depicts the parts of the City where those households may be located.

Median Household Income by Block Group



Source: Stanislaus County GIS

The map above reiterates closely what was identified in the NA-30 section where Racial/Ethnic Concentrations of Poverty (R/ECAP) were identified. Those areas in South and West Modesto, District 2 have several R/ECAP census tracts. Most higher earning block groups are North of downtown, then spreading both East and West moving further North.

Community meetings in all districts reflected the lack of affordable housing and the gap that exists between wages and housing costs. However, in those communities with greater low- and moderate-income populations, there was greater turnout of community members identifying the issues of housing costs and access to opportunities such as education and transit.

Are there any areas in the jurisdiction where racial or ethnic minorities or low-income families are concentrated? (include a definition of "concentration")

A Racial/Ethnic Concentrated Areas of Poverty (R/ECAP) census tract is defined as: Census tracts where more than half the population is non-White and 40% or more of the population is in poverty OR where the poverty rate is greater than three times the average poverty rate in the area.

According to 2010 Census data, there are five (5) R/ECAP census tracts within Stanislaus County, one of which is completely within Modesto bounds, while four are completely in or at least partially within

County bounds near Modesto. Those R/ECAP census tracts are located in South Modesto or South of Modesto in County property.

What are the characteristics of the market in these areas/neighborhoods?

As identified in the map, median household incomes in some of those block groups are low and have not risen enough to keep pace with the housing market. Many residents in these areas with extremely low-income have issues meeting basic needs and rely on supports to acquire food, childcare, and/or transportation. Additionally, those persons with a disability and seniors have compounded issues often with fewer financial resources and additional health care costs.

The Needs Assessment and Market Analysis found that there are not enough homes affordable to those low- and moderate-income households. As housing costs continue to rise in the region and incomes do not keep pace with those cost increases, this will further limit housing options and opportunities for those low- and moderate-income households.

Are there any community assets in these areas/neighborhoods?

Every neighborhood in Modesto has assets that community members look to as adding value. These assets are community centers, places of worship, schools, libraries, and parks. Public assets are dispersed throughout the City and the City continues to invest in both development of new community assets as well as the improvement of existing assets.

Assets include the Community Center located in Marshall Park. This Facility was constructed on 2005 and is currently under repayment through the City's Section 108 loan. The City often funds improvement projects that expands community enrichment programs like the kitchens at the Senior Center and Airport Neighborhood Community Centers.

Are there other strategic opportunities in any of these areas?

There is opportunity in each of these communities to capitalize on. However, given limited funding not all projects that would assuredly add value to a neighborhood can be pursued. The City makes efforts to leverage State or other Federal funds where possible to bring in additional funds to develop and support projects that add assets desired by the community.

The City was awarded an $8.5 million grant to renovate Cesar E. Chavez Park, located in West Modesto, that will include building an aquatic center with pool and splash pad, soccer field, lighted picnic pavilion and a plaza for skateboarders as well as renovating the park's existing features. This project will have a positive impact on the neighborhood and community as a whole.

The City applied for funding for two other parks: Mellis Park and Mancini Park. The City will apply through the next round of Proposition 68 funding with the intent to bring additional asset improvements to the Community.

MA-60 Broadband Needs of Housing

Describe the need for broadband wiring and connections for households, including low- and moderate-income households and neighborhoods.

The internet is becoming increasingly integrated into the economy, education, and social life. As such, new technologies require faster speeds to take advantage of all the tools the internet offers. Low- and moderate-income households are more likely to be without broadband than are households with more income as broadband may be viewed as a luxury when considering the choices of medical care, transportation costs, and education. As carriers in the region begin to roll out 5G wireless capabilities, these services will augment existing wired services. As 5G services are further developed, the availability of direct Wi-Fi services will become available as an alternative to current wired offerings. It is assumed that wired broadband will continue to dominate the market, however 5G options will begin to become available at a fairly rapid pace.

In order to increase local accessibility to free WIFI, the city has opened Free public WIFI access to the to the immediate areas surrounding the downtown Tenth Street Place building. This being open to the public, allows anyone including homeless and low-income households without access to WIFI, if they have a WIFI accessible device, they can easily access key online services.

Describe the need for increased competition by having more than one broadband Internet service provider serve the jurisdiction.

Competition across Modesto is commensurate with other metropolitan areas across the United States. The primary providers are AT&T, Xfinity Comcast, Spectrum, Hughes Net, and Viasat. Comparing prices of the three largest providers (AT&T, Xfinity, and Spectrum), the average cost for the lowest plan that qualifies as broadband is about $45/month. Increased competition and the ability for residents to reasonably switch providers will work to keep prices down.

Given competition among broadband carriers, the primary role of City government will be to assist in the permitting process for carriers to implement infrastructure plans as carriers roll out 5G and as wired broadband continue to expand.

Percent of Households by Number of Internet Service Providers

Jurisdiction	No providers	1 or more providers	2 or more providers	3 or more providers
Modesto	0.0	100	100	100
Stanislaus County	0.0	100	100	100
Nationwide	0.10	99.9	98.7	89.3

Source: FCC Broadband Mapping – broadbandmap.fcc.gov

The Modesto and Stanislaus County area at-large is well above the national average considering broadband access and competition. Lack of broadband provider competition leaves room for market rigidity – allowing providers to not offer affordable options for low- or moderate-income families. Ultimately, the lack of market options when considering broadband access disproportionately impacts low- and moderate-income households because they often have few financial resources to spend on what may be deemed non-essentials, such as broadband services. However, Modesto has relatively high broadband coverage with multiple providers. For those households that do struggle for broadband access, all city libraries offer free internet access.

MA-65 Hazard Mitigation

Describe the jurisdiction's increased natural hazard risks associated with climate change.

Describe the vulnerability to these risks of housing occupied by low- and moderate-income households based on an analysis of data, findings, and methods.

Based on the Regional Hazard Mitigation Plan adopted in July 2018, the following hazards were assessed and reviewed based on their risks in conjunction with climate changes.

Earthquake Hazard

The impact of climate change on earthquakes is unclear. There are some articles that claim climate change and drought, resulting from climate change, may increase the likelihood of earthquakes, but there seems to be no consensus within the scientific community.

Within the City limits of Modesto, the risk is to the vulnerable populations is unknown.

Landslide Hazard

Climate change may impact storm patterns in California, increasing the probability of more frequent, intense storms with varying duration. Increase in global temperature could affect the snowpack and its ability to hold and store water. Warming temperatures also could increase the occurrence and duration of droughts, which would increase the probability of wildfire, reducing the vegetation that helps to support steep slopes. Tree mortality resulting from drought, pests or any other threat could also pose an increase to landslides. Currently, Stanislaus County is not experiencing tree mortality as severe as other areas of California due to the drought and bark beetle. However, any future loss of trees would reduce the protection of steep slopes and thereby increase the probability for landslide occurrences.

Within the City limits of Modesto, the risk is minimal to the vulnerable populations.

Dam Failure Hazard

An article published by researchers D. E. Rheinheimer and J.H. Viers from the University of California at Davis discusses the effects of climate change on reservoir operations. The article is titled Combined Effects of Reservoir Operations and Climate Warming on the Flow Regime of Hydropower Bypass Reaches of California's Sierra Nevada. This article and others imply that climate change will impact the traditional operation measures and flow regimes used for dams as river conditions and water levels are fluctuating. Climate change may increase drought which lessens the water available or may produce intense sudden storms. Reservoir operators may need to change operations to mitigate the impact of climate change on rivers and the ecosystem.

The vulnerable populations within the City limits of Modesto could be impacted by a Dam failure. Probability of this is considered very low, but in the event, it is noted that; vulnerable populations are downstream from a potential dam failure. The populations most vulnerable are those that have the least time to evacuate and need assistance. Populations that may need assistance to evacuate include the elderly, disabled and young. The vulnerable population also includes those who may not have adequate warning to evacuation from emergency notification systems. The loss of life is impacted by the amount of early warning time first responders and the public has prior to the incident.

Flood Hazard

The impact of climate change may lessen the flood risk in some areas including Stanislaus County. Climate change may increase drought and lessen snowpack in the mountains resulting in less water in the region. Climate change may produce unpredictable weather patterns that results in strong or slow-moving storms that could cause localized flooding. It is anticipated that climate change will cause the sea level to rise. It is unclear how the rising sea level impacts of coastal flooding and coastal erosion may impact inland areas including Stanislaus County.

The vulnerable populations within the City limits of Modesto could be impacted by extreme flooding and the probability is considered high for recurrence as there is an incident recorded approximately every 14 years. Probability of this is considered high, emergency officials have received notice of potential flooding before the incident giving first responders time to notify and evacuate residents. The more vulnerable populations are those who are not able to self-evacuate including the elderly, young and those with disabilities. The homeless population is vulnerable in a flood incident and may need expanded notification and relocation efforts. Law enforcement and fire departments have coordinated the notification of homeless in past incidents. Drivers who ignore warnings of flood are also a population of concern particularly in the west side of the County at Eastin Road and Orestimba Creek. The county maintains crossing guards for this section, but they are sometimes ignored.

Wildfire Hazard

California has experienced a significant drought over the past five years. The drought has stressed all ranges of fuel in the wildland in Stanislaus County producing extreme fire behavior. The areas most affected by the drought would be the river bottom fuels and the fuels in the extreme west and east foothill portions of the County.

Though the risk in our County is extremely high, these areas are located well west and east of the City limits of Modesto. The only current risk to the vulnerable residents of the City would be air quality should an event arise within the County's State Responsibility Areas (SRA). Air Quality mitigation and emergency protocols are managed by the San Joaquin Air Quality District.

Strategic Plan

SP-05 Overview

Strategic Plan Overview

The Strategic Plan section of the Consolidated Plan is meant to clearly outline the City's priority needs, goals, and strategies for resource allocation of funds it receives on an annual basis from the Housing and Urban Development Department (HUD). Those HUD funds are The Community Development Block Grant (CDBG), The HOME Investment Partnerships Program (HOME), and Emergency Solutions Grant (ESG) programs. These three (3) sources of funding, in conjunction with other state and local leveraged resources will fund projects and activities that work to achieve the goals outlined in this section of the Consolidated Plan.

The goals and priority needs identified in this Consolidated Plan are informed by a specific process that the City carried out over a period of four months. The process involved the following ways of gathering feedback and input from the community and stakeholders:

- Resident survey (online and in-person)
- Telephone consultations and interviews from stakeholder organizations
- Public meetings, held by council district
- Direct feedback from City staff
- Stanislaus Community System of Care (CoC)
- Monthly City Manager Reports
- City Beat
- City Strategic Plan

This Strategic Plan is informed through the ways outlined above and in conjunction with the Needs Assessment and the Market Analysis sections.

The City of Modesto has recently updated its *Vision, Mission, Goals and Strategies* document – the 2020-2025 Strategic plan was adopted by City Council on August 14, 2019. The City has outlined ten (10) goals within three (3) target areas, those target areas are: Quality of life, Economic vitality, and Governance and service delivery. All the strategies outlined in this section align with the strategies and vision articulated in the City's Planning document. For a full view of the City's *Vision, Mission, Goals and Strategies* document, please see: http://modestogov.com/330/Reports-and-Publications

SP-10 Geographic Priorities

Describe the basis for allocating investments geographically within the jurisdiction (or within the EMSA for HOPWA)

HUD allows for the designation of priority areas that may be a primary focus of revitalization efforts. For the purpose of the Consolidated Plan, priority areas are loosely defined and are not strict and do not require any specific allocation of resources, matching, or partnerships. At this time, the City does not have nor plan to pursue any official HUD designated geographic based priority areas. The City funds program activities City-wide based on the low/mod block groups as defined by HUD on specific program eligibility (CDBG, HOME, and ESG) and in accordance with the priority needs listed in this section.

SP-25 Priority Needs

Priority Needs

The following priority needs have been established based upon on data from the Needs Assessment, Market Analysis, public meetings, and community survey results.

It is the City's intention to identify priority needs in a way that will allow the City to develop projects should new partnership opportunities or funding streams not identified within this plan arise during the lifecycle of this Consolidated Plan. Projects and activities will be funded at the City's discretion among

all priorities as deemed necessary based on local needs determined on an annual basis or during the program year.

1	**Priority Need Name**	**Affordable Housing**
	Priority Level	High
	Population	Extremely Low Low Moderate Middle Large Families Families with Children Elderly Public Housing Residents Chronis Homelessness Individuals People with Mental Illness People with Chronic Substance Use Disorders Veterans Survivors of Domestic Violence People with Physical disabilities People with Alcohol or Other Addictions
	Geographic Areas Affected	City-wide
	Associated Goals	Improve Quality and Increase Affordable Housing
	Description	Use HOME funds to leverage funding for the construction of new affordable rental housing units through partnerships with the State, the housing authority, and using tools such as land banking, the revolving loan fund, and housing set-aside funds. Use CDBG funds for home repair, acquisition of property for affordable housing, disability access/improvements, first time homebuyers, lead based paint services, energy efficiency improvements and similar projects.
	Basis for Relative Priority	Based on the Needs Assessment, Market Analysis, public meetings, and survey results, the high housing cost burden and low vacancy rates create a great demand for affordable housing for all households in the City, especially those earning below 80% of the area median income and those households that have special needs.
2	**Priority Need Name**	**Addressing and Preventing Homelessness**
	Priority Level	High
	Population	Extremely Low Low Income Large Families

		Families with Children Elderly Frail Elderly Public Housing Residents Chronic Homelessness Individuals People with Mental Illness People with Chronic Substance Use Disorders Veterans Survivors of Domestic Violence Unaccompanied Youth People with Mental Disabilities People with Physical Disabilities People with Developmental Disabilities People with Alcohol or Other Addictions
	Geographic Areas Affected	City-wide
	Associated Goals	Work Towards Ending Homelessness
	Description	Addressing the individuals and families that are experiencing homelessness was among the top needs identified in public meetings and the survey results from the communities. There is a need to provide services to those experiencing homelessness and temporary shelter situations so the homeless individuals and families may regain housing stability.
	Basis for Relative Priority	Data from the Needs Assessment and Market Analysis and public outreach indicate that addressing homelessness in Modesto and throughout the region is a top priority. As housing costs continue to rise and wages at lower income brackets have not kept pace with those increases, more families become at risk for homelessness.
3	**Priority Need Name**	**Enhance Infrastructure and Public Facilities**
	Priority Level	High
	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Frail Elderly Public Housing Residents Chronis Homelessness Individuals People with Mental Illness People with Chronic Substance Use Disorders Veterans

		Survivors of Domestic Violence People with Mental Disabilities People with Physical Disabilities People with Developmental Disabilities People with Alcohol or Other Addictions Non-Housing Community Development
	Geographic Areas Affected	City-wide
	Associated Goals	Enhance Infrastructure and Public Facilities
	Description	Addressing this need will work to improve the physical structures throughout the City in CDBG program eligible areas. Improved infrastructure allows for further development of housing and community assets, increasing community outcomes and parlaying into additional affordable housing.
	Basis for Relative Priority	Through public meetings, survey results, and consultations, the need for improvements to streets, curbs, sidewalks, bus stops, street lighting, and gutters was identified.
4	**Priority Need Name**	**Public Services**
	Priority Level	High
	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Frail Elderly Public Housing Residents Chronis Homelessness Individuals People with Mental Illness People with Chronic Substance Use Disorders Veterans Survivors of Domestic Violence People with Mental Disabilities People with Physical Disabilities People with Developmental Disabilities People with Alcohol or Other Addictions Non-Housing Community Development
	Geographic Areas Affected	City-wide
	Associated Goals	Access to Jobs, Education, and Other Services

	Description	Housing and general cost of living expenses continue to increase. Low- and moderate-income households may need support services to obtain and maintain standard affordable housing. Providing support services including but not limited to childcare, after-school programs for youth, recreational activities for seniors and supportive services for at-risk populations will assist low-and moderate-income households obtain and maintain standard affordable housing.
	Basis for Relative Priority	Based on feedback through public meetings held throughout the City and the community survey, the need for social and supportive services has increased since the development of the last Consolidated Plan. The City will plan to reach the public services cap using CDBG funds given the need justified through community feedback and the data analysis conducted in the Needs Assessment section of this Consolidated Plan.
5	**Priority Need Name**	**Community and Economic Development**
	Priority Level	High
	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Frail Elderly Public Housing Residents Chronis Homelessness Individuals People with Mental Illness People with Chronic Substance Use Disorders Veterans Survivors of Domestic Violence People with Mental Disabilities People with Physical Disabilities People with Developmental Disabilities People with Alcohol or Other Addictions Non-Housing Community Development
	Geographic Areas Affected	City-wide
	Associated Goals	Enhance Infrastructure and Public Facilities Access to Jobs, Education, and Other Services
	Description	In an effort to stimulate the economy, the City proposes to address its economic goals through various programs. The creation and retention of full-time equivalent jobs will be provided via grant, rebate and loan programs. As the cost of living rises, there is a need to assist low- and

		moderate-income households increase their incomes. Job training and educational opportunities afford low- and moderate-income households an opportunity to increase their earning. The City will continue to explore new partnerships with businesses, developers and service providers to address community and economic development goals.
	Basis for Relative Priority	Based on the Needs Assessment and consultations there is a need to increase the number of jobs paying a living wage and there is a need to match existing job openings with trained individuals. Additionally, COVID-19 has created a need to assist businesses and developers with the retention and creation of jobs. Under community development, specific concerns regarding tree maintenance and illegal trash dumping were brought up in several public meetings as well as write-in comments on the community survey.

SP-30 Influence of Market Conditions

Influence of Market Conditions

The following table describes market conditions that may influence the City's investment of funds in affordable housing types as outlined below:

Affordable Housing Type	Market Characteristics that will influence the use of funds available for housing type
Tenant Based Rental Assistance (TBRA)	The City is not planning to use HOME funds for TBRA.
New Unit Production	Community Outreach, Stakeholders, and data from the Needs Assessment and Market Analysis indicate that low-income households are cost burdened and experience housing problems at a higher rate. The City plans to prioritize the creation of new affordable units understanding the housing and land market continue to increase in costs.
Rehabilitation	Data from the Needs Assessment and Market Analysis as well as outreach efforts for the development of this plan indicate that low-income households experience housing problems at a higher rate. These housing problems may include substandard housing. The City will prioritize the rehabilitation of existing housing, especially owner-occupied housing and rental housing serving special needs populations. The vacancy rates have steadily declined; this tightening of the market has increased cost in acquiring both rental and ownership rehabilitation opportunities.
Acquisition, including preservation	Similar to above, data and community outreach indicates that cost burden and housing problems are more likely among those households earning less than 80% AMI. The City will prioritize the preservation of existing affordable rental housing, especially those at risk of conversion to market rate. It is understood that the housing market continues to become more costly and all of the activities listed above will in turn also become more costly. The City will

	prioritize those projects where the funding will impact the greatest number of people in the greatest need.

SP-35 Anticipated Resources

Introduction

There are several potential funding sources to implement the strategies contained in the 2020 - 2024 Consolidated Plan. These sources include, but are not limited to:

- Funds covered under the Consolidated Plan: CDBG, HOME, and ESG
- Funds provided under various programs of the California Department of Housing and Community Development and the California Housing Finance Agency
- State and federal tax credits and mortgage credit certificates
- Tax exempt bond proceeds;
- Sources leveraged by local partners when contributing HUD Funds to projects including but not limited to Federal Home Loan Bank Affordable Housing Program

Anticipated Resources

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Reminder of ConPlan
			Annual Allocation:	Program Income:	Prior Year Resources	Total:	
CDBG	public - federal	Acquisition Admin and Planning Economic Development Housing Public Improvements Public Services	$1,900,954	$800,000	$1,069,442	$3,770,396	$7,603,816
HOME	public - federal	Acquisition Homebuyer assistance Homeowner rehab Multifamily rental new construction Multifamily rental rehab New construction for ownership TBRA	$934,812	$400,000	$4,935,068	$6,269,880	$3,739,248
ESG	public - federal	Conversion and rehab for transitional housing Financial Assistance Overnight shelter	$164,549	$0	$0	$164,549	$658,196

		Rapid re-housing (rental assistance) Rental Assistance Services Transitional housing					

Explain how federal funds will leverage those additional resources (private, state and local funds), including a description of how matching requirements will be satisfied

Leveraging HUD resources allows the City to use local, state and other funds to combine with federal resources to maximize reach and impact of the City's HUD funded programs. Through the vetting of project applications for HUD funding, the City emphasizes the importance of leveraging to potential applicants. In Program Year 2019, the City developed a new project scoring system that places higher weight and rewards project applicants with higher level of leveraged funds. Upon project award, the City verifies that leverage funds pledged in the project application have been awarded/committed to the respective applicant/project.

Entitlement Funds:

The following are the HUD matching requirements for the ESG and HOME programs:

- **ESG Match Requirements:**
  For the ESG program, the City requires that ESG sub-recipients provide a dollar-for-dollar match for ESG funds received. Typically, the City is able to generate significantly more match than the amount required through its allocation of CDBG funds for ESG activities and primarily through the cash and non-cash contributions provided by ESG sub-recipients as a result of the generosity of their donors, supporters, and other funders.

  Cash contributions mean cash expended for allowable ESG costs, while noncash contributions mean the value (using a method reasonably calculated to establish fair market value) of any real property, equipment, goods, and services contributed to an ESG activity, provided that if these had to be paid with ESG funds, the costs would have been allowable.

  Specific sources of cash contributions include: private individual donors, CDBG funds, local fundraising cash, state funds, local funds, foundation grants, and in-kind contributions (value of in-kind contributions must be reasonable and the method used to establish value must be provided).

- **HOME Match Requirements:**
  The 25% HOME match requirements are met through the contributions or layers of funds that the developers provide for each HOME -assisted project. The match includes private financing, waiver or deferral of development fees approved by the City Council, Tax Credit Allocations, and any other eligible source. The City also has accumulated a match surplus from previous years.

The City intends to satisfy this requirement by allocating sufficient funds from the Affordable Housing Fund for this purpose.

Interdepartmental Leveraging

In the past, HUD funds have been used with resources from other City departments in the implementation of projects related to public facilities, infrastructure improvements, and park improvement projects. Through these projects HUD funds have been used in combination with local funds such as the City's Water Fund and resources related to parks projects.

In addition, the City encourages the construction Very Low and Low Income Housing development projects within the City and provides Capital Facility Fee (CFF) deferral, credit and exemption of CFF fees.

State Housing and Community Development Sources

In addition to federal resources, the State of California provides funding for affordable housing development, homebuyer programs, transit-oriented development, special needs housing, and infrastructure. Most projects that the City supports are through partnerships with local organizations who leverage significant amounts of resources. The following is a list of sources that, through such partnerships, the City has either directly or indirectly accessed in the past or seeks to access in the future:

- Low-Income Housing Tax Credit Program: administers both federal and State programs that encourage private investment in affordable housing.
- Permanent Local Housing Allocation (PLHA) Program:
- Affordable Housing and Sustainable Communities (AHSC) Program: funding for Green House Gas reducing-transit oriented affordable housing development and transportation-related infrastructure.
- Mental Health Services Act (HMSA): State funds administered at the county level to serve low-income mental health services clients.
- Housing Related Parks Program: Competitive funding for Parks that support affordable housing projects.
- SB 2 – The Building Homes and Jobs Act: provides a "permanent source" of funding for affordable housing by imposing a $75 fee on each recorded document up to a maximum of $225 per transaction per parcel, estimated to generate $200 to $300 million annually, statewide. The legislation requires that for moneys collected on and after January 1, 2018 until December 31, 2018, that 50% of the funds go to local governments, and for money's collected after January 1, 2019, that 70% be provided to local governments.
- Homeless Emergency Aid Program (HEAP): a $500 million block grant program designed to provide direct assistance to cities and counties to address the homelessness crisis throughout California. HEAP funds are intended to provide funding to Continuums of Care (CoCs) and large cities with populations over 330,000, so they may provide immediate emergency assistance to people experiencing homelessness or those at imminent risk of homelessness.

- California Emergency Solutions and Housing (CESH) Program: provides funds for a variety of activities to assist persons experiencing or at risk of homelessness as authorized by SB 850.
- Homeless Housing, Assistance, and Prevention Program (HHAP): HHAP is a block grant program designed to provide jurisdictions with one-time grant funds to support regional coordination and expand or develop local capacity to address their immediate homelessness challenges.

If appropriate, describe publicly owned land or property located within the jurisdiction that may be used to address the needs identified in the plan

One of the challenges in building new affordable homes is acquiring land suitable for housing. In 2019, the State of California took several actions to make state and local public lands available for affordable housing development including:

- An executive order to make excess state land available for affordable housing
- Connecting affordable housing developers to local surplus land and strengthening enforcement of the Surplus Lands Act
- Requiring cities and counties to inventory and report surplus and excess local public lands to include in a statewide inventory

During this Consolidated Plan period, the City will work to identify of City owned properties to meet this requirement with the intent to continue to add to the City's affordable housing stock. The intent is to transfer eligible properties to non-profit organizations to utilize the properties for low income households or rehabilitate the units and sell them to a low-income household.

Additionally, the City, as the successor housing entity to the former Redevelopment Agency of the City of Modesto, owns a parcel that will be utilized to develop 74 affordable housing units for low and very low-income households. The City is working with EAH, a non-profit affordable housing developer, to obtain project construction financing including State grants and tax credits to leverage HOME funding.

SP-40 Institutional Delivery Structure

Explain the institutional structure through which the jurisdiction will carry out its consolidated plan including private industry, non-profit organizations, and public institutions.

Responsible Entity	Responsible Entity Type	Role	Geographic Area Served
Community and Economic Development Department	Departments and agencies	Economic Development Homelessness Non-homeless special needs Ownership Planning Rental neighborhood improvements public facilities public services	City-wide
Parks, Recreation and Neighborhoods Department	Departments and agencies	Planning neighborhood improvements public facilities	City-wide
Housing Authority of the County of Stanislaus	PHA	Homelessness Ownership Planning Public Housing Rental Housing	City-wide
Stanislaus County	Government	Economic Development Homelessness Non-homeless special needs Planning Public Housing	City-wide
Public Works Department	Departments and agencies	Planning neighborhood improvements public facilities	City-wide
Police and Fire Departments	Departments and agencies	Planning	City-wide
Modesto City Schools	Public institution	Homelessness Non-homeless special needs Planning neighborhood improvements	City-wide

		public facilities public services	
California Association for the Physically Handicapped	Non-profit organizations	Non-homeless special needs public facilities	City-wide
Center for Human Services	Non-profit organizations	public services Street outreach	City-wide
Central Valley Opportunity Center	Non-profit organizations	public services	City-wide
The Children's Crisis Center	Non-profit organizations	public services	City-wide
Community Housing and Shelter Services	Non-profit organizations	Rental subsidy public facilities	City-wide
Bread of Life Ministries	Non-profit organizations	Homelessness public services	City-wide
The Disability Resource Agency for Independent Living (DRAIL)	Non-profit organizations	Non-homeless special needs/homeless? public services	City-wide
Doctor's Medical Center Foundation & Stanislaus Community Assist.	Non-profit organizations	public services	City-wide
Golden Valley Health Centers Homeless Health Project	Non-profit organizations	public services	City-wide
Habitat for Humanity, Stanislaus	Community/Faith-based organization	Home Ownership	City-wide
Haven Women's Center	Non-profit organizations	Domestic Violence public services	City-wide
Healthy Aging Association	Non-profit organizations	Non-homeless special needs public services	City-wide
Interfaith Ministries	Community/Faith-based organization	Homelessness public services	City-wide
Modesto Gospel Union	Community/Faith-based organization	Homelessness public services	City-wide
Modesto Love Center Ministries	Community/Faith-based organization	Homelessness public services	City-wide
Parent Resource Center	Non-profit organizations	public services	City-wide
Project Sentinel	Non-profit organizations	Planning public services Fair housing	City-wide

The Salvation Army (Emergency)	Community/Faith-based organization	Homelessness public services shelter	City-wide
Second Harvest Food Bank	Non-profit organizations	Homelessness public services	City-wide
Self-Help Enterprises	Non-profit organizations	Rental	City-wide
CICV	Non-profit organizations	public services	City-wide
Stanislaus County Affordable Housing Corporation (STANCO)	Non-profit organizations	Rental/BHRS	City-wide
Telecare	Non-profit organizations	public services	City-wide
United Way	Philanthropic organization	Planning public services	City-wide
United Samaritan Foundation	Philanthropic organization	Planning public services	City-wide

Assess of Strengths and Gaps in the Institutional Delivery System

The comprehensive nature of the delivery system in the City is one of its strengths. The delivery system includes public agencies, private firms, and non-profit organizations that have involvement in housing, providing services, homelessness, and community development issues. Each type of organization involved contributes its own knowledge and trust with the community in which they serve, which ensures a more comprehensive approach to solving housing and community development problems.

The City of Modesto has been a key partner in the Focus on Prevention initiative which began in 2014 and aimed at improving the coordination among service providers and engaging multiple community sectors to address underlying causes and needs of underserved population groups. The City's active involvement in the Stanislaus Community System of Care (CSOC), which acts as the local Continuum of Care, is key in ensuring that there's coordination between public and assisted housing providers and private governmental health, mental health and service agencies.

The Stanislaus Community System of Care has steadily improved communication and coordination since the development of the last Consolidated Plan. The group is led by a 25-member council representing all major sectors of the community, government, non-profit, service and housing agencies, and healthcare. There are regularly scheduled meetings where all groups gather and discuss potential gaps in the system, ways to further coordinate to create system efficiencies, and methods of sharing resources in a way that best serves the community. This intentional increased coordination at the local and County level have so far proven to be a key strength in the delivery of services. It has further allowed for local needs to bubble up to a place with wider knowledge and resources while the issues maintain local context and conditions.

Working alongside the CoC is the Stanislaus Homelessness Alliance (SHA). The SHA aims to develop a unified vision and strategy with clear outcomes. The SHA is comprised of elected officials and non-government community leaders with the appropriate level of authority necessary to implement homelessness strategies and initiatives within the community. The SHA meets monthly and documents all meeting activities within the Stanislaus County CoC website at: https://csocstan.com/get-involved/sha/

There is always room for improvement. The comprehensive nature of the delivery system creates places where interests and resources from the different entities involved will not always align. Coordination among the various agencies can sometimes be difficult, even among agencies within the same organization. Because the system involves government agencies, and both nonprofit and for-profit agencies, there is room for a difference of opinion in how to address certain issues that may arise. These issues will continue to be resolved through open and clear communication and the implementation and evolution of the recently established Coordinated Entry System for housing and homeless services.

Availability of services targeted to homeless persons and persons with HIV and mainstream services

Homelessness Prevention Services	Available in the Community	Targeted to Homeless	Targeted to People with HIV
Homelessness Prevention Services			
Counseling/Advocacy	X	X	X
Legal Assistance	X	X	X
Mortgage Assistance	X		X
Rental Assistance	X	X	X
Utilities Assistance	X		X
Street Outreach Services			
Law Enforcement	X	X	
Mobile Clinics	X	X	
Other Street Outreach Services	X	X	
Supportive Services			
Alcohol & Drug Abuse	X	X	X
Child Care	X		
Education	X		X
Employment and Employment Training	X	X	
Healthcare	X	X	
HIV/AIDS	X	X	X
Life Skills	X	X	
Mental Health Counseling	X	X	X
Transportation	X	X	

*Blank cells indicate the service is not targeted to that particular population

Describe how the service delivery system including, but not limited to, the services listed above meet the needs of homeless persons (particularly chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth)

The City funds and is an active partner in the service delivery system. The City has several different services to respond to the needs of the homeless, including shelter and preventative services. Such services include those directed at the social and health needs of homeless families and individuals. These wrap-around services are targeted to the general homeless population as well as to specific populations such as youth, foster youth, veterans, chronically homeless and families with children.

The homeless response task force quickly assembled and from October 2018 to February 2019, established and opened the Modesto Outdoor Emergency Shelter (MOES) on February 20, 2019. This area under the 9th Street Bridge at the Tuolumne River Regional Park was set up to provide the necessary access and a safer and more secure place for those staying at this shelter. Since then, MOES was managed in collaboration with the Stanislaus County Community Services Agency and a local non-profit service provider to provide ongoing case management, connect the residents to services, and work with getting the clients housing ready. When MOES opened, the camp housed 415 residents, roughly one tent for every family.

The MOES was officially closed as of Wednesday, December 11th, 2019. A total of 182 individuals from the MOES site were relocated to the newly formed Access Center Emergency Shelter at 330 9th Street which officially opened on December 2, 2019. The Access Center is a low barrier shelter that allows persons be sheltered with less restrictions as those imposed by traditional homeless shelters.

Services provided to MOES residents during their stay included but not limited to assistance with form completion, obtaining birth certificates, case management, assistance benefits, identification cards, life skills, homeless court, disability services, education, employment services, food assistance, health services, housing search, medical intervention, material goods, mental health, counseling, mental health referrals, senior services, and social security assistance.

The City will continue to partner with the respective entities for the continued operation of the Access Center which is now an integral part of the area's service delivery system.-

Even with such a comprehensive approach, certain populations remain hard to house. Such as those chronically homeless persons who are severely mentally ill and those afflicted by chronic substance abuse disorders. The City of Modesto will continue to work with its partners to assist chronically homeless individuals within the housing continuum.

Describe the strengths and gaps of the service delivery system for special needs population and persons experiencing homelessness, including, but not limited to, the services listed above

While there are programs that are targeted to meet the needs of special needs homeless such as persons with HIV/AIDS, veterans, youth, aging-out foster youth, women and children, and the mentally ill, there are gaps in case management and housing opportunities for single individuals, couples, and homeless individuals with pets.

In recent years, there have been several significant local efforts at closing gaps in the delivery of services to avoid the duplication of services and to provide services in the most effective and efficient manner. The following are key examples of the strengths in the current service delivery system:

1. Coordinated Entry: One of the most significant steps at closing the gaps of the service delivery system which has been recently implemented is the Coordinated Entry System. Coordinated Entry is a consistent, community wide intake and placement process through which people experiencing homelessness are efficiently connected to available housing services within the community. With Coordinated Entry, homeless individuals and families complete standard triage assessment survey that identifies the best type of services for that household. Participating programs accept referrals from the system, reducing the need for people to traverse the county seeking assistance at every provider separately. The process helps prioritize housing and homeless assistance based on vulnerability and severity of service needs to ensure that people who need assistance the most can receive it in a timely manner. The process also provides information about service needs and gaps to help plan assistance and identify needed resources in our community. The community has worked hard to improve on this process, and ensure that we are assisting poverty-level families not only with prioritizing them for their housing needs, but assessing all other needs. Now that these needs are assessed case managers will continue reaching out to the members to connect to applicable services until housing becomes available.

2. Another significant strength in the delivery system is the Community Assessment, Response, and Engagement (CARE) Multidisciplinary (MDT) personnel strategy. The CARE team is a joint strategy from the City of Modesto as well as Stanislaus County. The CARE team is made up of staff that are capable of engaging individuals and households in crisis, distressed in the moment for any number of reasons relating to mental or physical health. The creation of the CARE team was catalyzed by the urgent need to address a growing number of individuals that have extremely high contact rates with multiple local service agencies and may be found out in public visibly distressed and in need of support. This CARE team conducts regular outreach and engagement with what are most often the “hard to reach” individuals and households. The CARE team activity is tracked in detail through the CoC and its reporting.

3. Access Center: The City of Modesto and Stanislaus County partnered with the Salvation Army to construct an additional 182 bed, low barrier emergency shelter at 330 S. 9th Street, Modesto. The Salvation Army is the Operator of the new 182 bed Access Center Emergency Shelter. The shelter is intentionally low-barrier (showers, drug and alcohol testing are not required to enter) to eliminate reasons that individuals may choose not to enter emergency shelter and begin a

path to self-sufficiency. ACES was designed and constructed to allow homeless individuals to enter with pets, partners and possessions, the three most important impediments to entering shelter. When MOES closed in December 2019, over 500 homeless individuals previously camping at the site were eligible to transition to the new low barrier emergency shelter.

4. Downtown Streets Team (DST): DST employs a volunteer Structured Daily Activity (SDA) model in which those experiencing or at risk of homelessness volunteer on beatification projects within Modesto and Stanislaus County. Incentives for volunteering include, but are not limited to, intensive case management, employment navigation, service connection, and a non-cash basic needs stipend. The DST model is designed to help Team Members (clients) activate skills and attributes that are necessary to move toward employment, housing, and overall a better quality of living, but which are, through the experience of homelessness, often suppressed. These include things like maintaining a schedule, team work, accountability, self-confidence and more. Through the SDA model, Team Members rebuild all of these as well as regain a sense of pride in and stewardship of their community. In addition, Team Members gain valuable experience that they can list at the top of their resume to overcome long experience gaps. SDA projects are generally beautification projects, which includes basic tasks such as litter cleanup in the community. Thus, the model inherently provides a public service and a public benefit in the communities the program serves.

The City works in close coordination with service providers and utilizes case management expertise of a household's individual circumstance to best navigate a family's next steps along the housing spectrum. For those special needs populations, local service providers work closely with the City and other organizations within the CoC to ensure an assessment of needs is completed and then matched with the right level of services and interventions.

Treatment for substance abuse disorder is available in the community, but there are limited opportunities for persons who are actively using substances to be housed other than an overnight emergency shelter. Overnight shelter for those who are severely mentally ill is also limited. Services and supportive housing (transitional and permanent) are available but those with the most severe mental illness often do not have housing that is coupled with the level of care they require. These populations are often housed temporarily through short-term confinement or institutionalization as the result of arrest by law enforcement, but struggle to find suitable permanent housing placements.

Provide a summary of the strategy for overcoming gaps in the institutional structure and service delivery system for carrying out a strategy to address priority needs

The primary mechanism behind the institutions that are delivering services and housing throughout the community is the CoC. The CoC has continued to evolve its partnerships and strengthen its communication and coordination among partners. An investment into the CoC will yield the most results with the goal of strengthening the service delivery system. There will rarely be enough funding to adequately meet the need of community, however as the communities within the County continue to

invest resources into the CoC, this will be the primary strategy in overcoming any gaps in the service delivery system that may be identified.

Through the CSOC's consistent collaboration with all the all the programs that address homeless and affordable housing issues within the region. This sets the tone of the collaborative efforts. Through these collaborative efforts the region pulls together to unify system delivery. Evidence of these practices through the provider engagement with coordinated entry, with this provider coordination is the ongoing case conference meetings that ensure housing first and housing readiness is efficiently being rolled out. The providers are unifying case management practices with a robust look at essential supportive services to ensure that the all the needs of the recipient are addressed.

The Stanislaus Homeless Alliance (SHA) was introduced as an entity that operates in close conjunction with the CoC. The SHA will work to offer clear strategies and a unified approach to homelessness within the County. The function of the SHA will be to leverage and support existing partnerships within the CoC, working to mitigate the opportunity for gaps to form within the service delivery structure. Addressing the shortfall of available resources to meet the need, the City will utilize state funding where possible to fill gaps and further leverage private funding when possible.

The Citizens' Housing and Community Development Committee is a committee appointed by the City of Modesto City Council. This committee makes funding recommendations to the City Council regarding HUD funding, and this committee is comprised of representatives from a wide range of government agencies as well as several citizens at-large. These at-large citizens are often represented by low-income and racial minority groups. This committee meets once a month and discusses needs, issues, and strategies on how to utilize available funding to best support the community. This committee, being comprised of members of the public and governmental organizations is well suited to identify service delivery gaps and coordinate strategies to and effective solutions to address those gaps in the service delivery system.

The City of Modesto will be a recipient of State of California's Permanent Local Housing Allocation (PLHA) Program funds. These funds will be used to provide affordable housing opportunities to low income and homeless families and individuals which will assist the City in carrying out its strategy to address the priority needs (affordable housing and addressing homelessness).

SP-45 Goals Summary

Goals Summary Information

The following table outlines the goals, funding, and what the funding aims to achieve. The Goal Outcome Indicator in the far-right column indicates the type of activity the funding will be used for and the desired quantity. These are the five-year goals being pursued in program years 2020 through 2024; not every goal will receive the exact same amount of funding each year as the amount of funds given from HUD will fluctuate.

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Priority Needs Addressed	Funding	Goal Outcome Indicator
1	Improve the Condition and Increase Supply of Affordable Housing	2020	2024	Affordable Housing	City-Wide	Affordable Housing	CDBG: $3,517,889 HOME: $4,172,267	400 Households Housing Units
2	Works Towards Addressing and Preventing Homelessness	2020	2024	Homeless	City-Wide	Addressing and Preventing Homelessness	CDBG: $837,078 HOME: $142,414 ESG: $761,040	9,400Persons assisted 40 Households assisted
3	Increase Access to Jobs, Education, and Other Services	2020	2024	Non-Housing Community Development	City-Wide	Community and Economic Development	CDBG: $338,175	7,000 Persons Assisted
4	Enhance Infrastructure and Public Facilities	2020	2024	Non-Housing Community Development	City-Wide	Community and Economic Development	CDBG: $3,559,736	6,000 Persons assisted
5	Administration	2020	2024	Administration	City-Wide	N/A	CDBG: $1,179,585 HOME: $359,379 ESG: $61,705	NA

Goal Descriptions

1	Goal Name	**Improve the Condition and Increase Supply of Affordable Housing**
	Goal Description	Through the Needs Assessment, the Market Analysis, public meetings, consultations with stakeholders, and survey results, the lack of affordable housing in the City consistently stood to be the number one issue. The activities tied to this goal will work to preserve and expand the supply of affordable housing.
2	**Goal Name**	**Addressing Homelessness**
	Goal Description	Homelessness has become an issue for the region as a whole, and because Modesto is the County Seat and the center for most supportive services, the goal of working towards ending homelessness is a goal for the HUD funding. The activities tied to this goal will support getting individuals and families out of homelessness as well as preventing from individuals and families from becoming homeless. The City is engaged in both supporting those agencies that provide services to those that are homeless as well as providing support in housing options across the spectrum: emergency shelters, transitional shelters, rapid re-housing, and permanent supportive housing.
3	**Goal Name**	**Increase Access to Jobs, Education, and Other Services**
	Goal Description	It is often most difficult for those with less education and currently lower wages to increase their economic prosperity. The activities tied to this goal will work to increase residents' job readiness through skill training, promotion of business, educational opportunities, and other strategies that may serve low-income populations in their attempts to seek economic opportunities.
4	**Goal Name**	**Enhance Infrastructure and Public Facilities**
	Goal Description	The investment in publicly owned facilities and infrastructure improves the community and neighborhoods in which they serve. This investment directly impacts housing development and economic growth of communities. The activities tied to this goal will improve parks, streets, sidewalks, lighting, ADA accessibility, among other activities that serve residents.
5	**Administration**	**Administration for CDBG, ESG, and HOME programs.**
	Goal Description	Funding for the administration of the CDBG, ESG, and HOME programs.

Estimate the number of extremely low-income, low-income, and moderate-income families to whom the jurisdiction will provide affordable housing as defined by HOME 91.315(b)(2)

The City has released a Request for Proposals (RFP) to select experienced and financially capable development organizations, including Community Housing Development Organizations (CHDO) to assist the City with implementing Affordable Housing Development projects.

The City estimates, based on prospective projects, approximately 90 to 100 housing units may be developed during the next five years to provide low and very low-income units to households. Additionally, the City expects that 25% of these units will serve very low-income households at or below 30% of the area median income. The City estimates the remaining units to be available to households that are between 60% to 80% of the area median income.

SP-50 Public Housing Accessibility and Involvement

Need to Increase the Number of Accessible Units (if Required by a Section 504 Voluntary Compliance Agreement)

The Housing Authority is not under a Section 504 Voluntary Compliance Agreement.

Activities to Increase Resident Involvements

The Housing Authority of the County of Stanislaus (HACS) provides homeownership resources to participants in the Housing Choice Voucher Program. The Family Self-Sufficiency (FSS) Program has established partnerships with a variety of community resources to refer participants for services including pre- and post-secondary education, health care, childcare, employment development, supported employment, and small business development including micro-loans. The FSS Program also encourages families to participate in financial wellness programs including financial literacy and credit repair with an emphasis on long-term financial stability for the purposes of homeownership. Supportive services are provided through the Stanislaus County Assistance Project, the Stanislaus County Department of Mental Health, or Stanislaus County Integrated Services Agency.

The Housing Authority previously implemented a services and communication "quality control" system that provides the Housing Authority with immediate customer feedback and identifies areas that may need improvement. The Housing Authority has also implemented a resident education program with regularly scheduled meetings and written communications on agency policy, rules, and leases.

Efforts to improve communications with residents and program participants include on site resident training/informational meetings, regular newsletters and flyers.

Efforts to improve communications with residents and program participants include: on site resident training/informational meetings, regular newsletters and flyers. The HACS has implemented a "curbside" appearance program. The focus of the program is the exterior of buildings, parking areas, play grounds and other areas of the complexes. Rodent and insect problems are addressed when residents report a problem and/or on Annual Inspections. In an effort to better education residents concerning these problems, information is regularly provided through the HACS newsletter. These actions have assisted the HACS in creating an atmosphere which emphasizes customer satisfaction and communication.

Further, the HACS has a Resident Advisory Board (RAB) which represents the residents assisted by the HACS. The RAB assists in the development of the HACS five-year Plan. Resident involvement will continue to be supported in an effort to enhance the service delivery by taking into account input from those with lived experience.

Reach- Stanislaus Housing Authority non-profit to provide scholarships to their residents.

These actions have assisted the Housing Authority in creating an atmosphere which emphasizes customer satisfaction and communication.

Is the public housing agency designated as troubled under 24 CFR part 902?

Not Applicable. The Housing Authority of the County of Stanislaus is a high Performer, not a troubled Public Housing Authority.

Plan to remove the 'troubled' designation

N/A

SP-55 Barriers to affordable housing

Barriers to Affordable Housing

There are a number of codified policies in Modesto that may contribute to the current lack of affordable housing.

Development Fees:

- Zoning Change Fee
    - Should a development or housing unit be proposed for a site where it is not consistent with the General Plan and/or should a project be proposed for a site it is not currently permitted by zoning, a fee of up to $5,231 is required depending on the zoning change needed.
    - These costs could potentially stifle the development of housing in areas where it may otherwise be reasonable
        - Given a low supply of housing affordable to low- and/or moderate-income households, these costs may inhibit housing choice for those households
- Impact Fee, land dedications, site improvements
    - The costs to integrate necessary infrastructure (streets, sidewalks, storm drains, etc.) are bore by the developer, but are ultimately passed on to the consumer
    - These costs contribute to pricing out low- and/or moderate-income households for affordability reasons
    - The City may provide fee waivers in some cases and/or fee deferrals in others allowing construction to move forward with less up-front costs
- School district fees
    - School fees range from $2.97 to $4.66 per square foot; with an average of $3.82 per square foot
    - These may add significant costs to larger developments, contributing to the pricing out of low- and/or moderate-income households

Accessory Dwelling Units (ADU):

- The ADU ordinance in Modesto was passed on October 1, 2019 through City Ordinance 3704-C.S. The ordinance is currently under further review to meet the demands of state law
- The ADU ordinance will be integrated into Modesto's Downtown Master Plan and the City will coordinate with the County to have "shelf-ready" plans to increase speed and availability in developing ADU's where appropriate.

The City of Modesto regularly analyzes City building codes, market constraints, and housing/non-housing development policies, be it through the Consolidated Plan process, the Analysis of Impediments update, or the Housing Element update. The City acknowledges that outdated building codes and land use policies inhibit the development of housing for all income levels and the City understands the importance of regularly analyzing how local policies and ordinances impact the housing market for those households earning less than 80% of the area median income.

The City was awarded State SB2 PGP program funds. To assist in mitigating any barriers to affordable housing, the City will utilize funds to develop an Affordable Housing plan to identify opportunity sites for affordable housing; funds will also be used to of explore zoning code amendments to facilitate housing development.

Strategy to Remove or Ameliorate the Barriers to Affordable Housing

The City has worked to eliminate internal barriers to the development of affordable housing through the following continuing efforts:

- Providing funding for land acquisition, secondary financing, and infrastructure costs
- Assisting qualified households to purchase homes utilizing the Homebuyer Assistance Program
- Exemption or deferral of Capital Facilities Fees for projects providing low-income housing
- Using the adopted streamlining process for environmental review; HEROS
- Continuing to work with non-profit housing agencies in the provision of supportive services and programs
- Using streamlined application review and permit processing

To mitigate the negative effects of public policies that serve as barriers to affordable housing, the City of Modesto has policies in its impact fee program for affordable housing. The current Capital Facility Fees (CFF) Policies and Procedures provide, with respect to very low- and low-income housing exemptions, the total number of housing exemptions granted are not to exceed two percent (2%) of the cumulative total CFF program housing units. The CFF Policies and Procedures also allow a Community Housing and Development Organization (CHDO) to submit an application and request CFF be waived on new affordable units for households earning sixty (60%) or less of the Area Median Income.

In 2017, the State of California passed a 15-bill housing package aimed at addressing the state's housing shortage and high housing costs. Specifically, SB 2, which is part of the 15-bill housing package, established a permanent source of revenue intended to increase the affordable housing stock in California.

In 2019, the State of California released a Notice of Funding Availability to all local governments in California for the SB2 Planning Grants Program (PGP). The PGP program is intended for the preparation, adoption, and implementation of plans that streamline housing approvals and accelerate housing production.

In response to the NOFA, the City of Modesto applied for and was awarded $625,000. Funds will be partially used for the development of an Affordable Housing Plan which will consist of two primary components:

1. The first is identification of opportunity sites for affordable housing, along with an analysis of potential barriers and/or constraints related thereto. This is intended to maximize residential development potential on sites that have meaningful capacity for residential development. Existing barriers to new residential development will be identified and examined. Strategies to reduce or eliminate these barriers will be documented.

2. The second primary component of this AHP project will consist of a series of zoning code amendments intended to facilitate housing development at new locations / sites / zoning districts where residential land uses may not be allowed under the current code. Zoning code amendments, in addition to other available remedies, will also be prepared to reduce / eliminate the barriers identified as described above.

The SB2 Planning grant will play a significant role in assisting the City address affordable housing needs and any barriers currently in place.

All of the goals from the City's 2015-2023 Housing Element are relevant to the Consolidated Plan, and several goals explicitly aimed at removing barriers to the development of housing within the City.

Goal Number 4 of the 2015-2012 Housing Element is "Ensure land use and zoning procedures accommodate housing," stating that the City will work to track changes in Housing Law as to be consistent with supportive of State and federal laws. The goal also aims to review local regulations periodically for the ability to accommodate projected housing demands. Goal number 5 is "Reduce government constraints," with the aim of continuing to identify any development fees, impact fees, and other municipal costs that may unduly constrain housing production.

The City is also currently in process as a partner in the development of the Regional Analysis of Impediments to Fair Housing Choice (AI) for Stanislaus County. The AI will analyze public policies, strategies, and housing market practices that could potentially create barriers to affordable housing for households within the City. The AI will also identify actions to be taken in order to alleviate any barriers identified.

SP-60 Homelessness Strategy

Describe how the jurisdiction's strategic plan goals contribute to:

Reaching out to homeless persons (especially unsheltered persons) and assessing their individual needs

The City participates in Continuum-wide planning to move individuals and families from homelessness to permanent housing and independent living through a network of housing linked to supportive services. The local Continuum of Care (CoC), Stanislaus Community System of Care, released its *Plan to Address Homelessness in Stanislaus County*[1] in January 2019. The plan contains five core strategies to address homelessness, each of those strategies aligns with the goals and efforts of this Consolidated Plan. Below is a table that outlines three of the core components of the *Plan to Address Homelessness in Stanislaus County* and how that component relates to this Consolidated Plan:

County Plan Component	City of Modesto Plan Overlap
Outreach and engagement	The City makes ESG funds available to organizations that conduct street outreach and engage with households directly. Through the use of ESG funds, the City supports a coordinated entry system (CES) and the individualized support that is the most efficient use of funds.
Creation of and access to housing	The City plans to use CDBG and HOME funds to support the creation and preservation of affordable housing. Housing is always part of the plan in addressing homelessness, and the City's Consolidated Plan places a large emphasis on the development of affordable housing for low- and moderate-income households.
Supportive services	The City supports this component through use of funds focused on public services (CDBG) as well as ESG funds that help fund organizations that offer direct services to those individuals and households experiencing homelessness.

Along with this adopted plan, in recent years the CoC has been strategized through working groups and with the introduction of the Stanislaus Homeless Alliance (SHA). This revamping of the CoC includes a partnership with HomeBase resulting in a more efficient CoC application and NOFA process with aims to increase CoC funding. All ESG sub-recipients that carry out emergency shelter activities have a street outreach component to its service provision. Additionally, these ESG sub-recipients also participate in the local Continuum of Care's point-in-time count, which affords them an opportunity to reach out to unsheltered persons.

The CoC will continue the implementation of the Coordinated Entry System (CES) as the to match those individuals experiencing homelessness to the services that best suit their needs including connecting homeless to housing opportunities. The CoC formed a CES Task Force that will continue to meet

[1] https://stancares.wpcomstaging.com/wp-content/uploads/2019/01/Plan-to-Address-Homelessness-in-Stanislaus-County.pdf

regularly to assist with the continued evolution and implementation of the CES and address any issues that arise. The CoC will provide continued training for participating service providers and continue developing any necessary tools to effectively manage the system. This matching of appropriate needs is the most effective use of resources and minimizes bottlenecks in the service delivery system.

The CoC has several programs that focus on outreach and individuals and family engagement. The Access Center is located in Modesto and has a team that goes out into the communities five (5) days a week to connect those experiencing homelessness with services and benefits. The OEC also provides assessments, referrals, and a physical entry point into the Coordinated Entry System.

The following are examples of local project efforts aimed at reaching out to homeless persons and assessing their needs which will be part of the City's Strategy. The City will continue to partner and be part of these efforts of reaching out to homeless individuals:

Center for Human Services – Street Outreach
Since Program Year 2018-19, the City of Modesto has provided ESG funds to Center for Human Services to conduct street outreach for homeless youth. The program's objective is to become familiar with youth hangouts and become a consistent presence among the youth with the end goal of engaging homeless youth and connecting them to services including but not limited to shelter to access shelter, housing, and/or support services. The City will continue to partner with Center for Human Services in order to continue reaching out to youth with the goal to engage them early enough to interrupt their homelessness cycle.

Community Assessment, Response, and Engagement (CARE) Multidisciplinary (MDT) personnel strategy:

The CARE Team mission is to facilitate the expedited identification, assessment, and linkage of homeless individuals to housing and supportive services within Stanislaus County subject to the provisions of the Welfare and Institutions Code (WIC) section 18999.8. This WIC Code section was added effective January 1, 2018, to authorize California counties to establish multidisciplinary personnel teams to address homelessness within the county.Every CARE Team member is tasked with conducting outreach and engagement. The strength of the CARE Team comes from the ability to leverage experience and expertise from multiple disciplines when assisting a CARE client. During the initial and on-going client contacts, rapport is developed, and client issues are identified and prioritized. When issues are general, CARE Team members will link the client to a resource; whereas when the need is more specific, the relevant team member provides specialized care. For example, when the CARE Team identifies a CARE client who has agreed to take a mental health assessment, the CARE Team clinician will respond to the location to provide brief counseling, and schedule and conduct the mental health assessment. The need for this type of service was identified during the CARE planning process, and by implementing this, the CARE program is utilizing an innovative approach to meet the needs of the CARE population.

Addressing the emergency and transitional housing needs of homeless persons

The City of Modesto is where most services (including shelter and transitional housing) are located in Stanislaus County. The City of Modesto funds shelter activities to the maximum extent possible with

CDBG Public Services and ESG funds. Other strategies designed to address homelessness, such as financial assistance and supportive housing are carried out through other City funding sources to build affordable housing designed to serve youth experiencing homelessness and other extremely low-income/homeless populations.

All individuals and families receiving services through the CoC are receiving care that is individualized. Meaning whether the individual/family is in an emergency shelter or a transitional shelter the most effective support the CoC can offer is that which directly meets the needs of the individual/family as opposed to a "one-sized-fits-all" type of support.

The service providers and stakeholders involved in the CoC meet monthly to discuss issues and concerns that arise, this discussion may also include a look forward to needs and gaps experienced by a specific sub-population. These meetings monthly meetings are an effective place to coordinate the support and care for those individuals and families that are in an emergency shelter or a transitional shelter.

The City will partner with shelter providers in Modesto such as The Salvation Army to provide emergency shelter and low barrier shelter services to homeless persons. The newly formed Access Center Emergency Shelter will provide low-barrier (showers, drug and alcohol testing are not required to enter) to eliminate reasons that individuals may choose not to enter emergency shelter and begin a path to self-sufficiency. ACES is designed to allow homeless individuals to enter with pets, partners and possessions, which are typically the three main impediments to entering into a homeless shelter.

With respect to transitional housing, the City will partner with local service providers to provide funding whenever possible for the operation of transitional living facilities such as:

Center for Human Services – Pathways Program: Pathways is a 16-bed transitional living program that addresses the need for shelter and support services for homeless youth 18 to 21 years of age. Shelter is provided up to 21 months. The Pathways Program provides basic life skills, interpersonal and jobs skills training, assistance with obtaining medial insurance and assistance related to advancing educational opportunities.

Stanislaus County Affordable Housing Corporation (STANCO): STANCO operates transitional housing facilities that provide housing opportunities for homeless persons with mental disabilities.

Helping homeless persons (especially chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth) make the transition to permanent housing and independent living, including shortening the period of time that individuals and families experience homelessness, facilitating access for homeless individuals and families to affordable housing units, and preventing individuals and families who were recently homeless from becoming homeless again.

The CoC continues to home in on system processes and address gaps in the service delivery that can be shored up to ensure that specific vulnerable sub-populations do not fall through the cracks. As the CoC

partnerships grow and each entity becomes more understanding of their role as well as the roles of other agencies, the system will yield more effective results for those individuals and families that are experiencing homelessness. The Coordinated Entry System (CES) is an effective tool in minimizing the number of days someone experiences homelessness.

The delivery of wrap-around services is critical to the long-term success of those individuals and families that have experienced homelessness but are now housed. Through the CoC, there are housing supports made available, offering financial assistance, security deposits, legal services, credit repair, utility payments, counseling, among others. It is understood by the CoC and its partners that the end goal is not to simply find housing, but to maintain stable housing.

Families and children experiencing homelessness are prioritized as reflected by CDBG and ESG allocations to sub-recipients that serve these subpopulations (CSA Partnership, Center for Human Services, Children's Crisis Center, Haven Women's Center, and Family Promise).

The City of Modesto's Homelessness Prevention and Rapid Re-Housing (HPRP) activities include the allocation of ESG funds for chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth so they may receive security deposit assistance. Another subpopulation that is targeted with ESG HP/RP financial assistance are families with dependent children.

The City of Modesto, its ESG subrecipients, the CSOC and other partners have been especially strategic in creating opportunities that will stably house, either in the short term or long term, and promote the self-sufficiency of these subpopulations of persons experiencing homelessness. ESG subrecipients have also had to find strategic ways to assist clients find housing and keep their housing. The following are recent strategies that have been implemented locally in which the City will continue to be a partner in as its strategy at helping homeless individuals transition from homelessness to housing.

Empire Migrant Center:
Supported by the FOP movement, the Stanislaus County Community Services Agency's (CSA) partners with the Housing Authority to house homeless families during the cold-weather months in vacant family units at the Empire Migrant Center. The Empire Migrant Center located at 5132 South Ave. is used as a cold-weather shelter for homeless families. The Empire Migrant center consists of 90 single family dwelling units used for farmworker housing during project from April to October each year. This project allowed CSA to use 21 of the 90 units to place homeless families in these units during the months of November through March. This project will be a multi-year partnership allowing CSA to place homeless families each winter in housing and provide case management services with a goal to permanently house homeless households.

Youth Navigation Center:
The Center for Human Services provides a wide range of services that strengthen and support youth and families. One of the biggest projects currently being developed is a Youth Navigation Center. The Youth Navigation Center will be in Modesto and will be a one stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness. The Youth Navigation Center will create a space where existing services, currently at different sites, will be relocated and new services developed, creating a clear pathway for youth/young

adults. Most importantly, this Center will establish a coordinated system of care for this vulnerable population and will serve youth within Stanislaus County. Once completed, this project will provide the following services:

- Street outreach and engagement services
- Homeless prevention & diversion services
- Coordinated entry and assessment
- Crisis/Drop-in and Shelter for 13-17-year old persons (8 beds)
- Hutton House: Crisis/Drop-in and Low-Barrier Shelter for 18-24-year-old persons (24 beds)
- Pathways Program: Transitional Housing for 18-24-year-old persons (15 beds)
- Access to housing services including permanent housing slots designed for youth with diverse circumstances
- On-site education and employment services

Downtown Streets Team:
Another key effort led in Modesto aimed at reducing the number of people living in poverty and provide housing opportunities to homeless individuals is the Downtown Streets Team (DST). Downtown Streets Team employs a volunteer Structured Daily Activity (SDA) model in which those experiencing or at risk of homelessness volunteer on beatification projects within Modesto and Stanislaus County. Incentives for volunteering include, but are not limited to, intensive case management, employment navigation, service connection, and a non-cash basic needs stipend.

The DST model is designed to help "Team Members" (clients) activate skills and attributes that are necessary to move toward employment, housing, and overall a better quality of living, but which are, through the experience of homelessness, often suppressed. These include things like maintaining a schedule, teamwork, accountability, self-confidence and more. Through the SDA model, Team Members rebuild all these as well as regain a sense of pride in and stewardship of their community. In addition, Team Members gain valuable experience that they can list at the top of their resume to overcome long experience gaps.

SDA projects are generally beautification projects, which includes basic tasks such as litter cleanup in the community. Thus, the model inherently provides a public service and a public benefit in the communities DST serves in.

Homeless Employment Litter Program
Similar to the Downtown Streets team project, the City is forming a new partnership with Ready to Work (a nonprofit organization which creates opportunities where individuals who are either experiencing or at-risk of homelessness gain employment support while generating clean streets) and the California Department of Transportation (CalTrans) to initiate the Homeless Employment Litter Program (HELP). This partnership will result in the employment of homeless individuals to pick up litter around our city streets and state highways around Modesto RTW has been very successful in transitioning individuals into full-time employment and permanent housing. Along with market level compensation, employees will receive an employment plan to help secure graduation from the program, as well as assistance with resume building, filling out applications, interviewing and much more. Complementary to a more beautiful city, the goal is to develop a platform that will give individuals all the tools needed to become self-sufficient.

Help low-income individuals and families avoid becoming homeless, especially extremely low-income individuals and families who are likely to become homeless after being discharged from a publicly funded institution or system of care, or who are receiving assistance from public and private agencies that address housing, health, social services, employment, education or youth needs

The *Plan to Address Homelessness in Stanislaus County* identifies discharge planning as a key part of the strategy in addressing homelessness throughout the County moving forward. Acknowledging that further collaboration among public institutions and other system of care providers needs to occur so that no individual or family is discharged into homelessness, the CoC continues to work on these issues through awareness campaigns and coordinated efforts to align services and resources among CoC partners. The City helps lead in the coordination of Continuum-wide services. Furthermore, homelessness prevention assistance, while scarce, is provided through an ESG sub-recipient (Community Housing and Shelter Services). Again, foster care youth and those exiting the foster care system will be served through the City partnership with the Housing Authority on the above-mentioned federal stimulus funded activity.

The City of Modesto will continue collaborative efforts with the local Continuum of to improve services to the homeless and those at risk of becoming homeless. The following are key highlights of the work that has been conducted and will continue to be implemented in our community to assist individuals and families avoid becoming homeless:

Focus on Prevention Homelessness Initiative
Over four years ago, the Stanislaus County Board of Supervisors launched the Focus on Prevention (FOP) countywide initiative with the aim to improve the quality of life for all Stanislaus residents and families, through coordinated prevention efforts that work across multiple community sectors and address root causes of homelessness and other issues. The City of Modesto has been a stakeholder in the FOP movement since its inception, supporting the efforts to assist residents in escaping homelessness.

Homeless Discharge Coordination:
The City of Modesto is actively engaged in homeless discharge coordination from health care facilities. Since April 2019, the Hospital Council of Northern California has coordinated monthly meetings with representatives from local hospitals, homeless shelters, public agencies, and stakeholder groups to plan for the discharge of homeless individuals from health care facilities to comply with SB 1152. The objective has been to create a community standard of care and greater connection and cooperation between discharging and receiving providers of services for the homeless.

The City partnered with Stanislaus County Affordable Housing Corporation (STANCO) on the 522 E. Granger Ave. project. This project will provide housing to individuals with serious mental illness who are homeless or at risk of homelessness.

During Program Year 2018-2019, the City also partnered with the HACS on projects such as 201 E. Coolidge, 416 E. Coolidge and 0 Vine Street.

- 201 E. Coolidge is a 40-unit multi-family housing complex providing affordable housing opportunities to low income families.

- 416 E. Coolidge will be a new construction project featuring eight (8) single family homes as permanent supportive housing for behavioral health clients.
- 0 Vine Street will be a two-phase project with 23 housing units for homeless veterans and 12 units for senior housing.

Homeless Prevention and Rapid Rehousing:
The City will continue to partner with local service providers by providing ESG funds used to assist with homeless prevention assistance to persons or families at risk of losing their housing. ESG funds will also be provided to rapidly rehouse persons who are homeless. Assistance will be provided with intensive case management services to reduce the risk of persons falling back into the cycle of homelessness.

SP-65 Lead based paint Hazards

Actions to address LBP hazards and increase access to housing without LBP hazards

The Market Analysis section of this Consolidated Plan estimates that 8,820 owner-occupied low-income households and 8,400 renter-occupied low-income households are living in units built before 1980. Because lead-based building materials was banned in 1979, this is the best available estimate of the number of households that may have lead-based materials to abate.

The City of Modesto has adopted policies which will continue to be implemented in its housing programs. The City's lead-based paint policy complies with HUD requirements relating to lead-based paint hazards. In alignment with HUD's requirements, lead-based paint remediation actions will depend on the level of subsidy provided on a project by project basis.

City staff provides the HUD approved "Protect Your Family From Lead in Your Home" pamphlet to homeowners when lead-based paint is found or presumed to be present. Homeowner Rehabilitation Program Policies & Procedures adhere to 24 CFR 35.100 Subpart J 35.930(b), 24 CFR 35.100 subpart J 35.930(c), and 24 CFR 35.100 subpart J 35.930(d). Contractors who are working in homes where lead-based paint is found or presumed to be present provides to the homeowners EPA pamphlet "The Lead-Safe Certified Guide to Renovate Right" prior to construction activities.

Housing rehabilitation projects will be subject to federal regulations for Lead-Based Paint and contractors must be certified in safe work practices when completing the rehabilitation work. Costs related to lead-based paint inspections, clearance and abatement will be included in the City's housing rehabilitation loan program which is paid from entitlement funds.

How are the actions listed above related to the extent of lead poisoning and hazards?

The City will continue to provide lead-based paint testing as a component of its housing repair and rehabilitation programs when required by HUD regulations. Given the age and condition of the City's housing stock, there are a significant number of homes where lead-based paint testing is needed.

How are the actions listed above integrated into housing policies and procedures?

The City's housing program guidelines include specific policies related to testing and abatement. When lead-based paint is present or presumed to be present, lead-safe work practices are required. In addition, all of the City's loan agreements for new projects prohibit the use of any lead-based paint.

SP-70 Anti-Poverty Strategy

Jurisdiction Goals, Programs and Policies for reducing the number of Poverty-Level Families

The City coordinates the efforts among many stakeholders to effectively support low-income households through the projects associated with this Consolidated Plan. In addition to supporting low-income households directly in Modesto, the City acknowledges the regional nature of many issues facing low-income households. That being so, the City takes its role seriously as a participating member of the CoC as well as the Stanislaus Homeless Alliance (SHA).

The vision of the City, as well as the organizations in which it participates is to develop and implement effective programs and projects that are coordinated and resourced efficiently. Addressing the goals and priority needs listed within this Consolidated Plan are the primary ways in which the City will work to reduce the number of families living in poverty.

The City is part of the County-wide 2020-2025 Analysis of Impediments to Fair Housing Choice (AI) as well. Within the AI, an analysis was completed to understand those policies that may disproportionately impact low-income households in negative ways, or those policies that inadvertently impact low-income households in ways that may limit their choices in both choice of housing and thus, employment.

Another strategy the City will use is to enter into community partnerships that provide economic development opportunities for low income households. Partnerships such as those with Opportunity Stanislaus, the local economic development and workforce agency, will seek to leverage any funds available to the city (federal and/or state) for the economic advancement of low-income families with the end goal to get them out of poverty levels.

The City may also work with its Economic Development Department to consider the creation of a CDBG special economic development program to assist existing small businesses with loans or grants that will result in the creation of jobs for low income individuals and/or assist low income persons with the creation of microenterprise businesses as another strategy at reducing the number of poverty-level families.

How are the Jurisdiction poverty reducing goals, programs, and policies coordinated with this affordable housing plan

The City’s goals include several that align with the goal of reducing poverty, including creating new affordable housing, expanding housing and services for the homeless, creating new jobs, and providing social services. The City plans to fund specific activities that address each of these goals during the lifecycle of the Consolidated Plan.

Much of the affordable housing plan coordination occurs at the CoC and SHA level where City efforts and initiatives are shared and updates are provided. By doing this, the City may receive feedback from both bodies and/or new ideas may arise for new partnerships and/or enhancement of service delivery.

An example of the coordination that exists within the CoC, the Modesto Downtown Streets Team (DST) program was implemented locally after

is a volunteer work-experience program that offers gift cards to individuals that work to beautify downtown Modesto. While those working on the teams exchange up to 20 hours each week beautifying the streets through trash clean up and similar activities, they receive time with an Employment Specialist with the goal of finding gainful employment. The DST has placed over 700 individuals into permanent work.

SP-80 Monitoring

Describe the standards and procedures that the jurisdiction will use to monitor activities carried out in furtherance of the plan and will use to ensure long-term compliance with requirements of the programs involved, including minority business outreach and the comprehensive planning requirements

For all HUD funded projects, the City has implemented a subrecipient capacity risk analysis criteria that is assessed at the time of application, as part of the application technical review. If the organization does not meet the organizational capacity standards, the project is not considered for funding.

Organizations that meet the capacity requirements, are then assessed for to determine the extent of monitoring. Program/project monitoring ranges from frequent desk audits (i.e., monthly review of project files – performance reports, invoices and supporting documentation, ensuring timely expenditure, tracking progress toward Consolidated Plan/Annual Action Plan goals, etc.) for all HUD funded activities to more extensive and less frequent (at least once every program year) on-site audits for “high-risk” if certain risk factors are identified during project implementation.

In accordance with 24 CFR, Section 92.252, HOME-assisted rental units are monitored and inspected for income certifications, housing quality standards, and other affordability criteria. There are different levels of monitoring that staff follow, beginning at project predevelopment and continuing through the period of affordability. Staff reviews each draw request. Staff meets with the developers to provide technical assistance if needed, and make periodic site visits to follow up on project progress. In addition, staff are constantly monitoring to see if the projects are meeting the standards established in the initial agreement, if costs are on target, and to check on quality of construction.

The City is currently developing a standardized monitoring plan for each HUD program that meets each program’s requirements. This monitoring plan will be used as a tool to establish monitoring schedule as well as specific documentation to collect/review depending on the project type.

Annual Action Plan

AP-15 Expected Resources

Introduction

During Program Year 2020-2021, the City of Modesto anticipates receiving $1,900,954 in Community Development Block Grant (CDBG) program funds, $934,812 in HOME Investment Partnership (HOME) program funds, and $164,549 in Emergency Solution Grant (ESG) program funds. From the repayment of various loans, staff anticipates receiving $550,000 in CDBG, $100,000 from HOME, $150,000 from NSP, and $100,000 in the Revolving Loan Fund for a total projected $400,000 in program income.

There are several potential funding sources to implement the strategies contained in the 2020 - 2024 Consolidated Plan. The funding from HUD is clearly outlined in this plan, and there are other funds that assist implementation for strategies outlined in this plan as well. The funds that may contribute to addressing the needs and goals outlined in this Consolidated Plan are:

- Funds covered under the Consolidated Plan: CDBG, HOME, and ESG
- Funds provided under various programs of the California Department of Housing and Community Development and the California Housing Finance Agency
    - Permanent Local Housing Allocation (PLHA)
- State and federal tax credits and mortgage credit certificates
- Tax exempt bond proceeds;
- The City's General Fund
- Private industry sources such as the Federal Home Loan Bank Board's Affordable Housing Program
- Sources leveraged by local partners when contributing HUD Funds to these projects including but not limited to Federal Home Loan Bank Affordable Housing Program

Anticipated Resources

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan $
			Annual Allocation: $	**Program Income: $**	**Prior Year Resources: $**	**Total: $**	
CDBG	Public-federal	Acquisition Admin and Planning Economic Development Housing Public Improvements Public Services	1,900,954	$800,000	$1,069,442	$3,770,396	$7,603,816
HOME	public - federal	Acquisition Homebuyer assistance Homeowner rehab Multifamily rental new construction Multifamily rental rehab New construction for ownership TBRA	$934,812	$400,000	$4,935,068	$6,269,880	$3,739,248
ESG	public - federal	Conversion and rehab for transitional housing Financial Assistance Overnight shelter Rapid re-housing (rental assistance) Rental Assistance Services	$164,549	$0	$0	$164,549	$658,196

		Transitional housing					

Explain how federal funds will leverage those additional resources (private, state and local funds), including a description of how matching requirements will be satisfied

Leveraging HUD resources allows the City to use local, state and other funds to combine with federal resources to maximize reach and impact of the City's HUD funded programs. Through the vetting of project applications for HUD funding, the City emphasizes the importance of leveraging to potential applicants. In Program Year 2019, the City developed a new project scoring system that places higher weight and rewards project applicants with higher level of leveraged funds. Upon project award, the City verifies that leverage funds pledged in the project application have been awarded/committed to the respective applicant/project. The City continues to search for other Federal and State funding to use a leverage. As a result, as of 2020, the City will receive a Permanent Local Housing Allocation from the State that will further leverage Federal funding to assist with addressing the goals outlined in the 2020-2024 Consolidated Plan and Annual Action Plan.

The City of Modesto has access to a variety of federal and state resources to achieve its housing and community development goals. These funds include the following key programs in FY 2020-2021 and total just over $3.97 million:

- CDBG: $1,900,954
- HOME: $934,812
- ESG: $164,549
- PLHA: $969,747
- CARES ACT COVID-19 CDBG: $1,118,269
- CARES ACT COVID-19 ESG: $567,410

Specific funding sources will be utilized based on the opportunities and constraints of each program.

Entitlement Funds:

The following are the HUD matching requirements for the ESG and HOME programs:

ESG Match Requirements:

For the ESG program, the City requires that ESG sub-recipients provide a dollar-for-dollar match for ESG funds received. Typically, the City is able to generate significantly more match than the amount required through its allocation of CDBG funds for ESG activities and primarily through the cash and non-cash contributions provided by ESG sub-recipients as a result of the generosity of their donors, supporters, and other funders.

Cash contributions mean cash expended for allowable ESG costs, while noncash contributions mean the value (using a method reasonably calculated to establish fair market value) of any real property, equipment, goods, and services contributed to an ESG activity, provided that if these had to be paid with

ESG funds, the costs would have been allowable.

Specific sources of cash contributions include: private individual donors, CDBG funds, local fundraising cash, state funds, local funds, foundation grants, and in-kind contributions (value of in-kind contributions must be reasonable and the method used to establish value must be provided).

HOME Match Requirements:

The 25% HOME match requirements are met through the contributions or layers of funds that the developers provide for each HOME -assisted project. The match includes private financing, waiver or deferral of development fees approved by the City Council, Tax Credit Allocations, and any other eligible source. The City intends to satisfy this requirement by allocating sufficient funds from the Affordable Housing Fund for this purpose.

If appropriate, describe publicly owned land or property located within the jurisdiction that may be used to address the needs identified in the plan

The City, as the successor housing entity to the former Redevelopment Agency of the City of Modesto, owns a parcel that will be utilized to develop 74 affordable housing units for low and very low-income households. The City is working with EAH, a non-profit affordable housing developer, to obtain project construction financing including State grants and tax credits to leverage HOME funding.

One of the challenges in building new affordable homes is acquiring land suitable for housing. In 2019, the State of California took several actions to make state and local public lands available for affordable housing development including:

- An executive order to make excess state land available for affordable housing
- Connecting affordable housing developers to local surplus land and strengthening enforcement of the Surplus Lands Act
- Requiring cities and counties to inventory and report surplus and excess local public lands to include in a statewide inventory

During this Consolidated Plan period, the City will work to identify of City owned properties to meet this requirement with the intent to continue to add to the City's affordable housing stock. The intent is to transfer eligible properties to non-profit organizations to utilize the properties for low income households or rehabilitate the units and sell them to a low-income households.

AP-20 Annual Goals and Objectives

Goals Summary Information

#	Goal Name	Start Year	End Year	Category	Needs Addressed	Funding*	Goal Outcome Indicator
1	Improve the Condition and Increase Supply of Affordable Housing	2020	2024	Affordable Housing Non-Housing Community Development	Affordable Housing	CDBG: $703,578 HOME: $834,453	199 Household Housing Units
2	Work Towards Addressing and Preventing Homelessness	2020	2024	Homeless	Addressing and Preventing Homelessness	CDBG: $167,416 HOME: $28,483 ESG: $152,208	2,000 Persons Assisted 8 Households Assisted
3	Enhance Infrastructure and Public Facilities	2020	2024	Non-Housing Community Development	Enhance Infrastructure and Public Facilities	CDBG: $711,947	4,000 Persons assisted
4	Access to Jobs, Education, and Other Economic Development Services	2020	2024	Non-Housing Community Development	Public Services Community and Economic Development	CDBG: $67,635	1,400 Persons Assisted
5	Administration	2020	2024			CDBG: $380,190 HOME: $93,481 ESG: $12,341	NA

* Funding amounts are annual funding estimates.

Goal Descriptions

1	Goal Name	Improve the Condition and Increase Supply of Affordable Housing
	Goal Description	Through the Needs Assessment, the Market Analysis, public meetings, consultations with stakeholders, and survey results, the lack of affordable housing in the City consistently stood to be the number one issue. The activities tied to this goal will work to preserve and expand the supply of affordable housing.
2	Goal Name	Work Towards Addressing and Preventing Homelessness
	Goal Description	Homelessness has become an issue for the region as a whole, and because Modesto is the County Seat and the center for most supportive services, the goal of working towards ending homelessness is a goal for the HUD funding. The activities tied to this goal will support getting individuals and families out of homelessness as well as preventing from individuals and families from becoming homeless. The City is engaged in both supporting those agencies that provide services to those that are homeless as well as providing support in housing options across the spectrum: emergency shelters, transitional shelters, rapid re-housing, and permanent supportive housing.
3	Goal Name	Enhance Infrastructure and Public Facilities
	Goal Description	The investment in publicly owned facilities and infrastructure improves the community and neighborhoods in which they serve. This investment directly impacts housing development and economic growth of communities. The activities tied to this goal will improve parks, streets, sidewalks, lighting, ADA accessibility, among other activities that serve residents.
4	Goal Name	Access to Jobs, Education, and Other Economic Development Services
	Goal Description	In an effort to stimulate the economy, the City proposes to address its economic goals through various programs. The creation and retention of full-time equivalent jobs will be provided via grant, rebate and loan programs. As the cost of living rises, there is a need to assist low- and moderate-income households increase their incomes. Job training and educational opportunities afford low- and moderate-income households an opportunity to increase their earning. The City will continue to explore new partnerships with businesses, developers and service providers to address community and economic development goals.
5	Goal Name	Administration
	Goal Description	Funding for the administration of the CDBG, ESG, and HOME programs.

Estimate the number of extremely low-income, low-income, and moderate-income families to whom the jurisdiction will provide affordable housing as defined by HOME 91.215(b):

The City estimates, based on prospective projects, approximately 90 to 100 housing units may be developed during the next five years to provide low and very low-income units to households. Additionally, the City expects that 25% of these units will serve very low-income households at or below 30% of the area median income. The City estimates the remaining units to be available to households that are between 60% to 80% of the area median income.

The following are the City's one-year affordable housing goals:

One Year Goals for the Number of Households Supported Through		**Income Demographic**
Rental Assistance	8	Extremely Low
The Production of New Units	181	Extremely Low
Rehab of Existing Units	18	Low-Moderate
Acquisition of Existing Units	0	N/A
Total	207	

AP-35 Projects

Introduction

The projects to be undertaken in the 2020 program year (July 1, 2020 to June 30, 2021) are summarized below. The City will utilize funds available to address the goals outlined in this Consolidated Plan. The specific projects will target affordable housing opportunities through acquisition, rehabilitation and construction of housing. In addition, the City will provide public services including homelessness services and economic development activities. The City will also provide enhancements to public facilities and infrastructure.

Projects

Project #	Project Name
1	Program Planning and Administration
2	Housing Rehabilitation Administration Activity Delivery
3	Section 108 Loan Repayment
4	Economic Development
5	Public Facilities
6	Affordable Housing – Acquisition, Rehabilitation, homelessness
7	Public Services
8	Affordable Housing – Owner Occupied Housing Rehabilitation

Describe the reasons for allocation priorities and any obstacles to addressing underserved needs

The priority needs described in the Strategic Plan are:

- Affordable housing
- Addressing and preventing homelessness
- Enhance infrastructure and public facilities
- Public services
- Community and economic development

The funding allocation priorities remain closely connected to these identified needs. Those projects that demonstrate potential to create further progress in addressing these needs will be prioritized.

In the funding of all projects, and in providing assistance to specific beneficiaries, the City will ensure:

- Documentation of the low- and moderate-income status of individuals/households, or
- The area where a project benefit will be realized has a population where at least 51% of the residents are low-and moderate-income, or
- A slum and blight project meet the criteria for such projects. The availability of funding from both federal and State sources is a key determinant of the City's ability to address identified needs. Budget problems at both the Federal and State levels make funding for housing programs uncertain. Partly to make the most of limited resources, the City has formed partnerships with a variety of governmental, non-profit, and service agencies to combine resources to implement programs related to housing and community development needs.

The primary obstacle in addressing underserved needs is the limited financial resources made available to address the needs. Prioritization of funding and associated needs requires that some needs expressed by communities may not be addressed in a given program year.

Other obstacles in addressing needs are:

- Limited services to support the diverse population
- High and increasing cost of land throughout the County present obstacles by further limiting the quantity of projects the City can take on given finite financial resources to acquire land that is becoming increasingly expensive
- Increasing rental rates across the City presents an obstacle in that fewer households may be able to be supported given the funding allocated. The money spent on rental assistance may not go as far given increasing rental costs.
- Coordination gaps between service providers and agencies providing housing
    - Coordination continues to improve as the CoC becomes more efficient
- Prevailing wage requirements increase construction costs for housing, thus increasing the cost of affordable housing development, potentially limiting the number of affordable housing developments in the City
- Resident perceptions of various services may hinder them from accepting assistance
- Current housing market and economic conditions
- Education and dissemination of information to low- and moderate-income residents is a potential obstacle. Although the City has excellent relationships with neighborhood associations and organizations within the different districts in the City, there remains an obstacle of reaching the right people to ensure knowledge of programs available to them.

AP-38 Project Summary

Project Summary Information

1	**Project Name**	Program Planning and Administration
	Target Area	City-wide
	Goals Supported	Administration
	Needs Addressed	NA
	Funding	CDBG: $380,190 HOME: $93,481 ESG: $12,341 CARES Act CDBG: $223,653 CARES ACT ESG: $56,741
	Description	This project will fund administrative expenses related to the planning and administration of CDBG, HOME, and ESG activities including but not limited to development of HUD plans, contract development, project monitoring, and enforcement of federal regulations. Matrix Code: 21A - General Program Administration Regulatory Citation: 570.206 National Objective: N/A
	Target Date	6/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	NA
	Location Description	1010 10th Street, Modesto CA 95354
	Planned Activities	Program Administration
2	**Project Name**	Housing Rehabilitation Administration Activity Delivery (14H)
	Target Area	City-wide
	Goals Supported	Improve the Condition and Increase Supply of Affordable Housing
	Needs Addressed	Affordable Housing
	Funding	CDBG: $250,000

	Description	Activity delivery costs related to carrying out housing rehabilitation activities (rental and owner occupied). Examples include appraisal, architectural, engineering, and other professional services; preparation of work specifications and work write-ups; loan processing; survey, site and utility plans; application processing; and other fees. Matrix Code: 14H Rehabilitation Administration Regulatory Citation: 570.202(b)(9) National Objective: N/A
	Target Date	6/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	The City will facilitate housing rehabilitation projects for 15 eligible households per year at or below 80% of the Area Median Income.
	Location Description	Citywide/Low Income Census Tracts.
	Planned Activities	Housing Rehabilitation Activity Delivery
3	**Project Name**	Section 108 Loan Repayment
	Target Area	NA
	Goals Supported	NA
	Needs Addressed	NA
	Funding	CDBG: $319,441.70
	Description	Planned repayment of Section 108 Loan Principal/interest
	Target Date	6/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	NA
	Location Description	NA
	Planned Activities	Repayment of Section 108 Loan
4	**Project Name**	Economic Development
	Target Area	NA
	Goals Supported	Access to Jobs, Education, and Other Economic Development Services
	Needs Addressed	Community and Economic Development
	Funding	CDBG: $250,000 CARES Act COVID19 CDBG: $800,000

	Description	Partnerships with businesses, developers and service providers to address community and economic development goals including but not limited to the creation and retention of full-time equivalent jobs through grant and loan programs. Matrix Code: 18A - Direct Financial Assistance to For-Profit Businesses Regulatory Citation: 570.203(b) National Objective: 570.208(4)
	Target Date	6/30/2024
	Estimate the number and type of families that will benefit from the proposed activities	CDBG: Assist 8 small businesses negatively impacted by COVID19; Retain minimum of 8 LMI jobs. One FTE created/retained for every $35,000 CARES Act COVID19 CDBG: Assist 20 small businesses negatively impacted by COVID19; Retain minimum of 20 LMI jobs. One FTE created/retained for every $35,000
	Location Description	Citywide
	Planned Activities	Economic Development Assistance
5	**Project Name**	Public Facilities
	Target Area	NA
	Goals Supported	Enhance Infrastructure and Public Facilities
	Needs Addressed	Enhance Infrastructure and Public Facilities
	Funding	CDBG:
	Description	Improve the physical structures throughout the City in CDBG program eligible areas including but not limited to construction or rehabilitation of public facilities and/or improving infrastructure conditions in LMA neighborhoods. Matrix Code: 03A – 04 Regulatory Citation: 570.201(c) National Objective: 570.208(a)(1)
	Target Date	6/30/2024
	Estimate the number and type of families that will benefit from the proposed activities	Approximately 4,000 individuals from LMA neighborhoods.
	Location Description	LMA neighborhoods within Modesto
	Planned Activities	Community Centers, park improvements, homeless facilities, and/or other eligible public facilities.
6	**Project Name**	Affordable Housing – Acquisition, Rehabilitation, Homelessness

	Target Area	NA
	Goals Supported	Improve the Condition and Increase Supply of Affordable Housing
	Needs Addressed	Affordable Housing
	Funding	CDBG HOME
	Description	Use CDBG funds for acquisition and/or rehabilitation of property for affordable housing, disability access/improvements, first time homebuyers, lead based paint services, energy efficiency improvements and similar projects. Use HOME funds to leverage funding for the construction and/or rehabilitation of new affordable rental housing units through partnerships with the State, the housing authority, and using tools such as land banking, the revolving loan fund, and housing set-aside funds. Matrix Code: 01-02; 11-19E Regulatory Citation: 570201(a) or (c) National Objective: 570.208(a)(3)
	Target Date	6/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	Assist 181 households below 80% AMI through the following activities: Kansas House (103), 416 E. Coolidge (8), 0 Vine Street Phase 1 (23), and Youth Navigation Center (47)
	Location Description	Citywide
	Planned Activities	Acquisition, Rehabilitation, Construction of affordable housing units
7	**Project Name**	Public Services
	Target Area	NA
	Goals Supported	Access to Jobs, Education, and Other Economic Development Services
	Needs Addressed	Public Services
	Funding	CDBG
	Description	Partner with local public service providers to provide essential public services to Modesto residents. Matrix Code: 03T – 05Z Regulatory Citation: 570201(e) National Objective: 570.208(a)(2)
	Target Date	06/30/2021

	Estimate the number and type of families that will benefit from the proposed activities	Assist over 2,500 individuals below 80% of AMI through public service activities
	Location Description	Citywide
	Planned Activities	General Public Service Activities
8	**Project Name**	Affordable Housing – Owner Occupied Rehabilitation
	Target Area	NA
	Goals Supported	Improve the Condition and Increase Supply of Affordable Housing
	Needs Addressed	Affordable Housing
	Funding	CDBG
	Description	Provide direct financial assistance eligible households through the Homeowner Rehabilitation Program to address health and safety repairs. Matrix Code: 14A Regulatory Citation: 570.202(a)(1) National Objective: 570.208(a)(3) LMH
	Target Date	06/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	Assist 18 households at or below 80% of the AMI
	Location Description	Citywide
	Planned Activities	Housing Rehabilitation

AP-50 Geographic Distribution

Description of the geographic areas of the entitlement (including areas of low-income and minority concentration) where assistance will be directed

HUD allows for the designation of priority areas that may be a primary focus of revitalization efforts. For the purpose of the Consolidated Plan, priority areas are loosely defined and are not strict and do not require any specific allocation of resources, matching, or partnerships. At this time, the City does not have nor plan to pursue any official HUD designated geographic based priority areas. The City funds program activities City-wide based on the low/mod block groups as defined by HUD on specific program eligibility (CDBG, HOME, and ESG) and in accordance with the priority needs listed in this section.

Rationale for the priorities for allocating investments geographically

The City of Modesto will use a place-based strategy during the planning period. The geographic distribution of funding is predicated somewhat on the nature of the activity to be funded. It is the City's intent to fund activities in the areas most directly affected by the needs of low-income residents and those with other special needs. The Annual Action Plan directs investment geographically to an area benefit neighborhood. The area benefit category is the most commonly used national objective for activities that benefit a residential neighborhood. An area benefit activity is one that benefits all residents in a particular area, where at least 51% of the residents are low- and moderate-income persons. Public infrastructure improvements are an area benefit activity when they are located in a predominately low- and moderate-income neighborhood. Where possible, the City of Modesto will distribute CDBG funds throughout the low- and moderate-income block groups located throughout the six city council districts.

Discussion

No additional discussion.

AP-55 Affordable Housing

Introduction

The City understands the importance of approaching affordable housing from multiple angles: both preserving and maintaining existing affordable housing stock as well as continually looking for opportunities to develop new affordable housing.

The City offers affordable housing programs to support and assist households in obtaining or maintaining their home. The City utilizes contracts on affordable housing units to ensure units remain affordable for a certain extended period of time. To mitigate the negative effects of public policies that may pose barriers to affordable housing, the City of Modesto has policies in its impact fee program for affordable housing. The current Capital Facility Fees (CFF) Policies and Procedures provide, with respect to very low- and low-income housing exemptions, the total number of housing exemptions granted are not to exceed two percent (2%) of the cumulative total CFF program housing units. The CFF Policies and Procedures also allow a Community Housing and Development Organization (CHDO) to submit an

application and request CFF be waived on new affordable units for households earning sixty (60%) or less of the Area Median Income.

Whenever possible, the City uses HUD resources to partner with local affordable housing developers and/or other public agencies to build affordable housing projects. This Action Plan identifies any such projects to be planned or carried out this Program Year.

One Year Goals for the Number of Households to be Supported	
Homeless	154
Non-Homeless	22
Special-Needs	31
Total	**207**

One Year Goals for the Number of Households Supported Through	
Rental Assistance	8
The Production of New Units	181
Rehab of Existing Units	18
Acquisition of Existing Units	0
Total	**207**

Discussion

- Rental Assistance (8 households; 4 homeless/4 non-homeless): Community Housing and shelter services will assist a minimum of eight (8) households with City ESG funds for homeless prevention assistance.
- Production of new Units (181 households): Completion of the Kansas House Project will provide103 new units for homeless households; The Vine Street Project will provide 23 new units to special needs households; 416 E. Coolidge will provide 8 new units, and Youth Navigation Center will provide 47 new units.
- Rehab of Existing Units (18 households): The City will seek to assist 18 households via the City's owner-occupied housing rehabilitation program.
- Acquisition of Existing Units: The City will work with local partners and look for opportunities to acquire additional properties to provide affordable housing opportunities.

AP-60 Public Housing

Introduction

In Stanislaus County, public housing needs, housing choice vouchers, and other specific HUD funds and services are addressed by two housing authorities:

- The Housing Authority of the County of Stanislaus (HACS), also serving Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Stanislaus, and Tuolumne Counties.
- The Riverbank Housing Authority administered by the Housing Authority of the County of Stanislaus.

Public housing sites can range from large apartment buildings to single-family houses. Housing Choice Vouchers (HCV, also often called the "Section 8" program) are a portable rent subsidy that can be used to pay for a portion of rent in private rental housing units. Project-Based Section 8 vouchers are private rental units in which the current occupant receives subsidized rent through the housing authority.

Housing Authorities are subject to the same state and federal fair housing laws as other housing providers and cannot discriminate on the basis of state or federally protected classes. Housing Authorities must also follow any local fair housing ordinances and may have additional tenant protections added by HUD.

Actions planned during the next year to address the needs to public housing

Collectively, the housing authorities in Stanislaus County provide access to 6,335 subsidized housing units including 736 public housing units, 1,060 project-based Section 8 units, and 4,460 housing choice vouchers, though these totals vary at any given time. Though there are technically two housing authorities, the HACS administers the programs of both the HACS and Riverbank housing authorities.

The HACS has been designated as a "high performing" public housing authority by HUD since 2008. This designation is given to public housing authorities (PHAs) that score above a 90 out of 100 points. PHA projects are assessed based on a physical inspection (40 points), financial condition (25 points), management system (25 points), and timely use of capital funds (10 points). The total PHA score is then created out of the average score for all projects weighted by the number of units.

Like many public housing authorities across the country, the housing authorities in Stanislaus County lack an adequate supply of funding for units and/or vouchers to meet the affordable housing needs within their service areas. This is reflected by long or closed waiting lists for potential units. In Stanislaus County, the average waiting time for a public housing unit is 10 years. Waiting lists for housing choice vouchers are only open occasionally and, even then, sometimes only for select applicants.

PHAs complete both an annual plan and a 5-year plan to help prioritize projects, development, funding, and programs. For 2019-2023, the HACS listed the following goals and objectives (among others) that help affirmatively further fair housing and increase housing choice:

1. Depending on the availability of federal and state funding, increase the inventory of affordable rental housing within the jurisdiction of the Housing Authority of the County of Stanislaus for extremely low to moderate income households.

Objectives:

- *Housing Choice Voucher Program – Continue to expand upon existing marketing and outreach efforts to attract new landlord participants to the Housing Choice Voucher Program.*
- *Development – Leverage private or other public funds to create additional housing opportunities. • Development – Subject to the availability of funding, develop or acquire 500 affordable housing units over the next five years.*

2. Conserve and upgrade the Affordable Housing Inventory in Stanislaus County.

Objectives:

- *Public Housing – Implement Asset-Based Community Development (ABCD) initiatives to engage and unite residents, associations and institutions from within each community for more sustainable communities and economic development.*
- *Administration – Partner with county and/or city in efforts to improve housing stock and create stable, viable neighborhoods.*

3. Increase assisted housing choices.

Objectives:

- *Housing Choice Voucher Program – Provide voucher mobility counseling at initial family briefings and during annual reexaminations.*
- *Housing Choice Voucher Program – Continue to maintain the 2-tiered Benefit Payment Standard (BPS) to ensure families have the ability to locate affordable housing in less poverty concentrated neighborhoods.*
- *Housing Choice Voucher Program - Continue to seek funding for the Individual Development & Empowerment Accounts (IDEA) and Workforce Initiative Subsidy for Homeownership (WISH) programs for graduating Family Self-Sufficiency (FSS) Program Participants.*

The City will continue to leverage opportunities and funding to address needs outlined in the City's Consolidated Plan and remain cognizant of goal and objective overlaps with the HACS.

Actions to encourage public housing residents to become more involved in management and participate in homeownership

The HACS has a Resident Advisory Board (RAB) which represents the residents assisted by the HACS. The RAB assists in the development of the HACS five-year Plan. Resident involvement will continue to be supported in an effort to enhance the service delivery by taking into account input from those with lived experience.

Efforts to improve communications with residents and program participants include: on site resident training/informational meetings, regular newsletters and flyers. The HACS has implemented a "curbside" appearance program. The focus of the program is the exterior of buildings, parking areas,

play grounds and other areas of the complexes. Rodent and insect problems are addressed when residents report a problem and/or on Annual Inspections. In an effort to better education residents concerning these problems, information is regularly provided through the HACS newsletter. These actions have assisted the HACS in creating an atmosphere which emphasizes customer satisfaction and communication

The Housing Authority of the County of Stanislaus (HACS) provides homeownership resources to participants in the Housing Choice Voucher Program. The Family Self-Sufficiency (FSS) Program has established partnerships with a variety of community resources to refer participants for services including pre- and post-secondary education, health care, childcare, employment development, supported employment, and small business development including micro-loans. The FSS Program also encourages families to participate in financial wellness programs including financial literacy and credit repair with an emphasis on long-term financial stability for the purposes of homeownership. Supportive services are provided through the Stanislaus County Assistance Project, the Stanislaus County Department of Mental Health, or Stanislaus County Integrated Services Agency.

These actions have assisted the Housing Authority in creating an atmosphere which emphasizes customer satisfaction and communication.

If the PHA is designated as troubled, describe the manner in which financial assistance will be provided or other assistance

The PHA is not designated as troubled; since 2008, the Housing Authority of the County of Stanislaus (HACS) has been designated as a “high performing” public housing authority by HUD. This designation is given to public housing authorities (PHAs) that score above a 90 out of 100 points. PHA projects are assessed based on a physical inspection (40 points), financial condition (25 points), management system (25 points), and timely use of capital funds (10 points). The total PHA score is then created out of the average score for all projects weighted by the number of units.

AP-65 Homeless and Other Special Needs Activities

Introduction

The City of Modesto participates in the County-wide Continuum of Care (CoC) to develop and implement regional goals and strategies to address and end homelessness. The CoC released its *Plan to Address Homelessness in Stanislaus County* in January 2019. A primary function and goal of the CoC is to increase housing stability and decrease incidents of homelessness in Stanislaus County by targeting services and funds to populations most in need, meeting both the immediate and long-term needs of households experiencing homelessness, and avoiding the duplication of services by coordinating with service providers and the CoC.

Along with this adopted plan, in recent years the CoC has been strategized through working groups and with the introduction of the Stanislaus Homeless Alliance (SHA). This revamping of the CoC includes a partnership with HomeBase resulting in a more efficient CoC application and NOFA process with aims to increase CoC funding.

In the coming year, the City will continue to partner with local service providers and agencies with the goa of reducing and ending homelessness via street outreach, homeless prevention, and rapid rehousing. In addition, the City will work with the CoC on addressing the emergency shelter and transitional housing needs of homeless persons as well as continuing to find creative approaches to addressing homelessness and special needs populations.

Describe the jurisdictions one-year goals and actions for reducing and ending homelessness including:

Reaching out to homeless persons (especially unsheltered persons) and assessing their individual needs

The City of Modesto has actively participated in CSOC's planning process to move individuals and families from homelessness to permanent housing and independent living through a network of housing linked to supportive services. The primary strategy document is the annual CSOC Application. Additionally, the City will continue to work with the CoC in the implementation of the continuum-wide Coordinated Entry System (CES) to match the right services to the households given their individual circumstance, this includes taking into consideration special needs in both housing and supportive services. The CoC formed a CES Task Force that will continue to meet regularly to assist with the continued evolution and implementation of the CES and address any issues that arise. The CoC will provide continued training for participating service providers and continue developing any necessary tools to effectively manage the system. This matching of appropriate needs is the most effective use of resources and minimizes bottlenecks in the service delivery system.

In the coming year, the City will continue to partner with organizations such as Center for Human Services (CHS) which conducts street outreach to unsheltered homeless youth. CHS' goal, through street outreach, is to engage with homeless youth and connect them to resources including housing at CHS' Hutton House, a runaway and homeless youth shelter (ages 13-17), or Pathways, a transitional living place for older youth (ages 18-21). In 2019, the City provided CDBG grant and loan funds to CHS to acquire a property that will be used to establish a Youth Navigation Center. This Youth Navigation Center will enhance current outreach efforts and services for the youth population with everything being available at one location.

Community Assessment, Response, and Engagement (CARE) Multidisciplinary (MDT) personnel strategy: The CARE team is a joint strategy from the City of Modesto as well as Stanislaus County. The CARE team is made up of staff that are capable of engaging individuals and households in crisis, distressed in the moment for any number of reasons relating to mental or physical health. The CARE team conducts regular outreach and engagement with what are most often the "hard to reach" individuals and households. The CARE team activity is tracked in detail through the CoC and its reporting. The City will continue to be a partner in the CARE team program in efforts to increase outreach and engagement to homeless households and individuals.

The Downtown Streets Team (DST) is aimed at reducing the number of people living in poverty and

provide housing opportunities to homeless individuals. DTS employs a volunteer Structured Daily Activity (SDA) model in which those experiencing or at risk of homelessness volunteer on beatification projects within Modesto and Stanislaus County. Incentives for volunteering include, but are not limited to, intensive case management, employment navigation, service connection, and a non-cash basic needs stipend.

The DST model is designed to help "Team Members" (clients) activate skills and attributes that are necessary to move toward employment, housing, and overall a better quality of living, but which are, through the experience of homelessness, often suppressed. These include things like maintaining a schedule, teamwork, accountability, self-confidence and more. Through the SDA model, Team Members rebuild all of these as well as regain a sense of pride in and stewardship of their community. In addition, Team Members gain valuable experience that they can list at the top of their resume to overcome long experience gaps.

SDA projects are generally beautification projects, which includes basic tasks such as litter cleanup in the community. Thus, the model inherently provides a public service and a public benefit in the communities DST serves in.

Finally, the City of Modesto is actively involved in the Annual Point-In-Time (PIT) Count conducted throughout the CoC which includes all of Stanislaus County. The PIT Count includes staff and volunteers going out into the community and physically counting individuals experiencing homelessness as well as outreach efforts linking those individuals to services available within the community. Outreach efforts particularly seek to identify the numbers and needs of those individuals and households experiencing unsheltered homelessness.

Addressing the emergency shelter and transitional housing needs of homeless persons

Given Modesto is the county seat of Stanislaus County and the largest City within, Modesto is also the central point for many of the CoC's related supportive services. The City funds shelter activities to the maximum extent possible through CDBG Public Services and ESG funds.

The City partners with shelter providers in Modesto such as The Salvation Army to provide emergency shelter and low barrier shelter services to homeless persons. The newly formed Access Center Emergency Shelter will provide low-barrier (drug and alcohol testing are not required to enter) to reduce barriers for individuals choosing to enter an emergency shelter. ACES is designed to allow homeless individuals to enter with pets, partners, and possessions, which are often-cited impediments individuals have when entering a homeless shelter.

With respect to transitional housing, the City will partner with local service providers to provide funding whenever possible for the operation of transitional living facilities and emergency shelters such as:

Center for Human Services – Pathways Program: Pathways is a 16-bed transitional living program that addresses the need for shelter and support services for homeless youth 18 to 21 years of age. Shelter is

provided up to 21 months. The Pathways Program provides basic life skills, interpersonal and jobs skills training, assistance with obtaining medial insurance and assistance related to advancing educational opportunities.

Stanislaus County Affordable Housing Corporation (STANCO): STANCO operates transitional housing facilities that provide housing opportunities for homeless persons with mental disabilities. The City of Modesto provided funding for STANCO in 2019 for transitional housing of five (5) beds. The City will continue to look for partnership opportunities with STANCO and other providers to meet emergency and transitional shelter needs of residents.

Hutton House is an emergency shelter for runaway, homeless, and youth in crisis who are ages 13-17.

Pathways is a transitional living and support services program that focuses on youth who have "aged out" of the foster care placement system.

Children's Crisis Center of Stanislaus County (CCC) provides child care and shelter services to abused, neglected, and at-risk children in the community.

Cricket, Guardian, Marsha's, Sawyer, and Verda's Houses provides shelter for children who may be involved in a family crisis or a conflict situation.

Homeless Prevention and Rapid Re-Housing Program (HPRP) provides rental assistance in conjunction with intensive case management.

Community Housing and Shelter Services (CHSS) provides opportunities to households with and without children to obtain and maintain permanent housing.

Community Impact of Central Valley (CICV) provides services to individuals with HIV/AIDS through the Housing Opportunities for Persons with AIDS Program (HOPWA).

Family Promise of Greater Modesto provides shelter at church sites and case management support for finding permanent affordable housing.

Haven Women's Center of Stanislaus County provides shelter services and outreach to homeless women and children in the South Stanislaus County area and within the City. Services include those for victims of domestic violence.

Housing Authority of the County of Stanislaus administers 222 Shelter Plus Care Certificates and HUD-VASH vouchers which help provide permanent supportive housing to homeless veterans.

Miller Pointe is a 15-unit permanent rental housing project serving very low-income households.

Meadow Glen is a 32-unit permanent rental supportive housing serving very low-income foster youth aged out of foster care.

The Modesto Men's Gospel Mission and Women's Mission provides a limited stay of seven nights on the floor, and three nights out, and also serves two meals a day.

Mission Emergency Shelter provides beds for temporary shelter to house up to 100 unaccompanied adult men and women and up to 90 women and children for a maximum stay of fourteen days.

New Life Program Residential is an on-site program, operated by the Modesto Gospel Mission, for up to 41 unaccompanied adult men and women who need specialized help to return to societal living. This program is operated by the Modesto Gospel Mission.

The Salvation Army Modesto Corps provides an array of services to the homeless.

The Berberian Emergency Shelter provides 164 cold weather beds to unaccompanied homeless adult men and women and up to 30 year-round beds to homeless persons with special medical needs.

The Berberian Transitional Living Facility provides 20 beds for homeless male and female veterans and 20 beds for unaccompanied homeless males and females for up to 24 months.

Stanislaus County Affordable Housing Corporation (STANCO) operates eight properties for permanent affordable housing and conducts outreach to place people in supportive housing. STANCO also operates 33 transitional beds for homeless families with children and 37 beds for unaccompanied adult homeless males and females.

- **STANCO Transitional Housing**
- California – 36 beds and 4 units

- Garden Gate – 3 beds and 1 unit
- Ricardo – 3 beds and 1 unit
- Locust – 3 beds and 1 unit
- Garvey – 13 beds
- REST House - 5 beds
- **STANCO Permanent Supportive Housing**
- 24 beds

Bennett Place contains 18 units that are reserved for persons who have a serious mental illness (SMI) or serious emotional disturbance (SED) and are homeless or at risk for homelessness.

Turning Point Community Programs provides integrated, cost-effective mental health services, employment and housing for adults, children and their families that promote recovery, independence and self-sufficiency.

Turning Point Respite Center at Garden Gate provides a safe home-like environment for up to 12 homeless mentally ill persons nightly.

Salvation Army Veteran Emergency Shelter: provides shelter services to homeless individuals who are U.S. Veterans.

Catholic Charities provides a variety of programs and services with a new office location as of 2019 in Modesto. Catholic Charities provides transportation services, housing and case management services, low-cost healthcare, and childcare as well as immigration and legal services.

There is a total of 511 emergency shelter beds in Modesto and 223 within Stanislaus County (not in Modesto) for a total of 734 emergency shelter beds within the County. Additionally, there are 301 emergency shelter beds pending. The emergency shelter beds available in Modesto are from the following organizations:

Modesto Emergency Shelter Beds

Agency	Number of Beds
Center for Human Services	7
Community Housing and Shelter Services (CHSS)	155
Family Promise	14
Haven Women's Shelter	8
Modesto Gospel Mission	181
Salvation Army	140
Turning Point	3

TOTAL	**511**

Source: Stanislaus Homelessness Alliance Affordable Housing Presentation

Helping homeless persons (especially chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth) make the transition to permanent housing and independent living, including shortening the period of time that individuals and families experience homelessness, facilitating access for homeless individuals and families to affordable housing units, and preventing individuals and families who were recently homeless from becoming homeless again

The CoC continues to hone in on system processes and address gaps in the service delivery system to ensure that specific vulnerable sub-populations do not fall through the cracks. As the CoC partnerships grow and each entity becomes more understanding of their role as well as the roles of other agencies, the system will yield more effective results for those individuals and families that are experiencing homelessness. The Coordinated Entry System (CES) is an effective tool in minimizing the number of days someone experiences homelessness. As stated in the *Coordinated Entry System Policies and Procedures Manual*, the CoC works to assess households for the individual needs and make matches to available housing interventions. The case conferencing teams meet weekly to work through the households that have completed assessments. Each household experiencing homelessness or chronic homelessness is offered a standard assessment tool to ensure fairness and equitable access to available services and housing options across the continuum.

The delivery of wrap-around services is critical to the long-term success of those individuals and families that have experienced homelessness but are now housed. Through the CoC, there are housing supports made available, offering financial assistance, security deposits, legal services, credit repair, utility payments, counseling, among others. It is understood by the CoC and its partners that the end goal is not to simply find housing, but to maintain stable housing.

The City of Modesto's Homelessness Prevention and Rapid Re-Housing (HPRP) activities include the allocation of ESG funds for all household types including but not limited to chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth so they may receive security deposit assistance. Another subpopulation that is targeted with ESG HP/RP financial assistance are families with dependent children.

The City of Modesto, its ESG subrecipients, the CoC, and other partners have been especially strategic in creating opportunities that will stably house and promote the self-sufficiency of these subpopulations of persons experiencing homelessness. ESG subrecipients have also had to find strategic ways to assist clients find housing and keep their housing. The following are recent strategies that have been implemented locally in which the City will continue to be a partner in as its strategy at helping homeless individuals transition from homelessness to housing:

Empire Migrant Center:

Supported by the FOP movement, the Stanislaus County Community Services Agency's (CSA) partners with the Housing Authority to house homeless families during the cold-weather months in vacant family

units at the Empire Migrant Center. The Empire Migrant Center located at 5132 South Avenue is used as a cold-weather shelter for homeless families. The Empire Migrant center consists of 90 single family dwelling units used for farmworker housing during project from April to October each year. This project allowed CSA to use 21 of the 90 units to place homeless families in these units during the months of November through March. This project will be a multi-year partnership allowing CSA to place homeless families each winter in housing and provide case management services with a goal to permanently house homeless households.

Youth Navigation Center:

The Center for Human Services provides a wide range of services that strengthen and support youth and families. One of the biggest projects currently being developed is a Youth Navigation Center. The Youth Navigation Center will be located in Modesto and will be a one stop service hub providing a continuum of services for young people (13-24 years old) who are experiencing crisis, housing instability, and/or homelessness. The Youth Navigation Center will create a space where existing services, currently at different sites, will be relocated and new services developed, creating a clear pathway for youth/young adults. Most importantly, this Center will establish a coordinated system of care for this vulnerable population and will serve youth within Stanislaus County. Once completed, this project will provide the following services:

- Street outreach and engagement services
- Homeless prevention & diversion services
- Coordinated entry and assessment
- Crisis/Drop-in and Shelter for 13-17-year-old individuals (8 beds)
- Hutton House: Crisis/Drop-in and Low-Barrier Shelter for 18-24-year-old individuals (24 beds)
- Pathways Program: Transitional Housing for 18-24-year-old individuals (15 beds)
- Access to housing services including permanent housing slots designed for youth with diverse circumstances
- On-site education and employment services

Downtown Streets Team:

Another key effort led in Modesto aimed at reducing the number of people living in poverty and provide housing opportunities to homeless individuals is the Downtown Streets Team (DST). Downtown Streets Team employs a volunteer Structured Daily Activity (SDA) model in which those experiencing or at risk of homelessness volunteer on beautification projects within Modesto and Stanislaus County. Incentives for volunteering include, but are not limited to, intensive case management, employment navigation, service connection, and a non-cash basic needs stipend.

The DST model is designed to help “Team Members” (clients) activate skills and attributes that are necessary to move toward employment, housing, and overall a better quality of living, but which are, through the experience of homelessness, often suppressed. These include things like maintaining a schedule, teamwork, accountability, self-confidence and more. Through the SDA model, Team Members rebuild all of these as well as regain a sense of pride in and stewardship of their community. In addition, Team Members gain valuable experience that they can list at the top of their resume to overcome long

experience gaps.

SDA projects are generally beautification projects, which includes basic tasks such as litter cleanup in the community. Thus, the model inherently provides a public service and a public benefit in the communities DST serves in.

Homeless Employment Litter Program

Similar to the Downtown Streets team project, the City is forming a new partnership with Ready to Work (a nonprofit organization which creates opportunities where individuals who are either experiencing or at-risk of homelessness gain employment support while generating clean streets) and the California Department of Transportation (CalTrans) to initiate the Homeless Employment Litter Program (HELP). This partnership will result in the employment of homeless individuals to pick up litter around our city streets and state highways around Modesto RTW has been very successful in transitioning individuals into full-time employment and permanent housing. Along with market level compensation, employees will receive an employment plan to help secure graduation from the program, as well as assistance with resume building, filling out applications, interviewing and much more. Complementary to a more beautiful city, the goal is to develop a platform that will give individuals all the tools needed to become self-sufficient.

Helping low-income individuals and families avoid becoming homeless, especially extremely low-income individuals and families and those who are: being discharged from publicly funded institutions and systems of care (such as health care facilities, mental health facilities, foster care and other youth facilities, and corrections programs and institutions); or, receiving assistance from public or private agencies that address housing, health, social services, employment, education, or youth needs.

The *Plan to Address Homelessness in Stanislaus County* identifies discharge planning as a key part of the strategy in addressing homelessness throughout the County moving forward. Acknowledging that further collaboration among public institutions and other system of care providers needs to occur so that no individual or family is discharged into homelessness, the CoC continues to work on these issues through awareness campaigns and coordinated efforts to align services and resources among CoC partners. The City helps lead in the coordination of Continuum-wide services. Furthermore, homelessness prevention assistance, while scarce, is provided through an ESG sub-recipient (Community Housing and Shelter Services). Again, foster care youth and those exiting the foster care system will be served through the City partnership with the Housing Authority.

The City of Modesto will continue collaborative efforts with the CoC to improve services to the homeless and those at risk of becoming homeless. The following are key highlights of the work that has been conducted and will continue to be implemented in our community to assist individuals and families avoid becoming homeless:

Focus on Prevention Homelessness Initiative

Over four years ago, the Stanislaus County Board of Supervisors launched the Focus on Prevention (FOP) countywide initiative with the aim to improve the quality of life for all Stanislaus residents and families, through coordinated prevention efforts that work across multiple community sectors and address root causes of homelessness and other issues. The City of Modesto has been a stakeholder in the FOP movement since its inception, supporting the efforts to assist residents in escaping homelessness.

Homeless Discharge Coordination:

The City of Modesto is actively engaged in homeless discharge coordination from health care facilities. Since April 2019, the Hospital Council of Northern California has coordinated monthly meetings with representatives from local hospitals, homeless shelters, public agencies, and stakeholder groups to plan for the discharge of homeless individuals from health care facilities to comply with SB 1152. The objective has been to create a community standard of care and greater connection and cooperation between discharging and receiving providers of services for the homeless.

Homeless Prevention and Rapid Rehousing:

The City will continue to partner with local service providers by providing ESG funds used to assist with homeless prevention assistance to persons or families at risk of losing their housing. ESG funds will also be provided to rapidly rehouse persons who are homeless. Assistance will be provided with intensive case management services to reduce the risk of persons falling back into the cycle of homelessness.

Foster care/youth facilities

One of the biggest youth service providers in Stanislaus County is the Center for Human Services (CHS). The City has an ongoing partnership with CHS in the planning and programing of services for youth terming out of foster care to prevent homelessness among this population. A prime example is the recent partnership with CHS on the first Youth Navigation Center to be located in Modesto which will provide a one-stop-shop service hub for youth experiencing or in danger of homelessness.

Corrections/Law Enforcement:

As part of the Coordinated Entry efforts, the City works with law enforcement agencies such as Modesto Police Department and Stanislaus County Sheriff and Probation Departments in discharge planning to

avoid discharge of inmates into homelessness.

AP-75 Barriers to affordable housing

Introduction:

The City's 2015-2023 Housing Element contains an analysis of the barriers that may exist in the development and/or preservation of affordable housing. Many factors may work independently to inhibit affordable housing, but more often there is an intersection of barriers that may impede affordable housing development and/or perseveration. Some of those barriers may include market mechanisms and circumstances, government codes and regulations, physical constraints, and environmental constraints.

Of those types of barriers, below is a summarized list of specific barriers:

- Market barriers
    - Construction costs
    - Land and labor costs
    - Loan/Credit issues for households
- Governmental barriers
    - Land use and zoning regulations
    - Permit fees
    - Residential development standards
    - Parking requirements
    - Development permit procedures
    - Building codes
- Environmental barriers
    - Natural disasters

There are a number of codified policies in Modesto that may contribute to the current lack of affordable housing.

Development Fees:

- Zoning Change Fee
    - Should a development or housing unit be proposed for a site where it is not consistent with the General Plan and/or should a project be proposed for a site it is not currently permitted by zoning, a fee of up to $5,231 is required depending on the zoning change needed.
    - These costs could potentially stifle the development of housing in areas where it may otherwise be reasonable
        - Given a low supply of housing affordable to low- and/or moderate-income households, these costs may inhibit housing choice for those households
- Impact Fee, land dedications, site improvements
    - The costs to integrate necessary infrastructure (streets, sidewalks, storm drains, etc.) are bore by the developer, but are ultimately passed on to the consumer

    - These costs contribute to pricing out low- and/or moderate-income households for affordability reasons
    - The City may provide fee waivers in some cases and/or fee deferrals in others allowing construction to move forward with less up-front costs
- School district fees
    - School fees range from $2.97 to $4.66 per square foot; with an average of $3.82 per square foot
    - These may add significant costs to larger developments, contributing to the pricing out of low- and/or moderate-income households

The City of Modesto regularly analyzes City building codes, market constraints, and housing/non-housing development policies, be it through the Consolidated Plan process, the Analysis of Impediments update, or the Housing Element update. The City acknowledges that outdated building codes and land use policies inhibit the development of housing for all income levels and the City understands the importance of regularly analyzing how local policies and ordinances impact the housing market for those households earning less than 80% of the area median income.

Actions it planned to remove or ameliorate the negative effects of public policies that serve as barriers to affordable housing such as land use controls, tax policies affecting land, zoning ordinances, building codes, fees and charges, growth limitations, and policies affecting the return on residential investment

The City works to remove barriers to the development and/or preservation of affordable housing through the following efforts:

- Providing funding for land acquisition, secondary financing, and infrastructure costs;
- Assisting qualified households to purchase homes utilizing the Homebuyer Assistance Program:
- Exemption or deferral of Capital Facilities Fees for projects providing low-income housing;
- Using the adopted streamlining process for environmental review; HEROS
- Continuing to work with non-profit housing agencies in the provision of supportive services and programs; and
- Using streamlined application review and permit processing.

To mitigate the negative effects of public policies that serve as barriers to affordable housing, the City of Modesto has policies in its impact fee program for affordable housing. The current Capital Facility Fees (CFF) Policies and Procedures provide, with respect to very low and low income housing exemptions, the total number of housing exemptions granted are not to exceed two percent (2%) of the cumulative total CFF program housing units. The CFF Policies and Procedures also allow a Community Housing and Development Organization (CHDO) to submit an application and request CFF be waived on new affordable units for households earning sixty (60%) or less of the Area Median Income.

In 2017, the State of California passed a15-bill housing package aimed at addressing the state's housing shortage and high housing costs. Specifically, SB 2, which is part of the 15-bill housing package,

established a permanent source of revenue intended to increase the affordable housing stock in California.

In 2019, the State of California released a Notice of Funding Availability (NOFA) to all local governments in California for the SB2 Planning Grants Program (PGP). The PGP program is intended for the preparation, adoption, and implementation of plans that streamline housing approvals and accelerate housing production.

In response to the NOFA, the City of Modesto applied for and was awarded $625,000. Funds will be partially used for the development of an Affordable Housing Plan (AHP) which will consist of two primary components:

3. The first is identification of opportunity sites for affordable housing, along with an analysis of potential barriers and/or constraints related thereto. This is intended to maximize residential development potential on sites that have meaningful capacity for residential development. Existing barriers to new residential development will be identified and examined. Strategies to reduce or eliminate these barriers will be documented.

4. The second primary component of this AHP will consist of a series of zoning code amendments intended to facilitate housing development at new locations / sites / zoning districts where residential land uses may not be allowed under the current code. Zoning code amendments, in addition to other available remedies, will also be prepared to reduce / eliminate the barriers identified as described above.

The SB2 Planning grant will play a significant role in assisting the City address affordable housing needs and any barriers currently in place.

All of the goals from the City's 2015-2023 Housing Element are relevant to the Consolidated Plan, and several goals are explicitly aimed at removing barriers to the development of housing within the City.

Goal Number 4 of the Housing Element is "Ensure land use and zoning procedures accommodate housing," stating that the City will work to track changes in Housing Law as to be consistent with supportive of State and Federal laws. The goal also aims to review local regulations periodically for the ability to accommodate projected housing demands. Goal number 5 is "Reduce government constraints," with the aim of continuing to identify any development fees, impact fees, and other municipal costs that may unduly constrain housing production.

The City is also a partner in the development of the Regional Analysis of Impediments to Fair Housing Choice (AI) for Stanislaus County. The AI will analyze public policies, strategies, and housing market practices that could potentially create barriers to affordable housing for households within the City. The AI will also identify actions to be taken in order to alleviate any barriers identified.

AP-85 Other Actions

Introduction:

Actions planned to address obstacles to meeting underserved needs

In alignment with local efforts and initiatives, the City's primary focus in 2020-2021 will be to use HUD resources to address the Consolidated Plan goals, all of which are high priority:

- Improve the Condition and Increase Supply of Affordable Housing
- Work Towards Addressing and Preventing Homelessness
- Enhance Infrastructure and Public Facilities
- Access to Jobs, Education, and Other Economic Development Services

This action plan identifies projects the City will undertake in pursuit of progress towards those goals outlined above.

Actions planned to foster and maintain affordable housing

Because there is a housing shortage in Modesto, one of the City's main strategies will be to use HUD funds to assist with property acquisition for conversion into affordable housing. In the development of the Strategic Plan, the City conducted a request for project proposals to identify potential projects that would assist in addressing the Consolidated Plan needs. The City will use projects identified via the RFP to maximize the use of HUD funds with the end goal of adding affordable housing units to the maximum extent possible.

Actions planned to reduce lead-based paint hazards

The Market Analysis section of the 2020-2024 Consolidated Plan estimates that 8,820 owner-occupied low-income households and 8,400 renter-occupied low-income households are living in units built before 1980. Because lead-based building materials was banned in 1979, this is the best available estimate of the number of households that may have lead-based materials to abate.

The City of Modesto has adopted policies which will continue to be implemented in its housing programs. The City's lead-based paint policy complies with HUD requirements relating to lead-based paint hazards. In alignment with HUD's requirements, lead-based paint remediation actions will depend on the level of subsidy provided on a project by project basis.

City staff provides the HUD approved "Protect Your Family From Lead in Your Home" pamphlet to homeowners when lead-based paint is found or presumed to be present. Homeowner Rehabilitation Program Policies & Procedures adhere to 24 CFR 35.100 Subpart J 35.930(b), 24 CFR 35.100 subpart J 35.930(c), and 24 CFR 35.100 subpart J 35.930(d). Contractors who are working in homes where lead-based paint is found or presumed to be present provides to the homeowners EPA pamphlet "The Lead-Safe Certified Guide to Renovate Right" prior to construction activities.

Housing rehabilitation projects will be subject to federal regulations for Lead-Based Paint and contractors must be certified in safe work practices when completing the rehabilitation work. Costs related to lead-based paint inspections, clearance and abatement will be included in the City's housing rehabilitation loan program which is paid from entitlement funds.

The following is the City's lead-based policy for reduction of lead paint hazards:

	Subsidy Amount		
	<$5,000	**$5,000-$25,000**	**>$25,000**
Approach to Lead Hazard Evaluation and Reduction	**"Do No Harm": Use lead safe work practices**	**Identify and control Lead hazards**	**Identify and Abate Lead Hazards**
Homeowner Notification	Yes	Yes	Yes
Lead Hazard Evaluation	Presume Presence of LBP (alternative: Paint testing of surfaces to be disturbed by rehabilitation)	Paint testing of surfaces to be disturbed by rehabilitation AND Risk assessment	Paint testing of surfaces to be disturbed by rehabilitation AND Risk assessment
Lead Hazard Reduction	Repair surfaces disturbed during rehabilitation, use lead-safe work practices, clearance test of work site upon completion.	Interim controls, lead- safe work practices, clearance test of unit upon completion.	Complete abatement, lead-safe work practices, clearance test of unit upon completion.

Actions planned to reduce the number of poverty-level families

Affordable housing is identified as the highest need in the City's 2020-2024 Strategic Plan. In order to address need for additional affordable housing the City of Modesto works with local affordable housing developers in efforts to identify new projects and/or ways to enhance the supply of affordable housing. Section AP-55 of this Action Plan outlines the City's 2020-2021 affordable housing goals for this year.

The City will enter community partnerships that provide economic development opportunities for low income households. Partnerships such as those with Opportunity Stanislaus, the local economic development and workforce agency, will seek to leverage any funds available to the city (federal and/or state) for the economic advancement of low-income families with the end goal to get them out of poverty levels. Opportunity Stanislaus developed the VOLT Institute, located in Modesto, to offer training for maintenance and technology positions. VOLT was developed in consultation with local businesses to address their needs for machine maintenance and continuing education among their workforce.

The City may also work with its Economic Development Department to consider the creation of a CDBG special economic development program to assist existing small businesses with loans or grants that will result in the creation of jobs for low income individuals and/or assist low income persons with the creation of microenterprise businesses as another strategy at reducing the number of poverty-level families.

Actions planned to develop institutional structure

The City of Modesto, through its engagement in local initiatives, is engaged in the Coordinated Entry system. Coordinated entry (also known as coordinated assessment system) is a consistent, community wide process to match people experiencing homelessness or at-risk of homelessness to community resources that are the best fit for their situation. In a community using coordinated entry, homeless individuals and families complete standard triage assessment survey that identifies the best type of services for that household. Participating programs accept referrals from the system, reducing the need for people to traverse the county seeking assistance at every provider separately. The process helps prioritize housing and homeless assistance based on vulnerability and severity of service needs to ensure that people who need assistance the most can receive it in a timely manner. The process also provides information about service needs and gaps to help plan assistance and identify needed resources in our community.

The intent is to provide coordinated entry to the entire geographic area through Access Points. Access Points are places–either virtual or physical–where an individual or family in need of assistance accesses the coordinated entry process. People experiencing homelessness can complete the assessment survey to participate in coordinated entry and are matched with community resources that best fit their situation. All locations and methods offer the same assessment approach and referrals using uniform decision-making processes. The Access Points in Stanislaus County include: 1) A centralized physical location (Access Center) in Stanislaus County where housing and support services, among others are provided, 2) 211 hotline system that screens and directly connects people to services, 3) Continuum of Care partners that provide assessments using the same tool county-wide, 4) A specialized Multi-disciplinary Outreach and Engagement Team that scouts the geographic area to provide access to those who might not want to engage at a physical access point.

The City works closely with the Stanislaus County Department of Behavioral Health and Recovery Services (BHRS) in the system delivery of housing services. BHRS provides Housing Support Services Program provides an array of support services for individuals facing barriers that include low income, severe mental illness, substance abuse, and other disabling conditions. The program offers a combination of affordable housing and support services designed to help individuals and families use housing as a platform for wellness and recovery following a period of homelessness, hospitalization or incarceration. The goal of Housing Support Services is to assist individuals in obtaining employment, independent living skills, recovery and increased self-sufficiency. In addition, BHRS provides Employment Support Services to individuals with psychiatric disabilities who are working towards Employment and Housing goals. The program provides an opportunity for individuals with severe mental health

disabilities to work in the community. Often, BHRS and City HUD funding resources are leveraged together when partnering with local affordable housing developers such as the HACS and STANCO.

Actions planned to enhance coordination between public and private housing and social service agencies

City of Modesto relies primarily on its (A) close consultation with the CSOC, which is made up of representative stakeholders and (B) monthly meetings with its public and private housing development partners, which include local private CHDOs (e.g., Habitat for Humanity, Stanislaus County and Stanislaus Affordable Housing Corporation, and Great Valley Housing Development Corporation (GVHDC)) and the Housing Authority (to enhance coordination in the areas of community housing and social services.

The City of Modesto relies on non-profit organizations and for-profit developers to build and acquire, develop, and rehabilitate affordable units. The City of Modesto will continue to work closely with these entities to ensure that each year as many new affordable units are developed or made available.

The City of Modesto also relies on the non-profit service sector to provide emergency shelter and transitional and special needs housing. The City of Modesto will continue to support eligible organizations and their activities with local, state and federal funding as it's made available and upon their governing entity's approval.

Discussion:

No additional discussion.

AP-90 Program Specific Requirements

Introduction:

The below section outlines specific program requirements for CDBG, HOME, and the ESG programs.

Community Development Block Grant Program (CDBG)

Reference 24 CFR 91.220(l)(1)

Projects planned with all CDBG funds expected to be available during the year are identified in the Projects Table. The following identifies program income that is available for use that is included in projects to be carried out.

1. The total amount of program income that will have been received before the start of the next program year and that has not yet been reprogrammed	0
2. The amount of proceeds from section 108 loan guarantees that will be used during the year to address the priority needs and specific objectives identified in the grantee's strategic plan	0
3. The amount of surplus funds from urban renewal settlements	0
4. The amount of any grant funds returned to the line of credit for which the planned use has not been included in a prior statement or plan.	0
5. The amount of income from float-funded activities	0
Total Program Income	0

Other CDBG Requirements

1. The amount of urgent need activities	0
2. The estimated percentage of CDBG funds that will be used for activities that benefit persons of low and moderate income	85%

HOME Investment Partnership Program (HOME)

Reference 24 CFR 91.220(l)(2)

1. **A description of other forms of investment being used beyond those identified in Section 92.205 is as follows:** The City of Modesto does not use form of investment within the local HOME program other than those identified in Section 92.205.

2. **A description of the guidelines that will be used for resale or recapture of HOME funds when used for homebuyer activities as required in 92.254, is as follows:**

When HOME funds are used for homebuyer activities, the City will follow the following guidelines:

Pursuant to 24 CFR 92.254(a)(5)(ii), the City requires that HOME funds be recaptured if the property does not continue to be the principal residence of the buyer for the duration of the Affordability Period secured by an Affordable Housing Covenant. The Recapture Provision shall apply to a HOME assisted property only when a Direct HOME Subsidy is provided to a homebuyer.

The Recapture provision will ensure that the City of Modesto recoups all or a portion of the HOME assistance to the homebuyers, if the housing does not continue to be the principal residence of the family for the duration of the affordability period.

Per, 24 CFR 92.254(a)(5)(ii)(A), In establishing recapture requirements, the City of Modesto is subject to the limitation that when the recapture requirement is triggered by a sale (voluntarily or involuntarily) of the housing unit, and there are no net proceeds or the net proceeds are insufficient to repay the HOME investment due, the City of Modesto will only recapture the net proceeds, if any. The net proceeds are the sales price minus superior loan repayment (other than HOME funds) and any closing costs.

Of the recapture options described in 92.254(a)(5)(ii)(A), the City of Modesto will use a the "Shared Net Proceeds" option as outlined in 24 CFR 92.254(a)(5)(ii)(A)(3). With this option, if the net proceeds are not sufficient to recapture the entire HOME investment, the City and original homebuyer will share the net proceeds.

To calculate the amount of net proceeds (or shared appreciation) to be returned to the City the following formula will be applied:

$$\frac{\text{HOME investment}}{\text{HOME Investment + Homeowner Investment}} \times \text{Net proceeds} = \text{HOME amount to be recaptured}$$

To calculate the amount of net proceeds (or shared appreciation) to available to the homebuyer the following formula will be applied:

$$\frac{\text{HOME investment}}{\text{Direct HOME Subsidy + Homeowner Investment}} \times \text{Net proceeds} = \text{HOME amount to be recaptured}$$

Since the HOME rule limits recapture to available net proceeds, the City will only recapture what is available from net proceeds. In this case, the City is not required to repay the difference between the total direct HOME subsidy and the amount the City is able to recapture from available net proceeds.

3. A description of the guidelines for resale or recapture that ensures the affordability of units acquired with HOME funds? See 24 CFR 92.254(a)(4) are as follows:

When HOME funds are used for resale or recapture, the City will follow the following guidelines:

Pursuant to 24 CFR 92.254(a)(5)(ii), the City requires that HOME funds be recaptured if the property does not continue to be the principal residence of the buyer for the duration of the Affordability Period secured by an Affordable Housing Covenant. The Recapture Provision shall apply to a HOME assisted property only when a Direct HOME Subsidy is provided to a homebuyer.

The Recapture provision will ensure that the City of Modesto recoups all or a portion of the HOME assistance to the homebuyers, if the housing does not continue to be the principal residence of the family for the duration of the affordability period.

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To calculate the amount of net proceeds (or shared appreciation) to available to the homebuyer the following formula will be applied:

$$\frac{\text{HOME investment}}{\text{Direct HOME Subsidy + Homeowner Investment}} \times \text{Net proceeds} = \text{HOME amount to be recaptured}$$

Since the HOME rule limits recapture to available net proceeds, the City will only recapture what is available from net proceeds. In this case, the City is not required to repay the difference between the total direct HOME subsidy and the amount the City is able to recapture from available net proceeds.

4. Plans for using HOME funds to refinance existing debt secured by multifamily housing that is rehabilitated with HOME funds along with a description of the refinancing guidelines required that will be used under 24 CFR 92.206(b), are as follows:

The City does not intend to use HOME funds for refinancing activities.

Emergency Solutions Grant (ESG)

Reference 91.220(l)(4)

1. Include written standards for providing ESG assistance (may include as attachment)

The City, in consultation with Continuum of Care stakeholders, developed policies and procedures for providing ESG assistance. The policies and procedures adopted are in accordance with HUD and HCD guidelines.

Standards for providing ESG homelessness prevention and rapid re-housing assistance include targeting households with dependent children and persons experiencing homelessness connected to or eligible to receive (within 6 months) assistance from mainstream benefits and services.

2. The City's ESG policies may be accessed at the following website: https://www.modestogov.com/DocumentCenter/View/6198/Section-5---Emergency-Solutions-Grants**If the Continuum of Care has established centralized or coordinated assessment system that meets HUD requirements, describe that centralized or coordinated assessment system.**

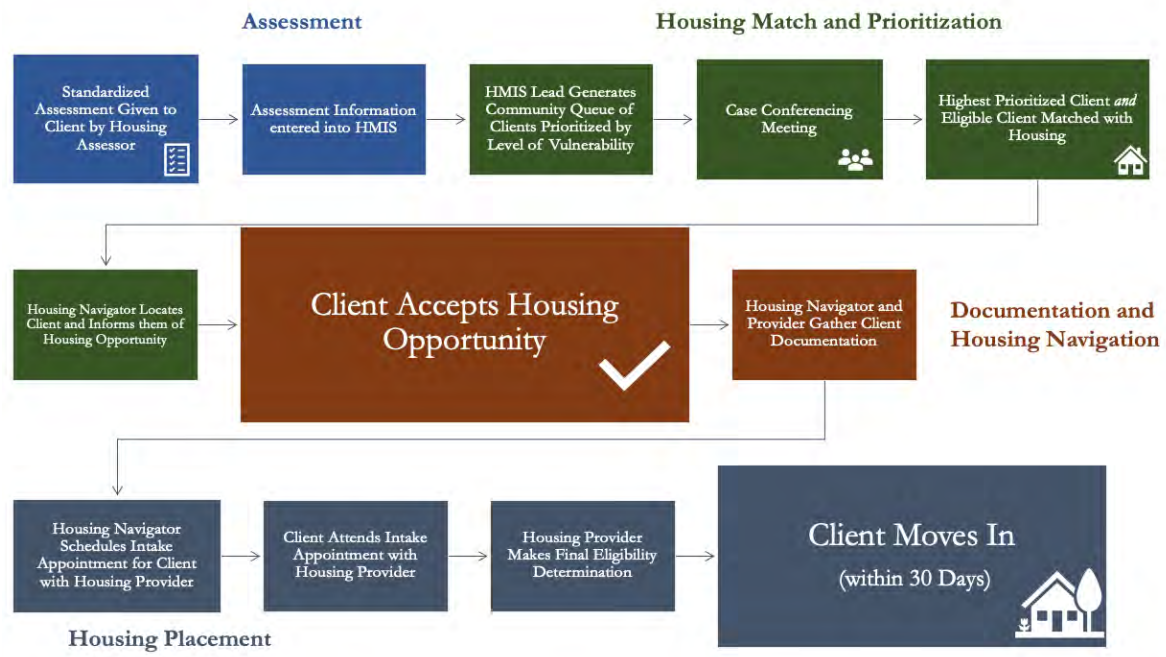
The CoC continues to work with partners and stakeholders in the implementation of the Coordinated Entry System (CES) process. Coordinated Entry (CE) is a consistent, community wide intake and placement process through which people experiencing homelessness are efficiently connected to available housing services within the community. With Coordinated Entry, homeless individuals and families complete standard triage assessment survey that identifies the best type of services for that household. Participating programs accept referrals from the system, reducing the need for people to traverse the county seeking assistance at every provider separately. The process helps prioritize housing and homeless assistance based on vulnerability and severity of service needs to ensure that people who need assistance the most can receive it in a timely manner. The process also provides information about service needs and gaps to help plan assistance and identify needed resources in our community. The community has worked hard to improve on this process and ensure that we are assisting poverty-level families not only with prioritizing them for their housing needs but assessing all other needs. Now that these needs are assessed case managers will continue reaching out to the members to connect to applicable services until housing becomes available.

Currently, the CoC holds weekly CE meetings/conference calls with housing/service providers where the list of homeless individuals who have been vetted through the CES process is reviewed for gauging individual housing readiness. Each individual is assessed as to housing readiness and is placed in any housing available within the community.

The *Coordinated Entry System Policies and Procedures Manual* was updated in January 2020. The manual outlines a process that consists of four (4) phases:

1. Assessment
    a. During this phase all community members experiencing homelessness or chronic homelessness are to be assessed by a Housing Assessor and their Standardized Assessment (uniform community assessment forms) score is placed a community queue for housing.
2. Housing Match and Prioritization
    a. The Case Conferencing Team will meet to review the community housing queue and begin to match eligible participants with housing opportunities. These Case Conferencing Teams meet weekly or more frequently based on need.
3. Documentation and Housing Navigation
    a. In this phase, official eligibility documentation, as standardized by the CoC, are gathered to prepare a household for an available housing intervention. The Housing navigator works with Housing Providers to guide a household through the referral and move-in process.
4. Housing Placement
    a. This phase includes ensuring that the households is ready for move-in and documenting client acceptance and move-in date in HMIS.

A detailed image below indicates specific steps within each phase.



For the full Coordinated Entry Policies and Procedures Manual, please find it at this link -> https://csocstan.com/coordinated-entry-system-ces-policies-and-procedures-manual/

3. Identify the process for making sub-awards and describe how the ESG allocation is made available

to private nonprofit organizations (including community and faith-based organizations).

The City of Modesto competitively awards ESG funding through an RFP process. This RFP process conforms to the City of Modesto's rigorous procurement process, including public noticing and utilizing its ZoomGrants online based system. The funding priorities as it relates to ESG are funding emergency shelter to the maximum extent possible and prioritizing rapid re-housing and homelessness prevention.

The RFP Process is undertaken through the following steps:

1. The City publishes a Notice of Funding Availability (NOFA)
2. The City holds are mandatory technical workshop for those organizations planning to apply for funds
3. The City conducts a technical review on all applications received
4. The City submits technical review notifications
5. Following technical review notifications, the City allows organizations one week to appeal their technical review determination
6. Grant presentations are made to the Modesto Grant Review Committee
7. Award notifications are made
8. Associated projects and planned activities are included in the Annual Action Plan that is presented to City Council
9. Sub-recipient grant agreements are finalized

4. If the jurisdiction is unable to meet the homeless participation requirement in 24 CFR 576.405(a), the jurisdiction must specify its plan for reaching out to and consulting with homeless or formerly homeless individuals in considering policies and funding decisions regarding facilities and services funded under ESG.

The City of Modesto works very closely with the CoC which is made up of a representative group of diverse stakeholders, including persons experiencing homelessness and those who at one time in their lives had experienced homelessness. The CoC bylaws, amended in May 2017, identify the CoC Council Members[2]. Those bylaws state that "3 people who are of have experienced homelessness" are to be members of the CSOC council, elected/appointed by the general membership of the CSOC.

Alongside working with the CSOC, the City regularly participates in Stanislaus Homeless Alliance (SHA) discussions when developing policies and funding recommendations regarding facilities and services funded under ESG.

***5.* Describe performance standards for evaluating ESG.**

To develop performance standards and evaluate outcomes of projects and activities assisted by ESG funds, the City of Modesto uses performance measures captured annually by HMIS to evaluate the outcomes of projects assisted with ESG funds. The performance measures will help evaluate the

[2] https://csocstan.com/wp-content/uploads/2020/02/CSOC-Bylaws.pdf

performance to determine the most effective services and assist with future allocation of ESG funds. These include: length of homelessness, returns to homelessness, number of sheltered homes persons, employment and income growth for persons, homeless for the first time, and exit and retention to permanent housing.

Discussion

The City of Modesto consults closely and regularly with the CoC and its HMIS, ESG/HPRP, and Supportive Housing Program (SHP) subcommittees, which develop policies and procedures for these programs and has played an active role in building the service infrastructure to sustain and improve the coordinated entry system. This consultation includes but is not limited to reports and presentations that are placed on the CoC monthly meeting agendas, weekly coordinated entry meetings to place individuals in housing, and ongoing coordination amongst service providers related to housing placement of homeless individuals.

Appendix A
Community Meeting Summaries & Survey Results

Meeting Date: 10/07/2019	**District 4**	**Facility Name & Address:** **Airport Neighborhood Collaborative** 801 Empire Ave Modesto, Ca. 95354
No Comments Received		
Meeting Date: 10/28/2019	**District 3**	**Facility Name & Address:** **Trinity United Presbyterian Church** 1600 Carver Rd Telle Center #502 Modesto, 95350
No Comments Received		
Meeting Date: 10/29/2019	**District 1**	**Facility Name & Address:** **Firehouse 6** 2700 Standiford Avenue Modesto, CA 95350
Meeting attended by two elected officials General discussion was held with Cloudburst consultant & Staff. **Notes:** • Attendees would like to see fair housing education to owners of accessory dwelling units. • Attendees would like to know how this the topics of HUD funding and fair housing relates to the more affluent districts.		
Meeting Date: 10/30/2019	**District 5**	**Facility Name & Address:** **Stanislaus County Veterans Center** 3500 Coffee Rd Suite 114/115 Modesto, CA 95355
1 elected official/no community members. **Notes:** • No meeting occurred		
Meeting Date: 10/30/2019	**District 2**	**Facility Name & Address:** **Stanislaus Regional Housing Authority – Trunk or Treat** 1701 Robertson Rd Modesto, 95351
No Comments Received		
Meeting Date: 10/31/2019	**District 2**	**Facility Name & Address:** **Graceada Park Veteran Stand Down Event** 401 Needham St. Modesto, 95354
No Comments Received		

Appendix A
Community Meeting Summaries & Survey Results

Meeting Date: 11/01/2019	District 2	Facility Name & Address: **The Center Church – South Modesto** 2019 Frazier Street Modesto, CA 95358

2 elected officials 11 community members

Notes:

- Big companies in the community don't pay enough to avoid overburdened households
- 40% of the issues are housing providers and expensive housing; 60% is the lack of available housing.
- Homelessness issues – Most homeless families are not ready for housing and need to learn basic skills for living alone
- Economic Development – Second chance programs and support for small businesses are needed
- Infrastructure – need a Community Center for South Modesto residents
- Need for additional law enforcement and code enforcement
- More oversight of the Housing Authority; address abuse of programs by some who receive assistance
- Need for Financial literacy programs that partner with the CRA programs in the area.
- Better Community outreach programs active in the communities
- Local private housing not being updated
- Infrastructure improvements were generally discussed in County area of the neighborhood and the City's ability to only invest in City jurisdiction.
    - Questions were asked about the possibility of the City and County investing HUD funds in areas bordered by both jurisdictions.
- Illegal dumping in alleys and roadways is an issue in the City and in County pockets

Appendix A
Community Meeting Summaries & Survey Results

Meeting Date: 11/06/2019	District 4	Facility Name & Address: **Airport Neighborhood Collaborative** 801 Empire Ave Modesto, Ca. 95354

2 elected officials and 24 community members

Notes:

- Safety concerns: poor to no lighting makes everyone feel insecure
- Safety concerns: cars traveling really fast and no speed bumps
- Would like to see a cover over the local bus stop and lighting
- Out of area investors are improving properties and charging too much for them.
- Landlords are not fixing basic needs and telling tenants that they will increase rent if they do the repairs
- There is a need funding for legal aid to assist low income tenants facing eviction. Little to no assistance currently exists.
- People are coming from out of the neighborhood to illegally dump trash and the homeowners are being help responsible for it.
- Would like to see building incentives (i.e. reduced fees, etc.) to develop housing on vacant and blighted lots. Would like to see a rental rehabilitation program accessible to landlords.
- This is mostly a rental community
- Request code enforcement to do a presentation
- More job opportunities and activities for youth
- Would like to see a homeless facility built in the neighborhood to get rid of vacant properties and camping.
- Teaching financial literacy to youth
- Build new housing and improve existing housing making them safe
- Policies and plans that support growth

Fair Housing Discrimination:

- Discrimination for workers in agriculture
- Lack accessibility to housing without a social security numbers
- What can the City do to improve the housing situation?
    - Have workshops for landlords and tenants to educate them on the rights
    - Bring in organizations like grocery stores in the neighborhood
- Modesto is growing too fast with no plan on maintaining the older neighborhoods.

Appendix A
Community Meeting Summaries & Survey Results

Meeting Date: 11/07/2019	District 2	Facility Name & Address: **West Modesto King Kennedy Center** 601 S. Martin Luther King Dr. Modesto, CA 95351

3 elected officials 30 community members

Notes:

- Community needs more development
- Can't move out of the neighborhood; it's not affordable
- Need more affordable housing both rental and homeownership opportunities
- More resources for police and public safety
- Homelessness policing is needed
- More policies for Homeless and associated services
- Lots of illegal dumping, mostly in county pockets
- Roads throughout the City need better maintenance
- More affordable housing for seniors
- Improve the overall neighborhood through upkeep of the infrastructure
- More accountability to the City and housing authority
- City is refusing to adhere to its Housing Element
- Job creation and activities for youth in the neighborhood
- Gangs are penetrating low income neighborhoods
- Better public transit
- Economic Development: need more grocery stores, cost are high and lack of options.

Fair Housing

- Project Sentinel does not work
- Real Estate officials directing individuals to buy in certain areas due to nationality or race
- Landlords not accepting section 8 vouchers
- Out of area investors are buying properties and pricing them too high
- No protections for landlords

Meeting Date: 11/13/2019	District 5	Facility Name & Address: **Fire House 9** 4025 Fara Biundo Drive Modesto, Ca. 95355

1 elected official and 1 community member(not local to Modesto)

- Homelessness and affordable housing are issues throughout the County
- Education for landlords and new state laws may be helpful in the affordability issues.
- Need more housing type housing options, other than single family homes.
- Based on customer feedback, family composition is the most prevalent housing discrimination type (community member's line of work = property management).

Appendix A
Community Meeting Summaries & Survey Results

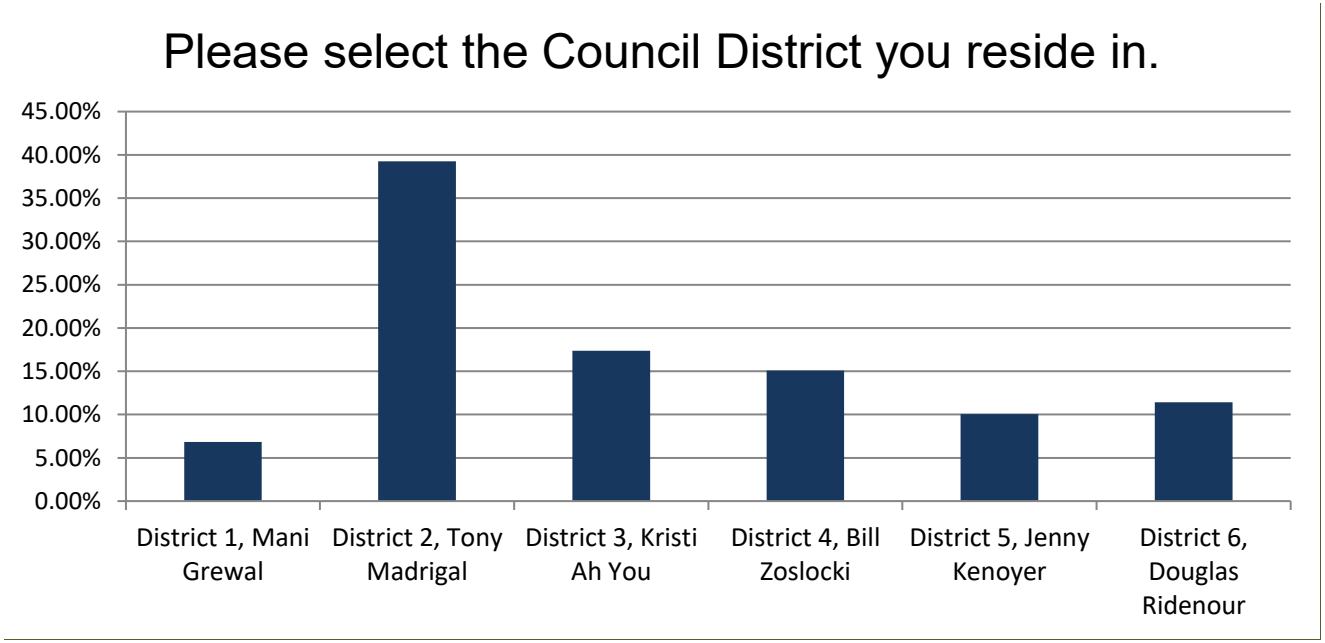
Meeting Date: 11/16/2019	**CoC Meeting**	
Representatives from community service providers and those organizations that attend the regularly scheduled Continuum of Care (CoC) meetings were present. Notes from the meeting were: • High rental costs and past evictions are formidable obstacles when trying to find housing for those individuals and families involved with the CoC • Additional money for training would be beneficial in maintaining the Homeless Management Information System (HMIS) • Affordability and availability of housing is very limited for those households in need of services. • Developers are not developing in the Valley – a developer noted that regulations act as an impediment when considering development • Services are needed throughout the region – most notably substance abuse treatment, job skill training, and mental health services • Affordable housing is an issue throughout the City, this is often even more of an issue for those large families that require larger units. • Mixed-use housing could be a contributor to additional affordable housing units		
Meeting Date: 11/20/2019	**District 5**	**Facility Name & Address:** **Boy Scout Club House – Enslen Park** 400 Enslen Ave, Modesto, CA 95354
4 community members • Homelessness and affordable housing are issues throughout the County • Education for low income families to help break generational habits and to teach them to be good residents and neighbors. • Need more housing type housing options, other than single family homes.		
Meeting Date: 01/09/2020	**CH&CDC**	
No Comments Received		
Meeting Date: 02/12/2020	**SHA**	
No Comments Received		
Meeting Date: 02/20/2020	**CoC**	
No Comments Received		
Additional Comments: • Representative from the local Marine Corp league would like to see his office receive education on homeless veteran programs in the area. They are referring individuals to programs and losing community trust when they don't qualify.		

Appendix A
Community Meeting Summaries & Survey Results

The Modesto Community Survey was posted online, and links were emailed out to stakeholder and citizen groups. The survey was left open for two months, opening in late September and closing in late November. The survey was made available in both English and Spanish and was available online and hard copies were also made available with City staff entering the results into the online system afterwards. A total of 226 residents responded to the survey.

- 29 respondents took the survey in Spanish
- 197 respondents took the survey in English

The graphs below each represent a question from the survey. Each graphic combines the responses of the English and Spanish surveys into a single data point.



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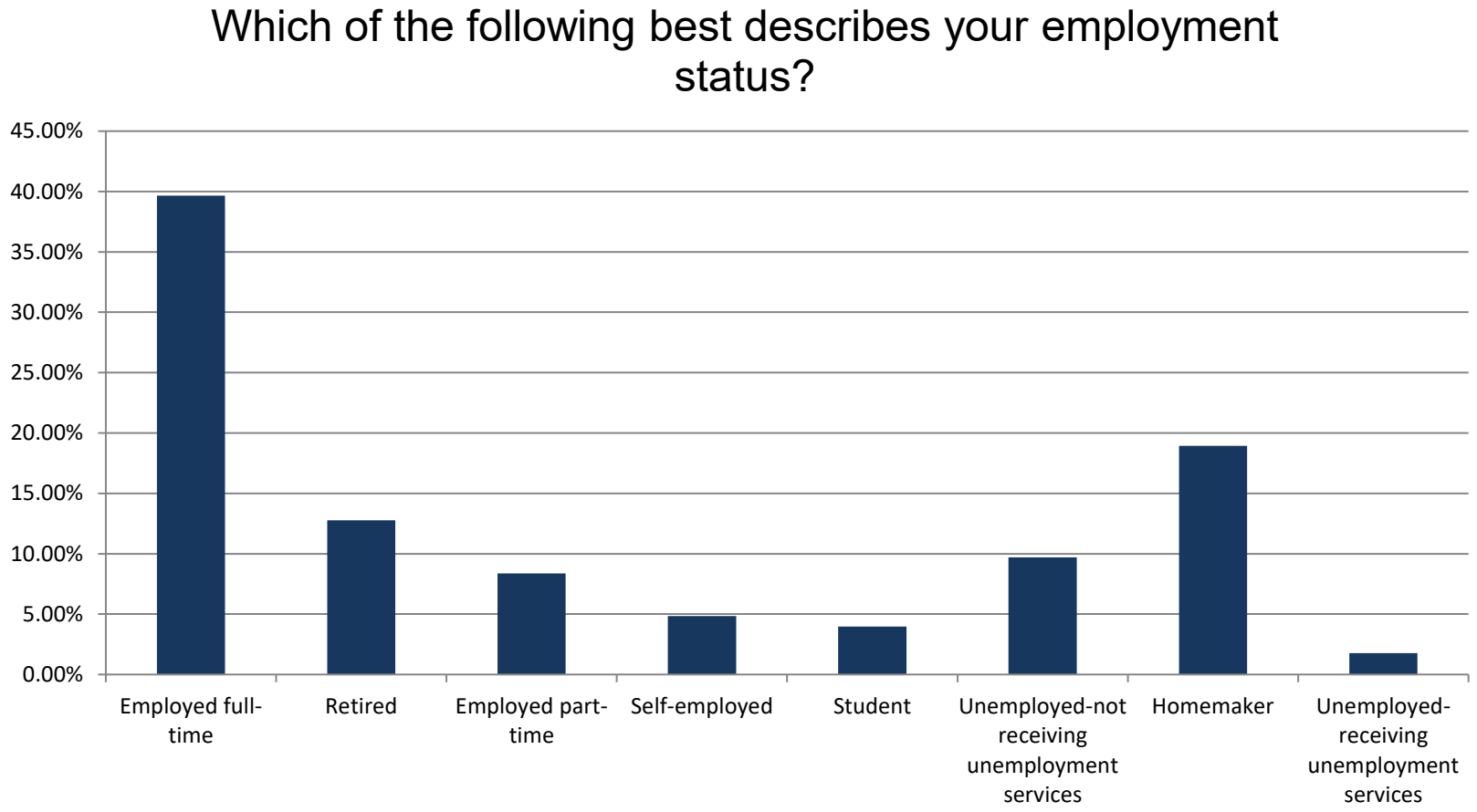

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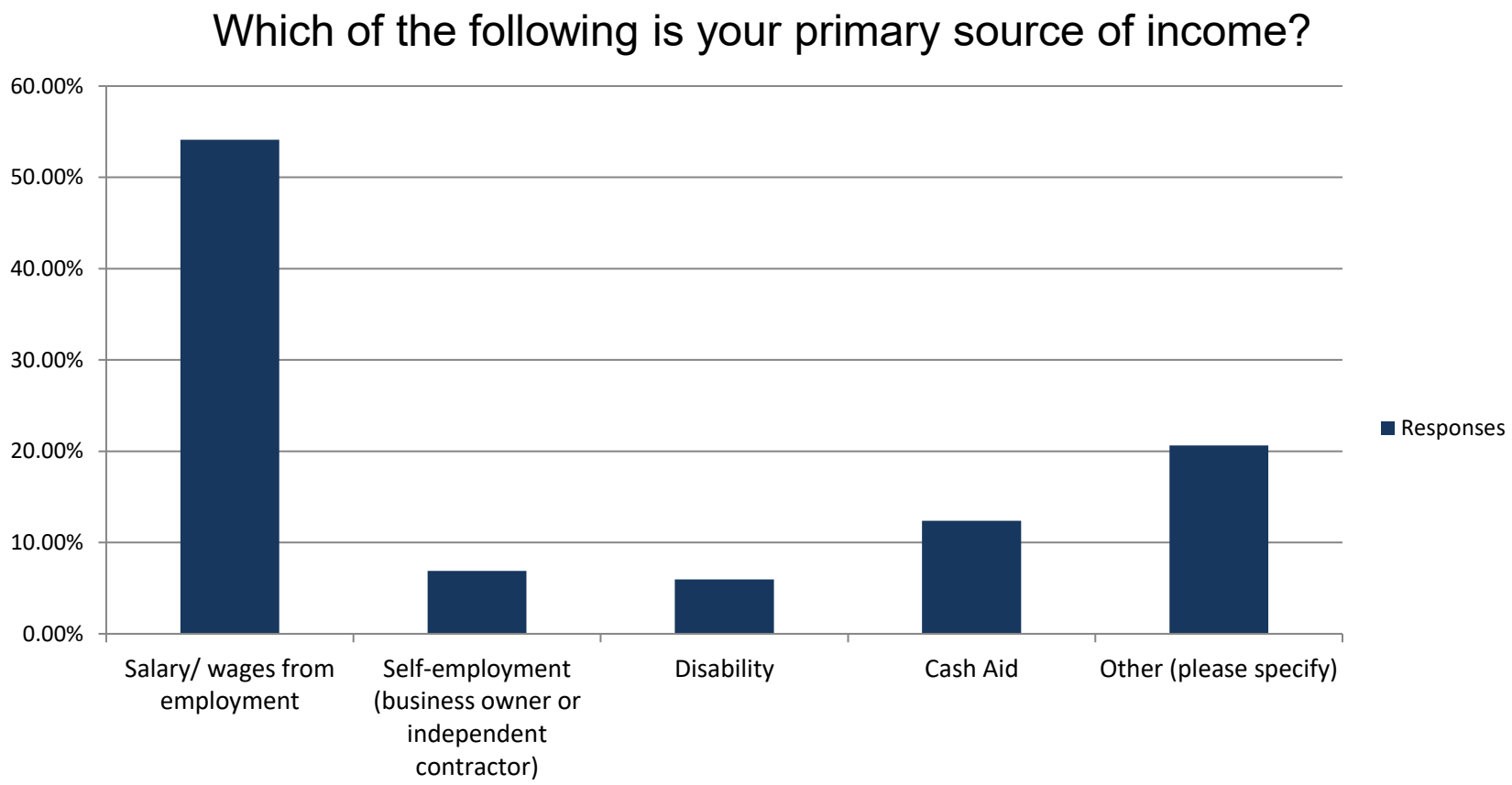

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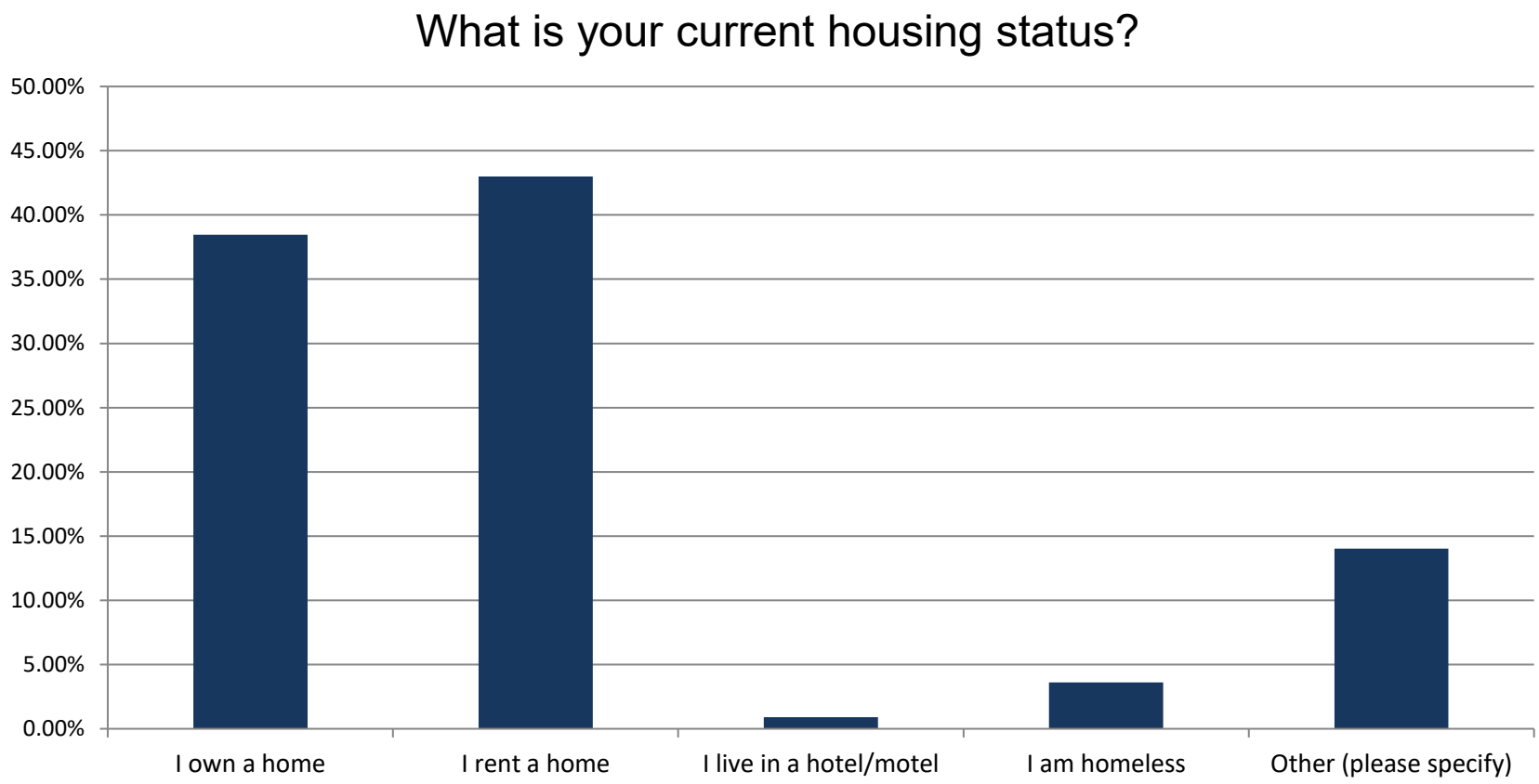
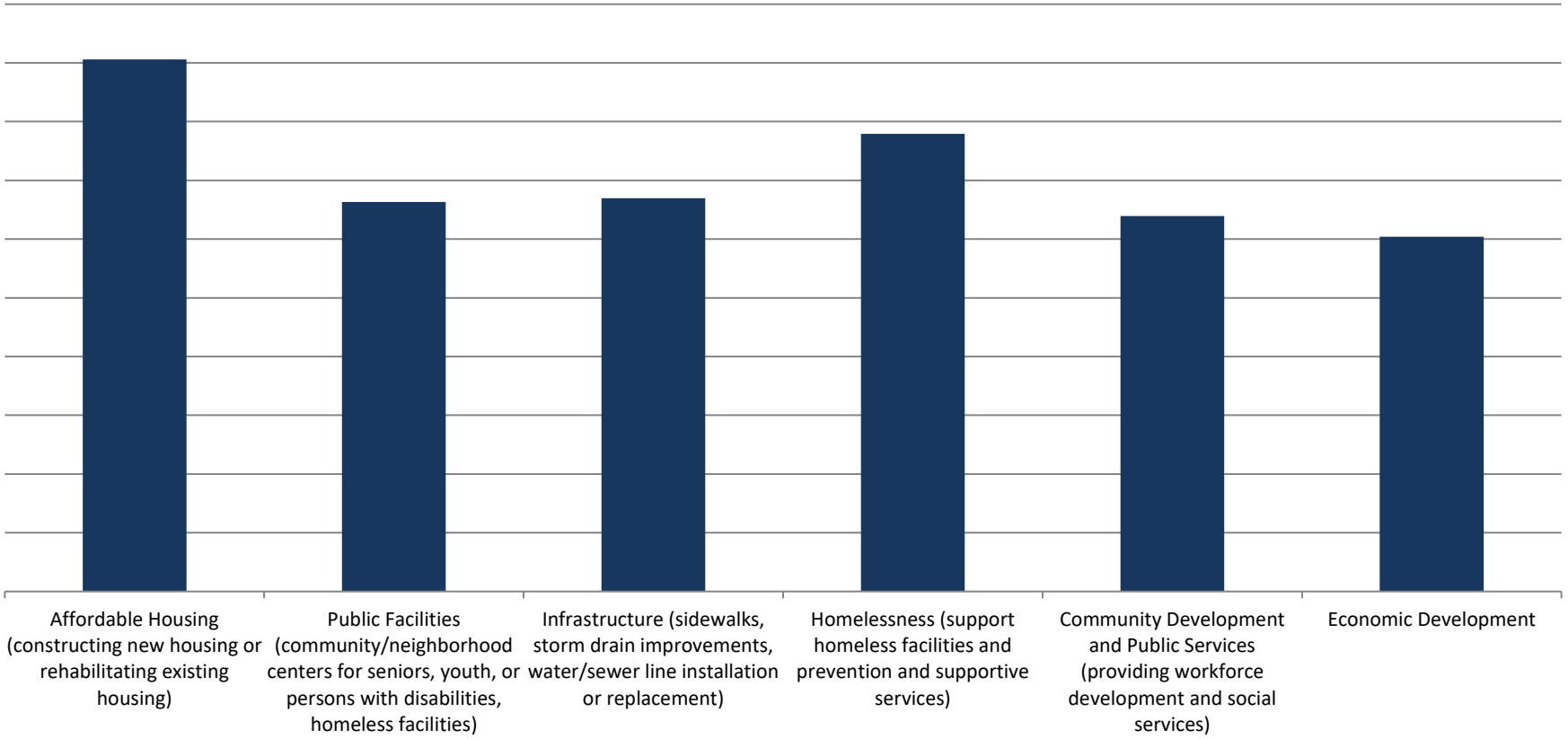


Appendix A
Community Meeting Summaries & Survey Results

What do you consider the greatest needs in your Council District over the next five years? Rank all options from 1 to 6, 1 being the greatest need.



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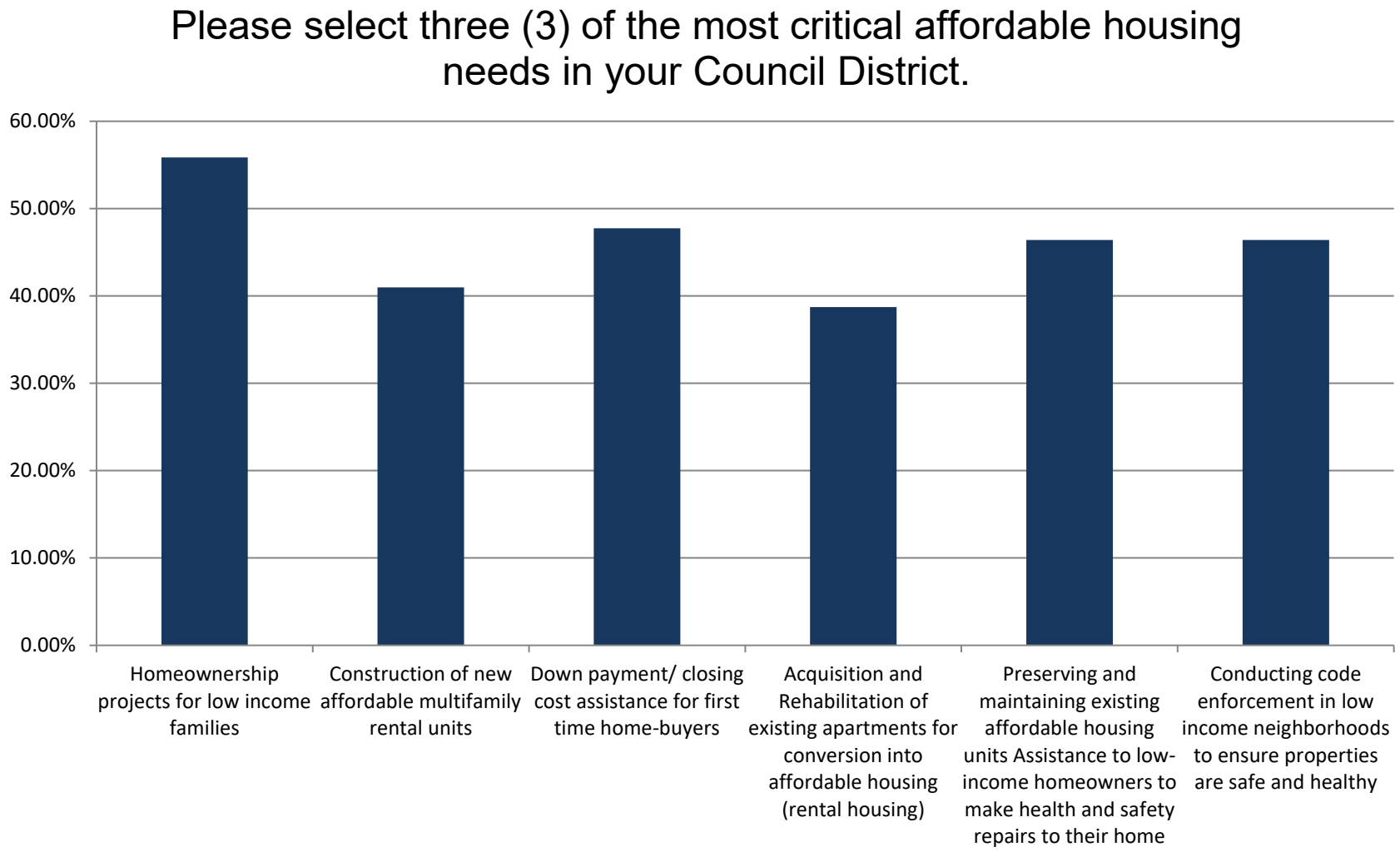
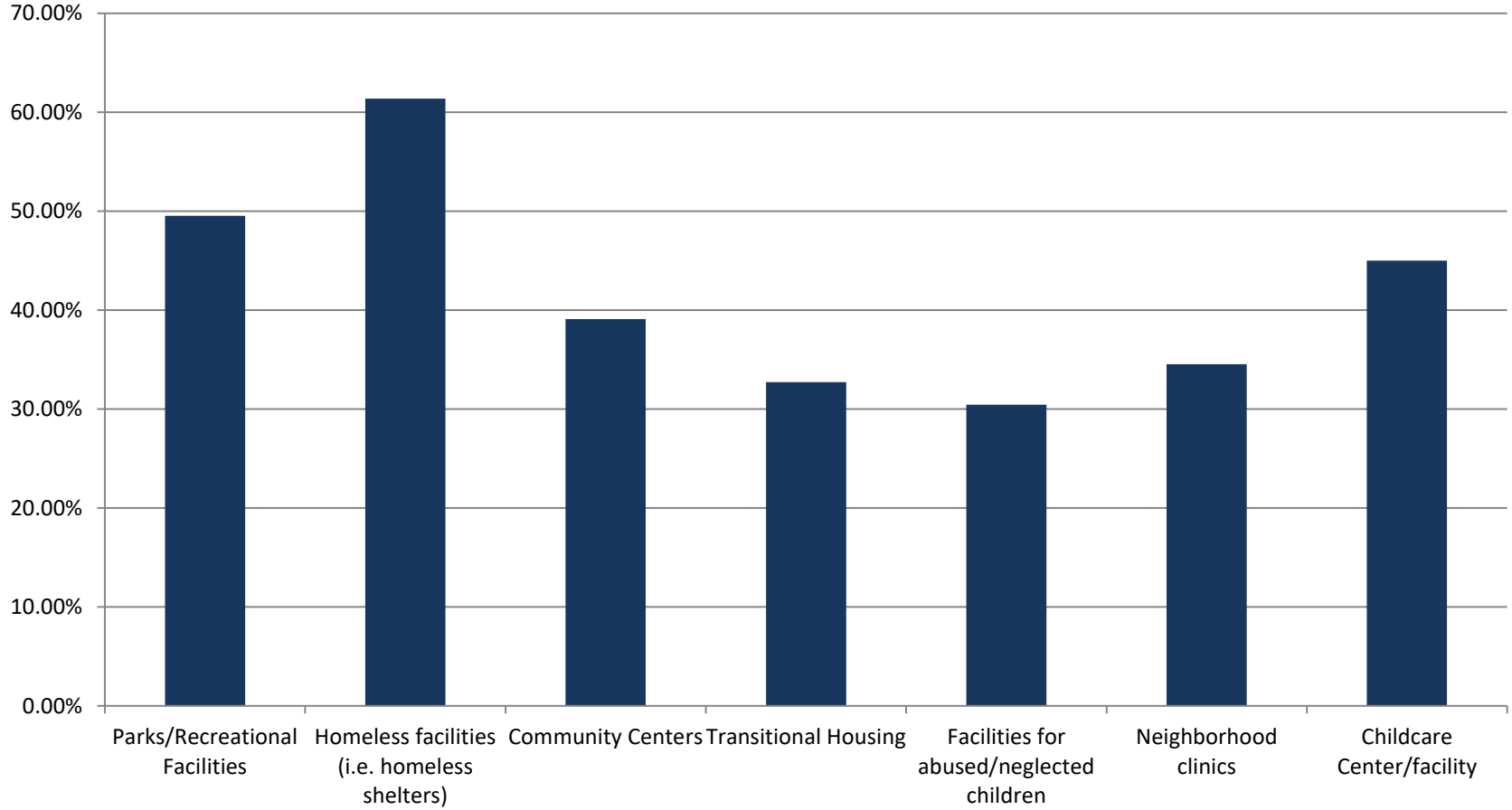


Appendix A
Community Meeting Summaries & Survey Results

Please select three (3) of the most critical public facility needs in your Council District. Construction of:



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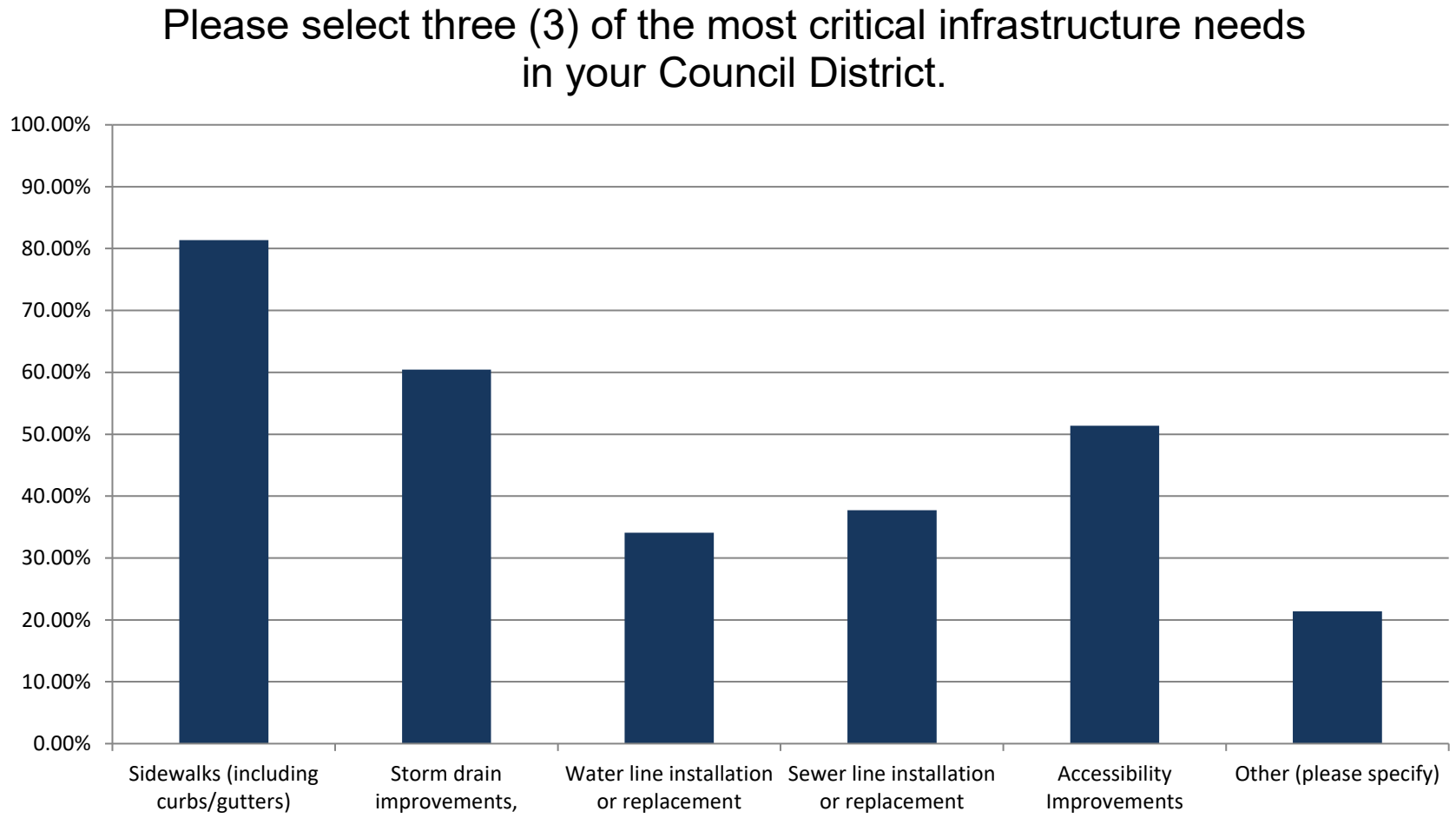
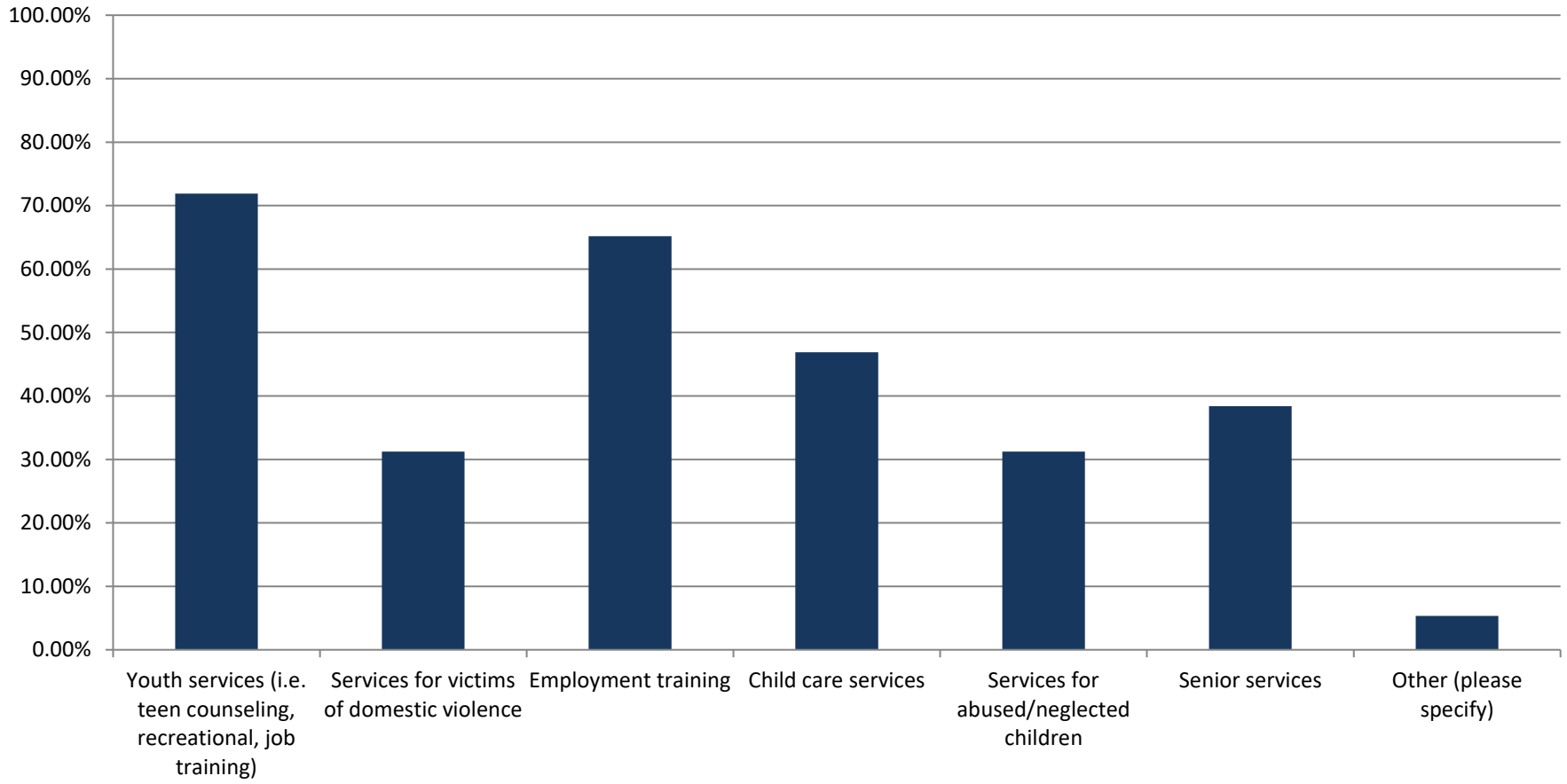


Appendix A
Community Meeting Summaries & Survey Results

Please select three (3) of the most critical community development needs in your Council District.



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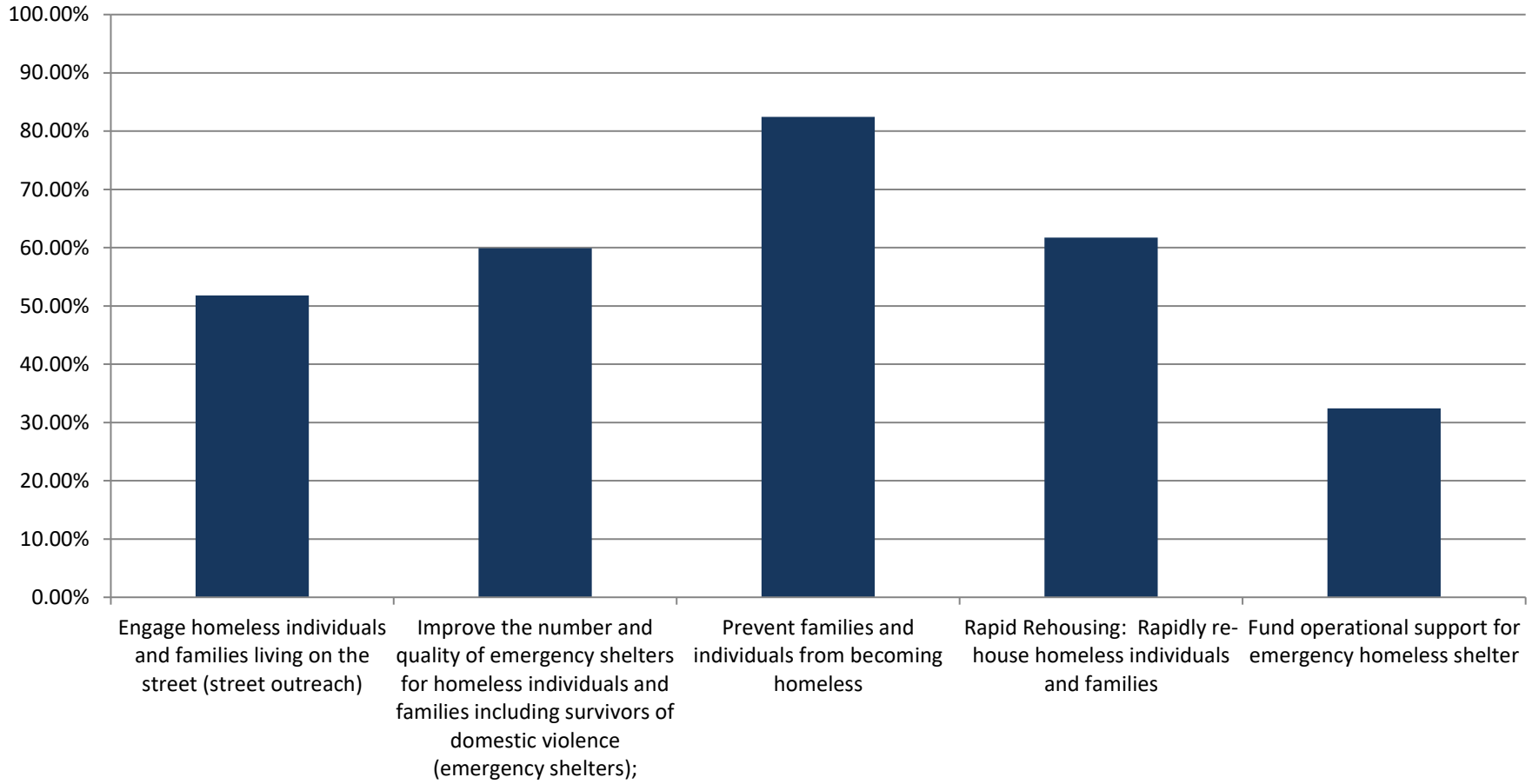
Please select three (3) of the most critical homeless needs in the City of Modesto.



Appendix A
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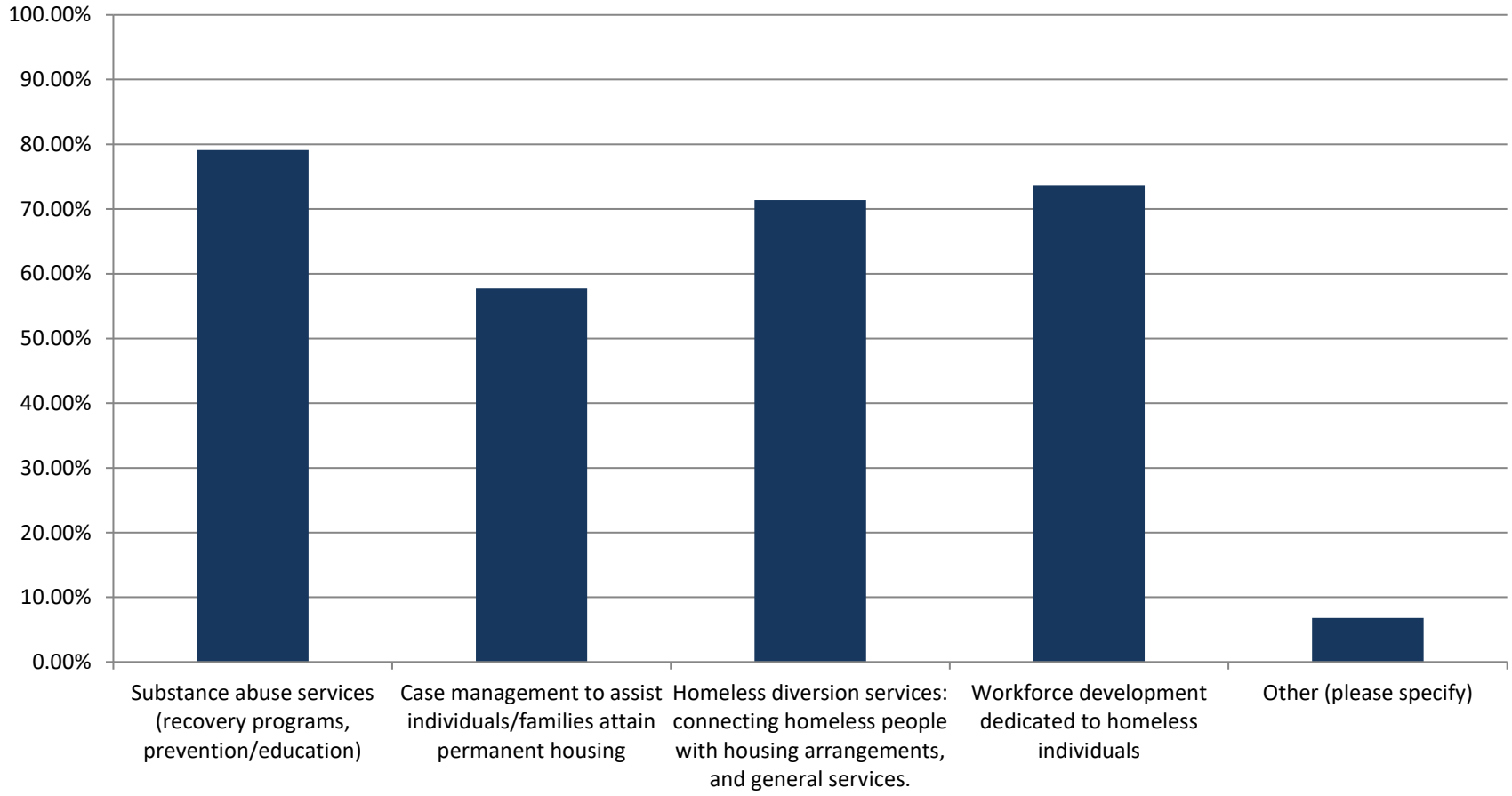
Please select three (3) of the most critical services for homeless individuals and families in the City of Modesto.



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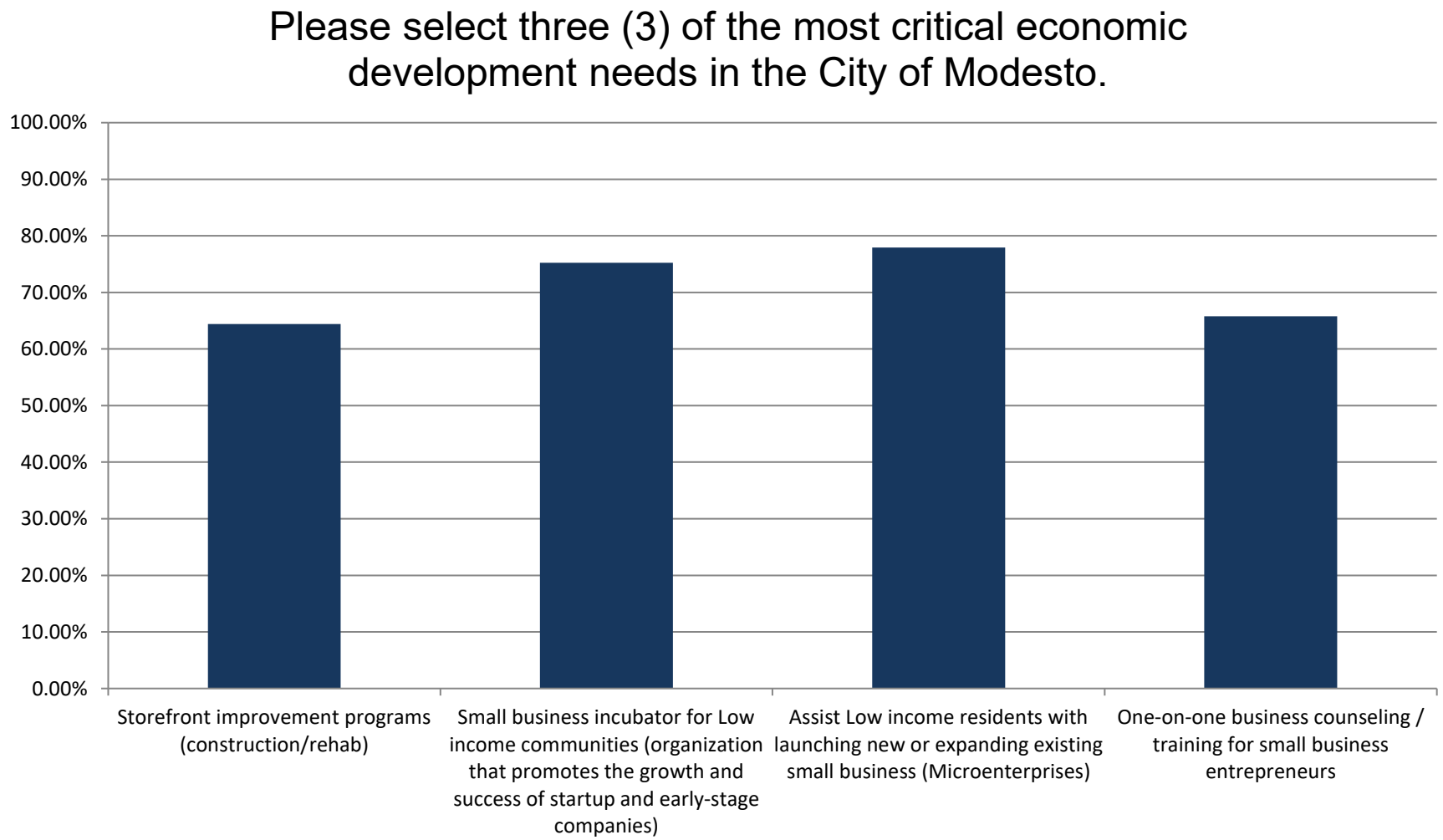

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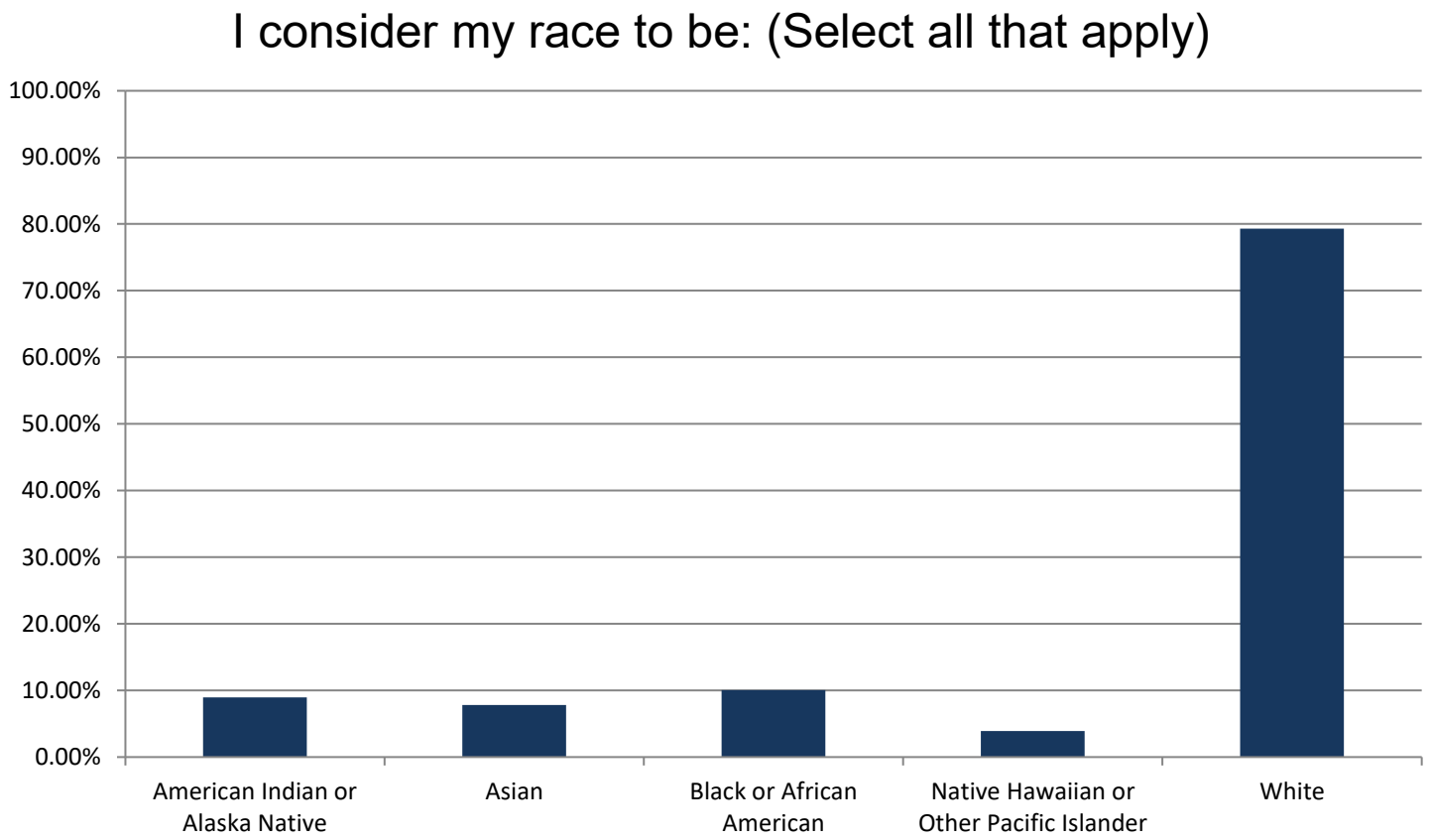

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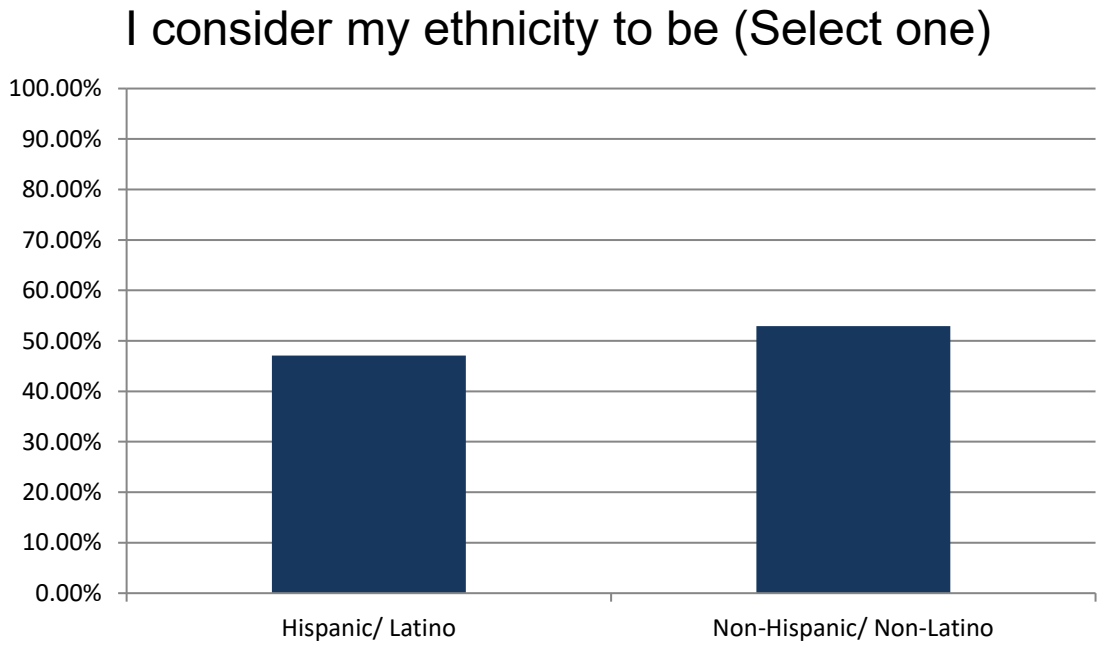

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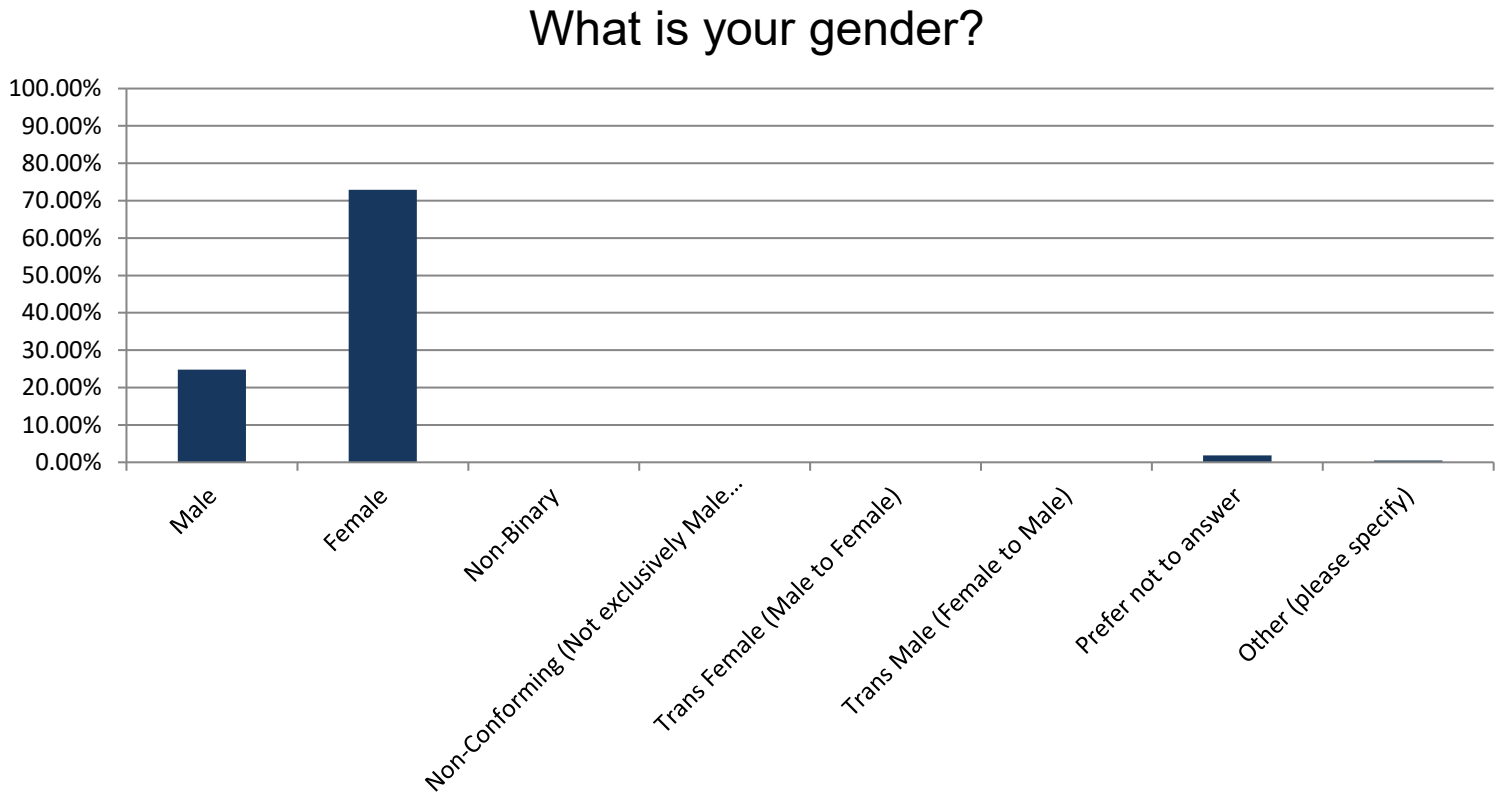

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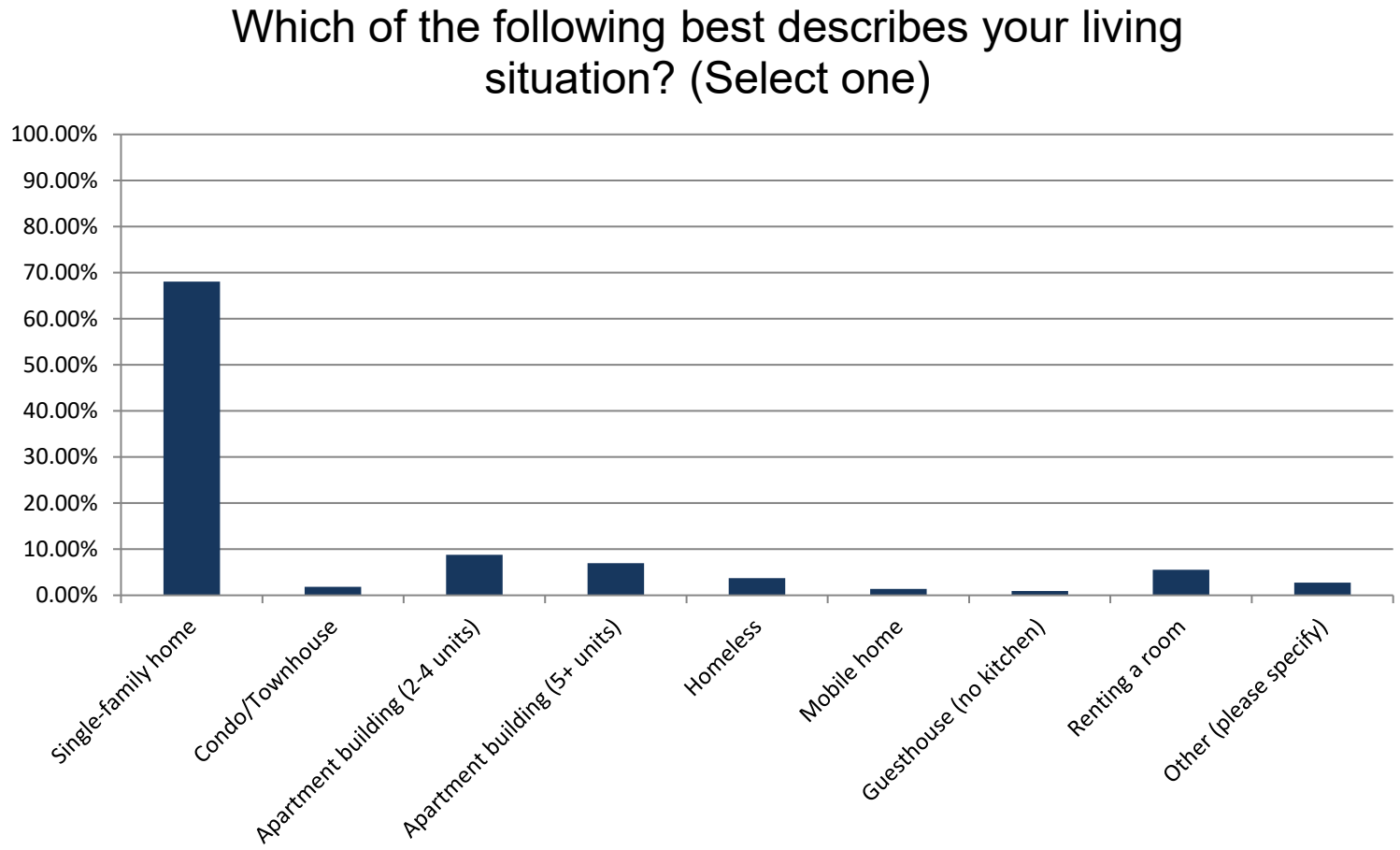

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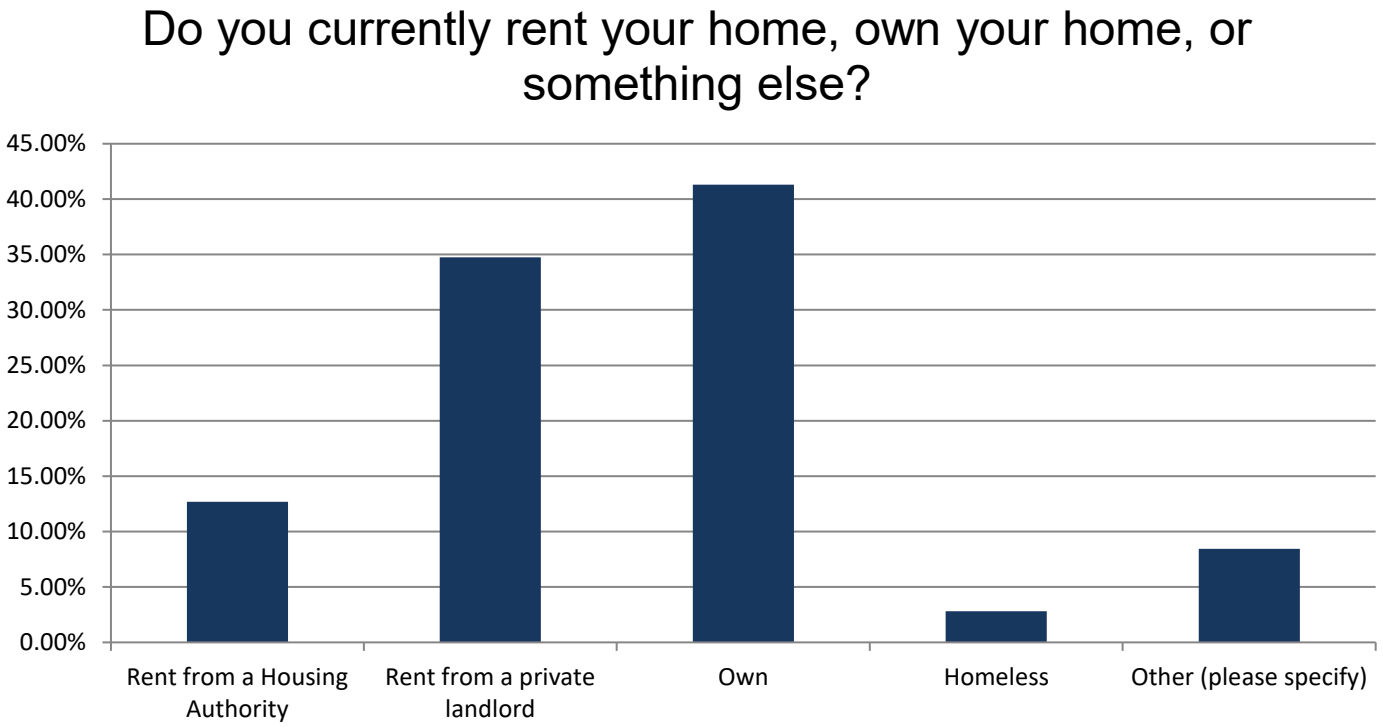

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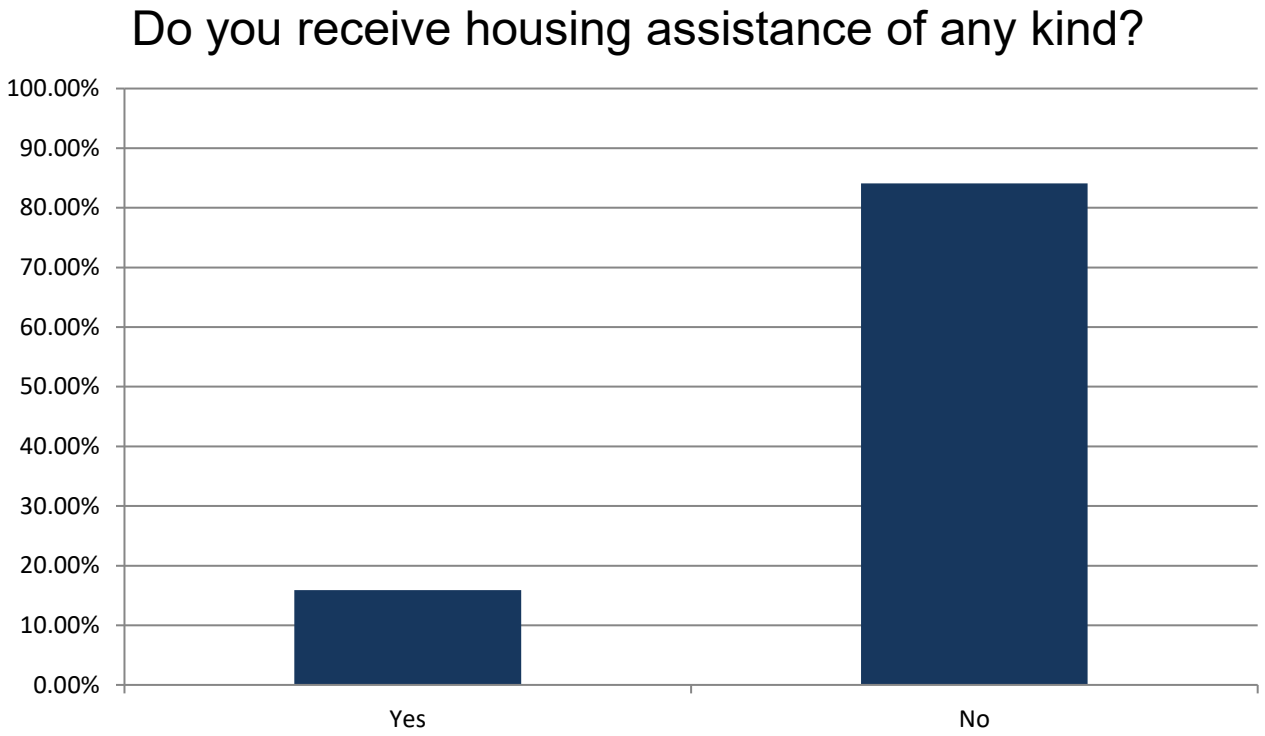

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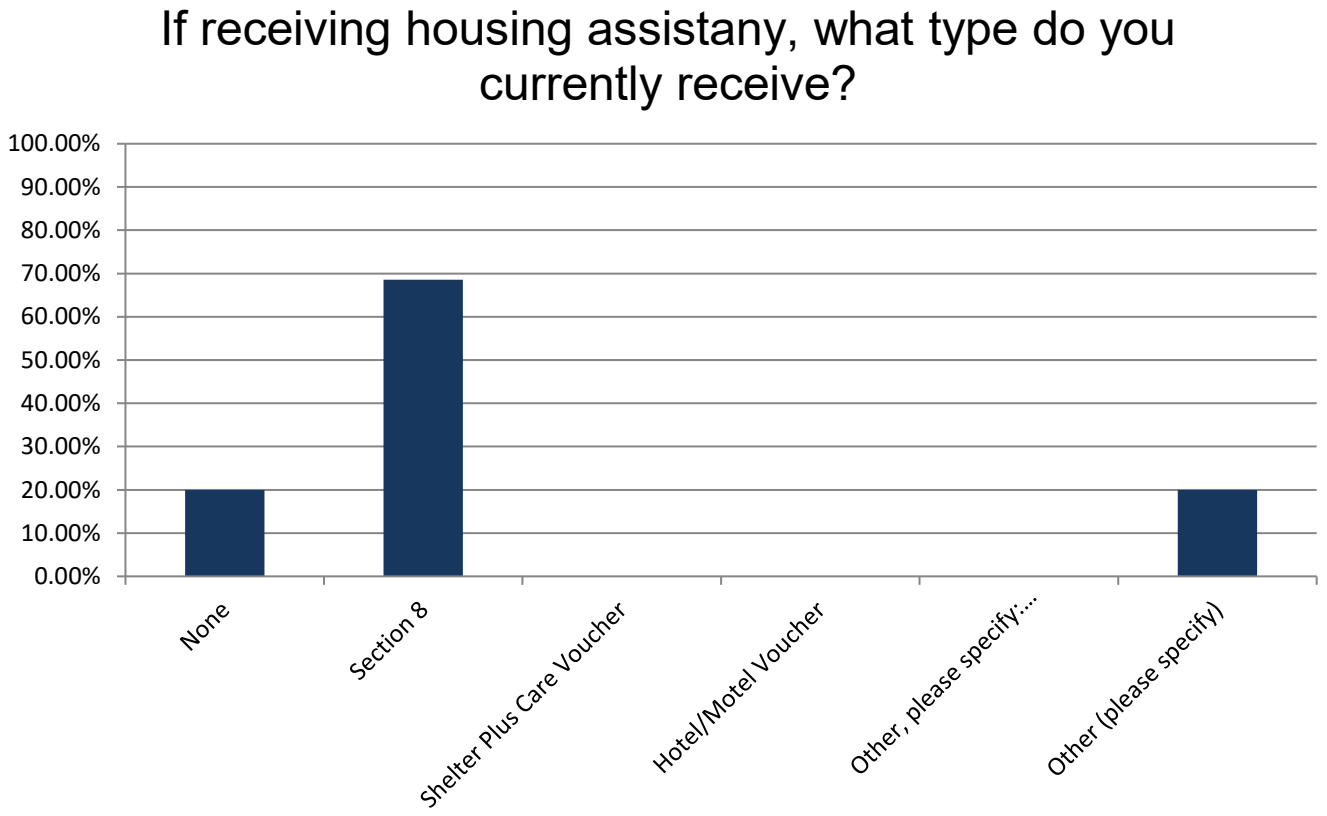

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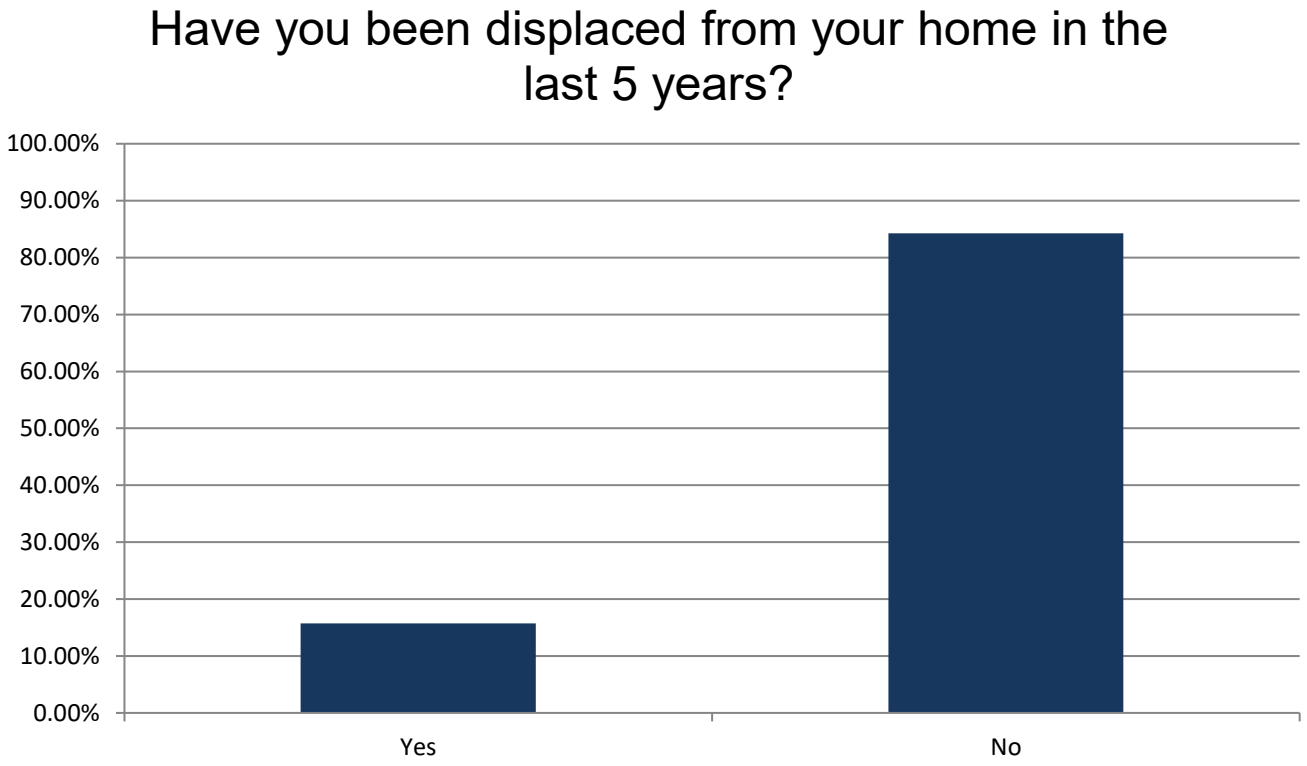

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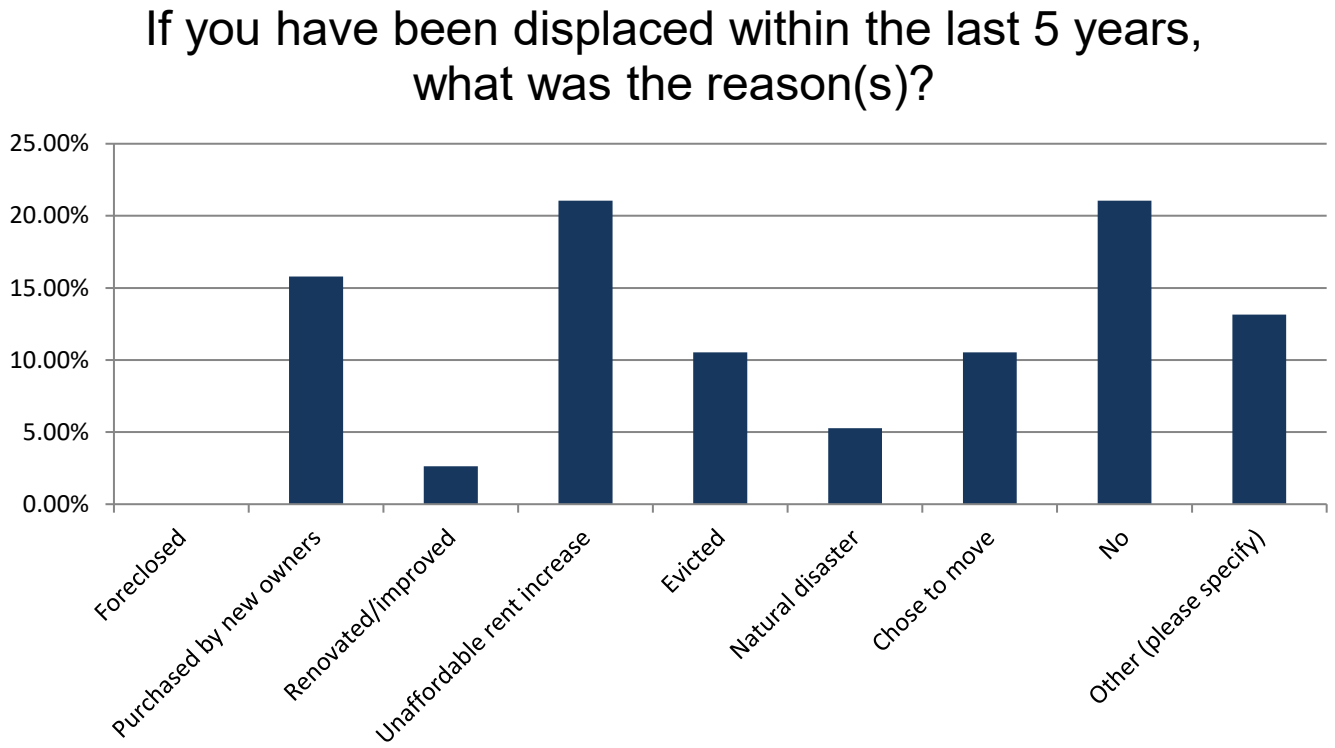

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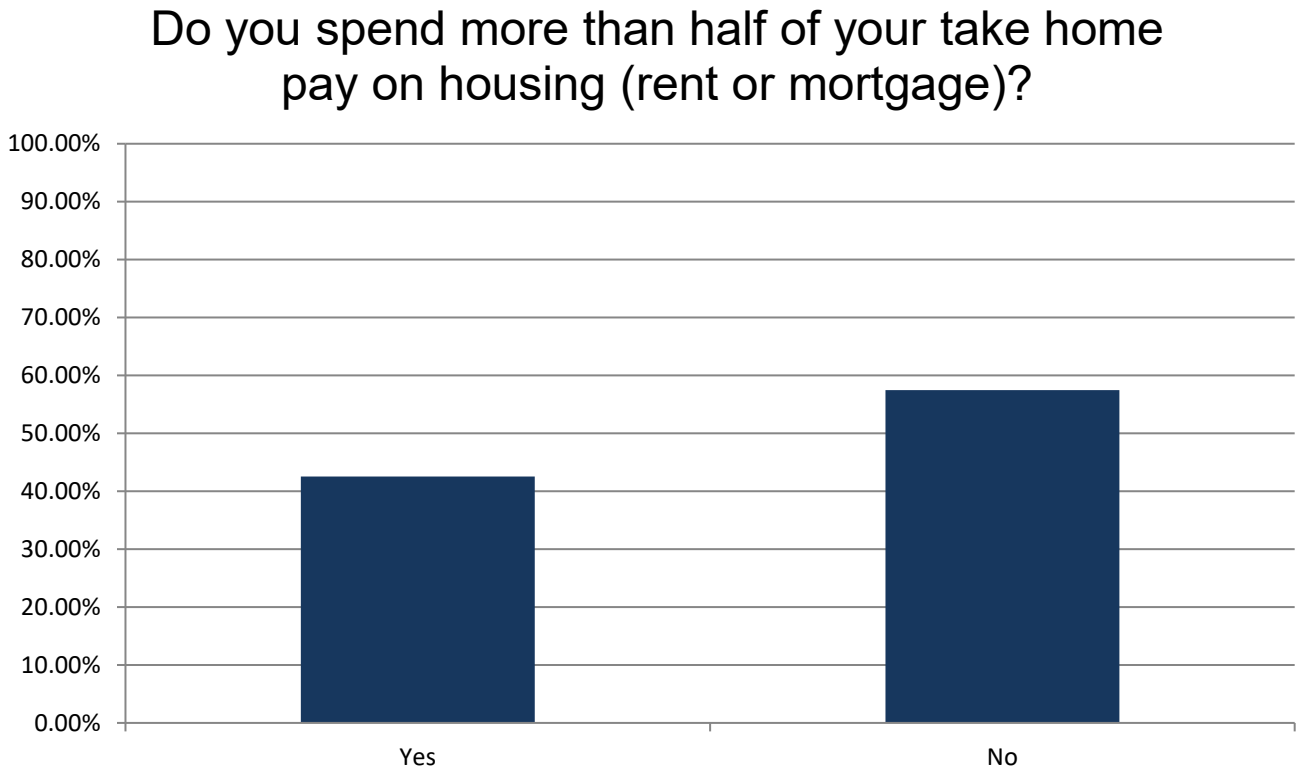

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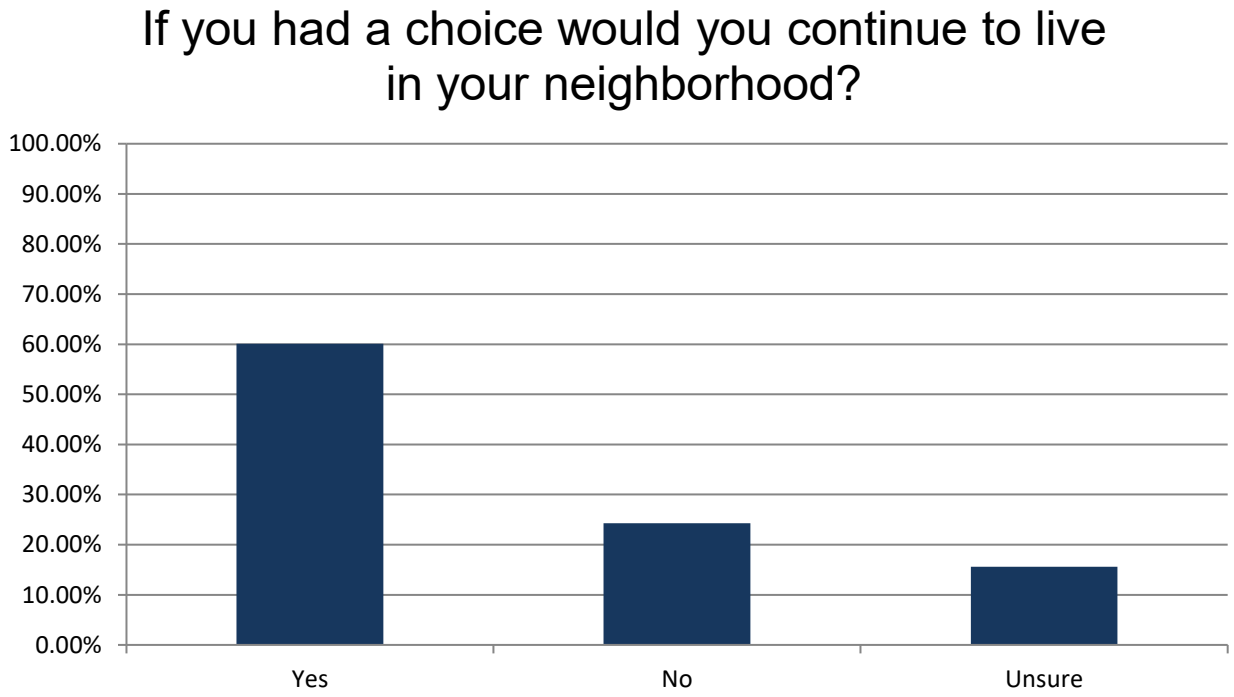

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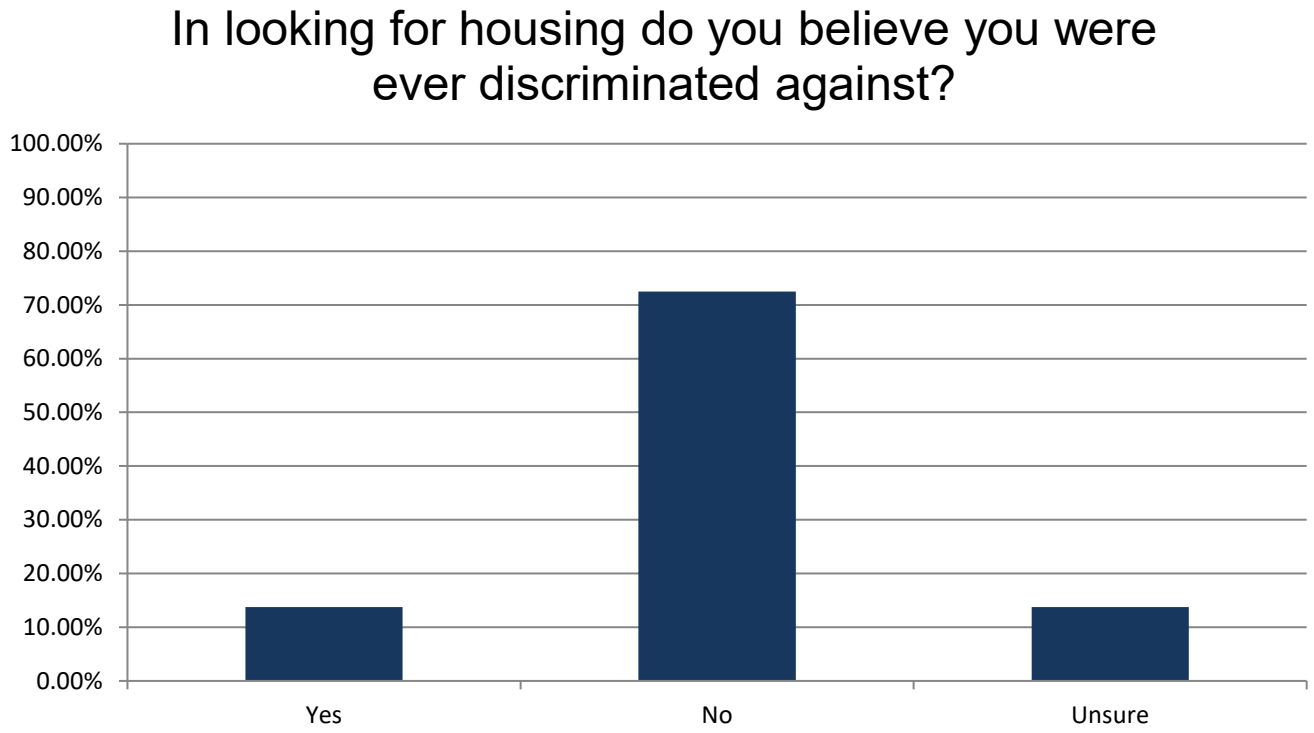

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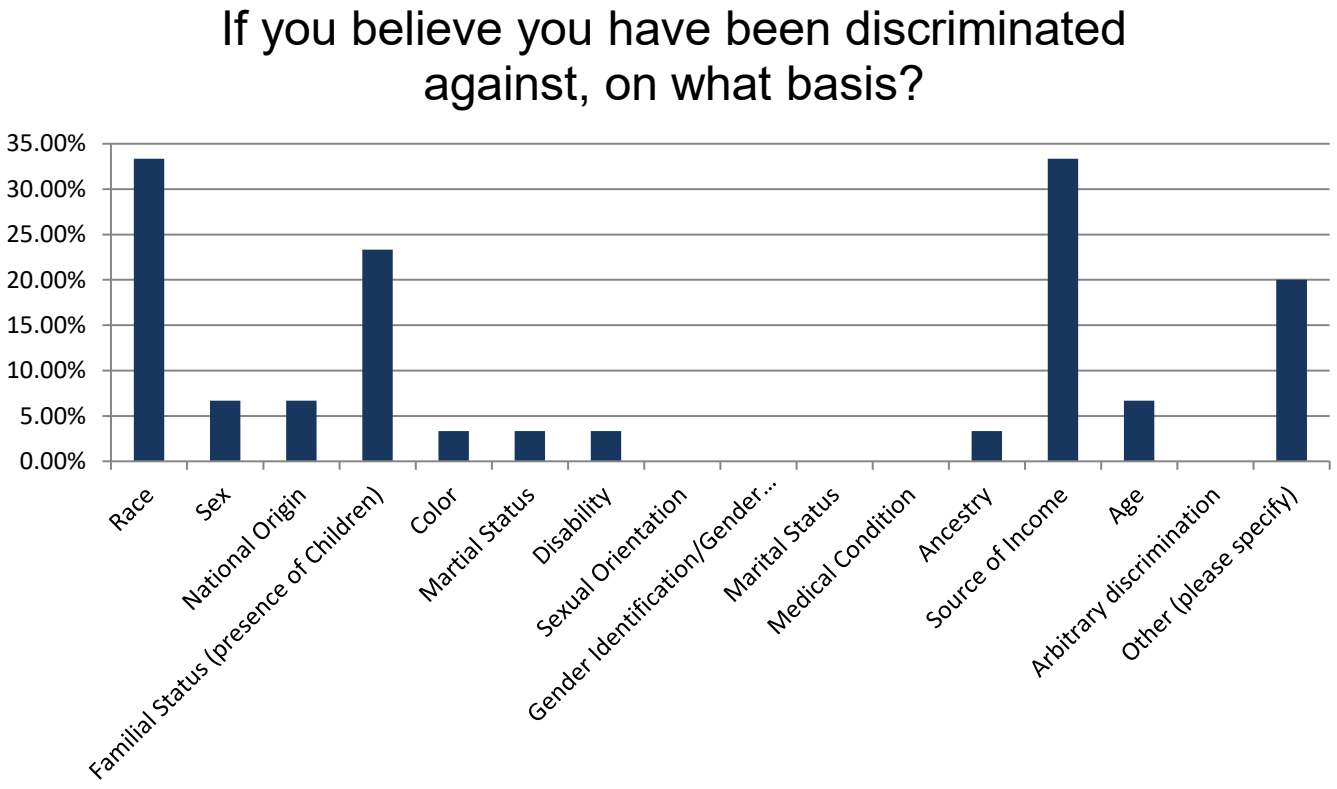

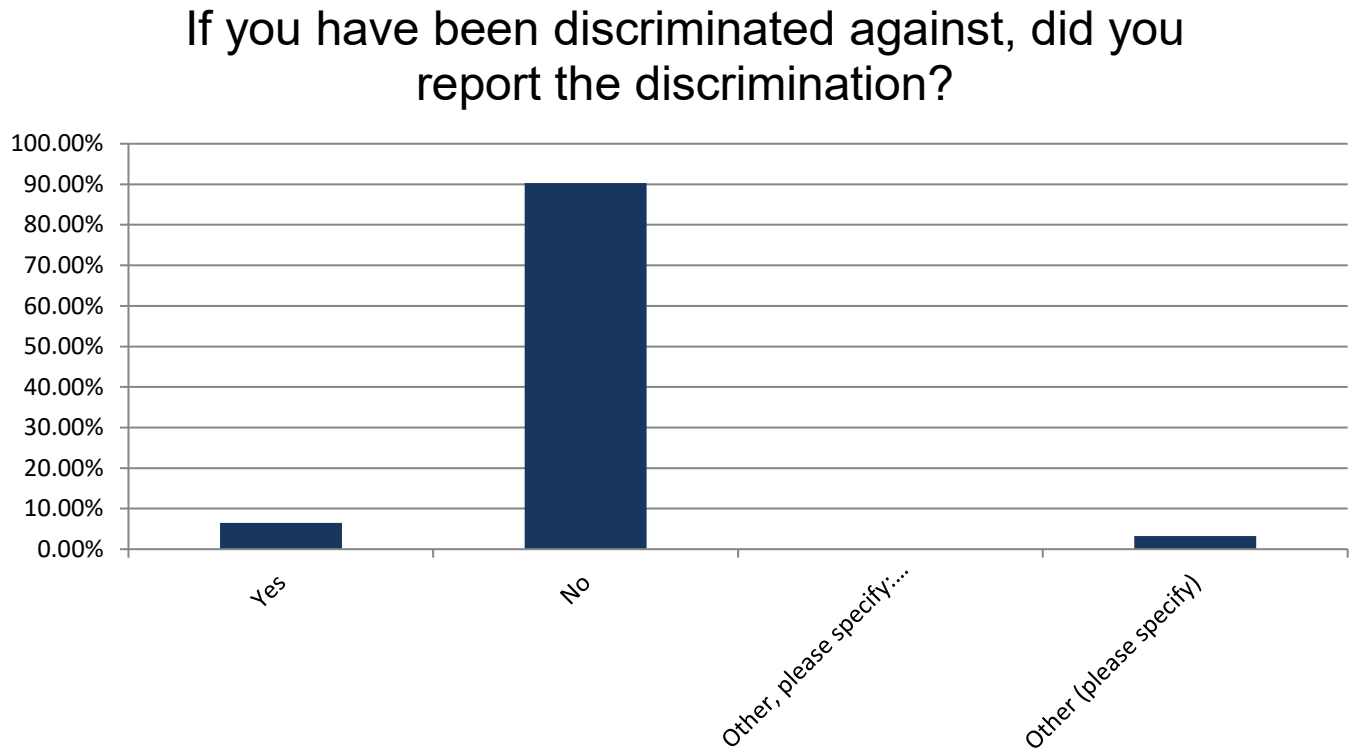
If you have been discriminated against, did you report the discrimination?
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Yes
No
Other, please specify:...
Other (please specify)

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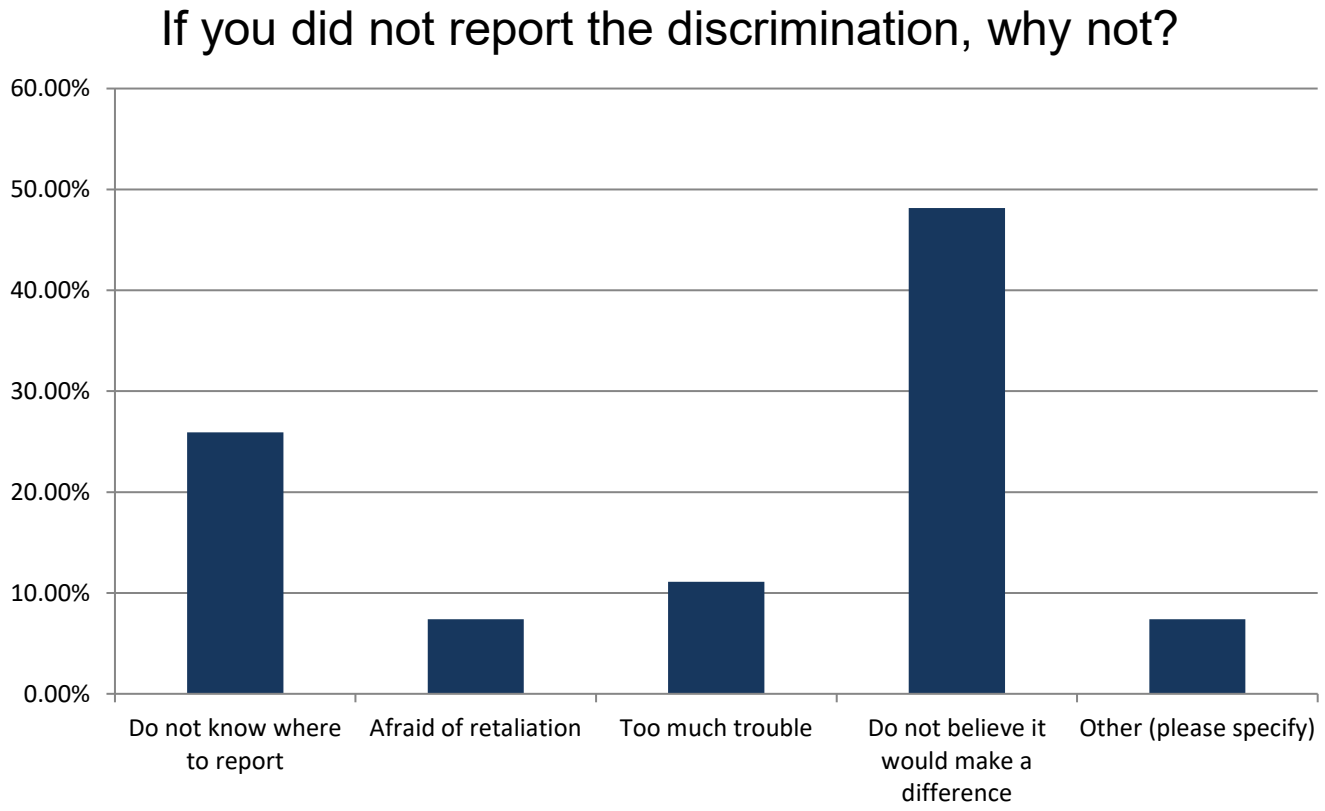

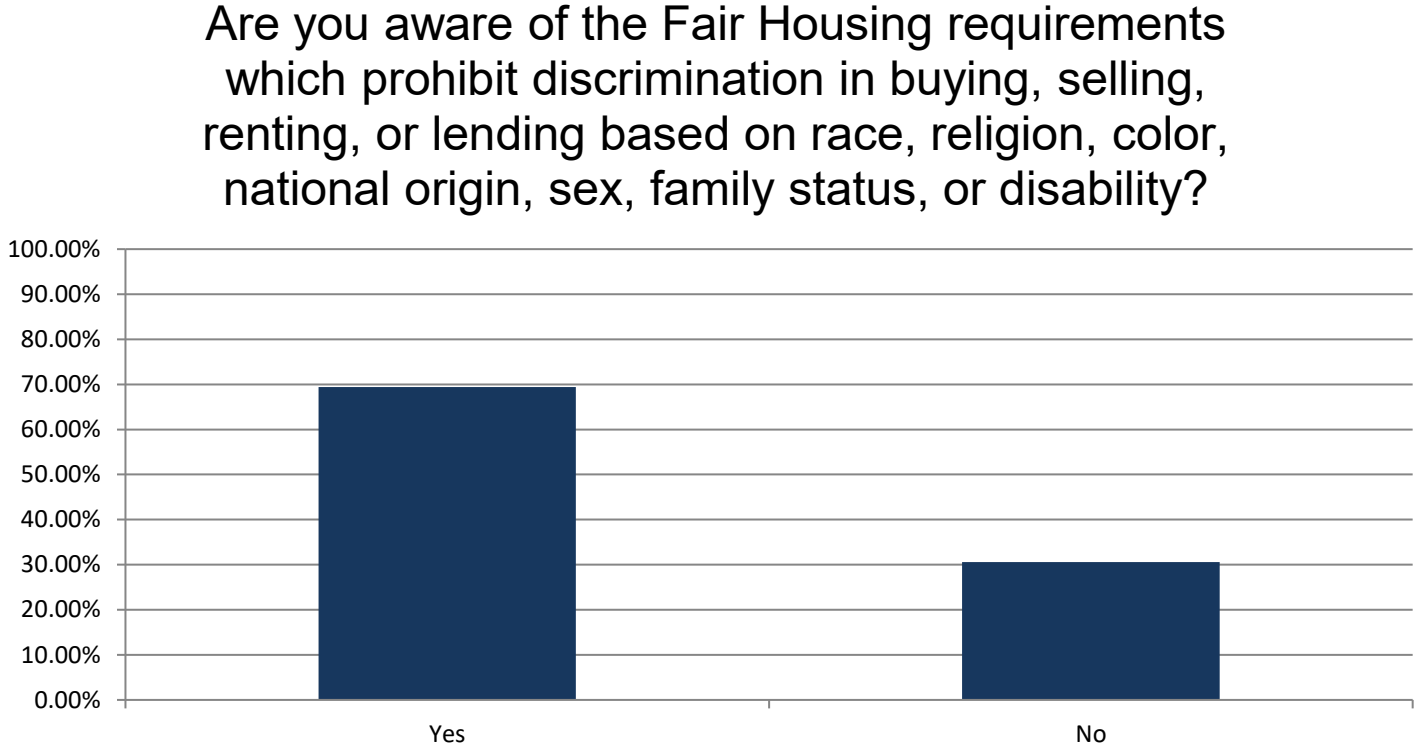
Are you aware of the Fair Housing requirements which prohibit discrimination in buying, selling, renting, or lending based on race, religion, color, national origin, sex, family status, or disability?
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Yes
No

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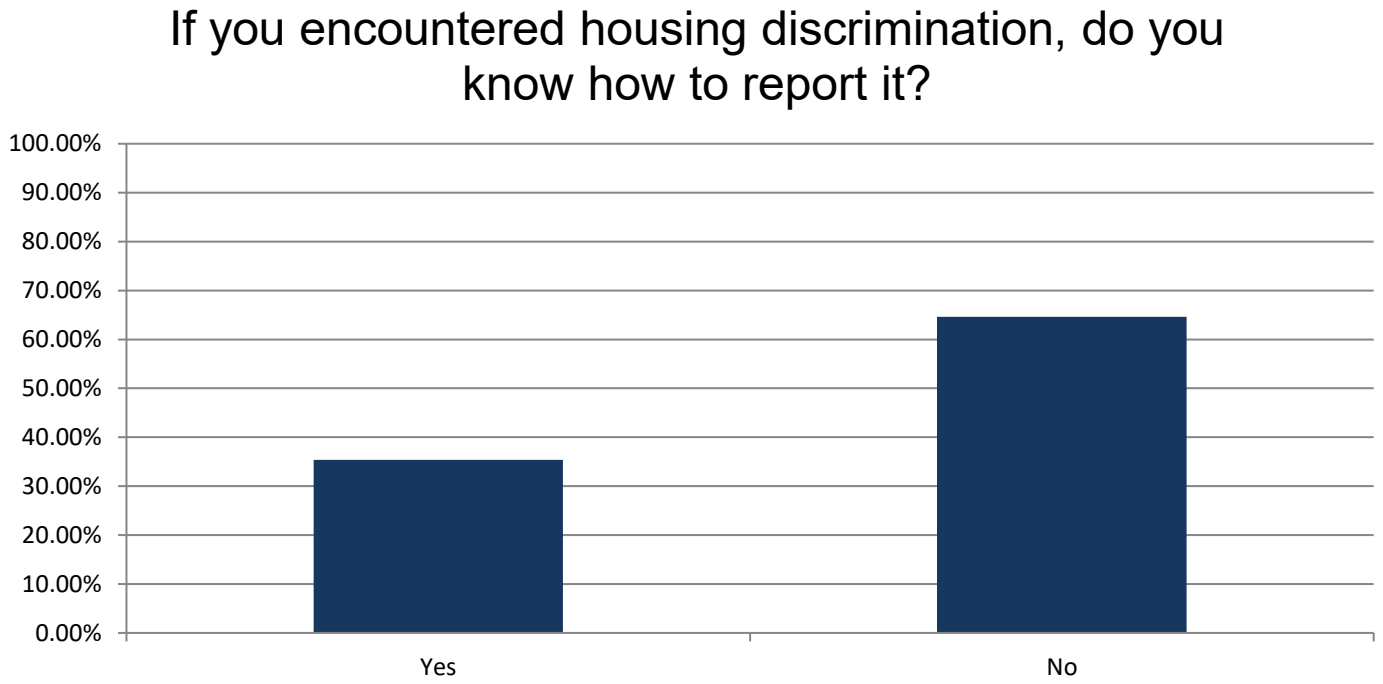

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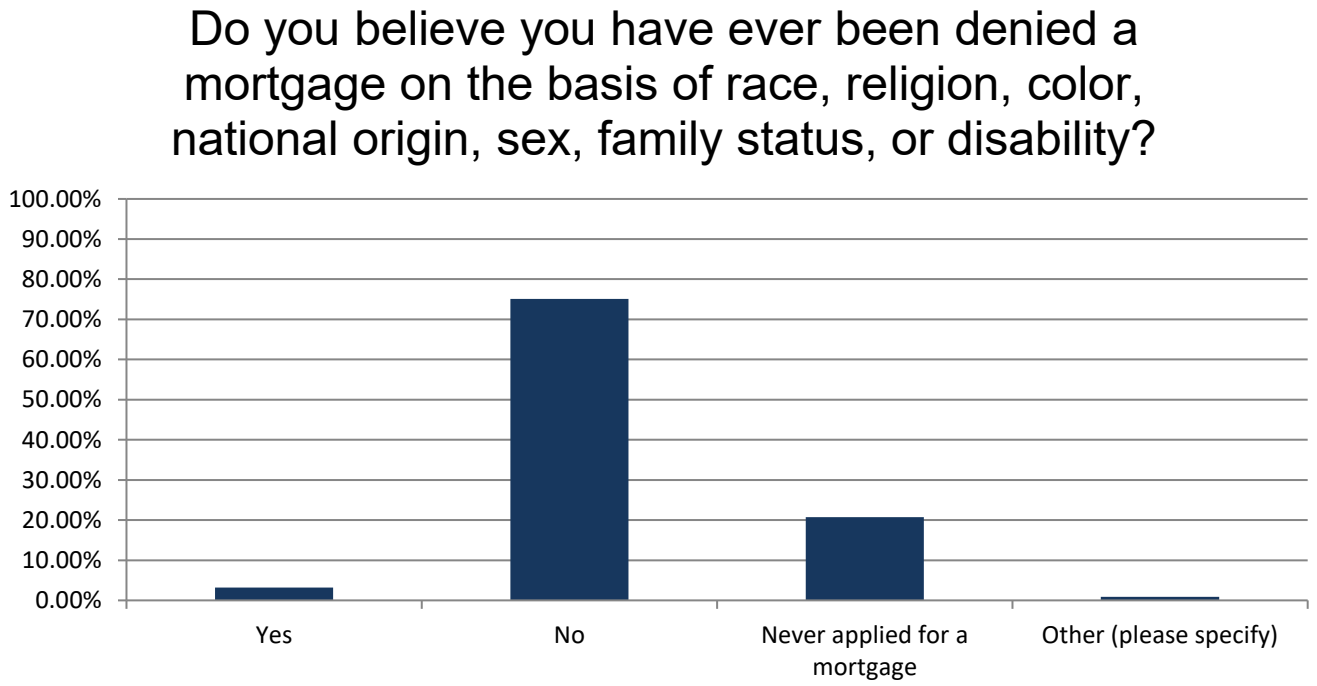

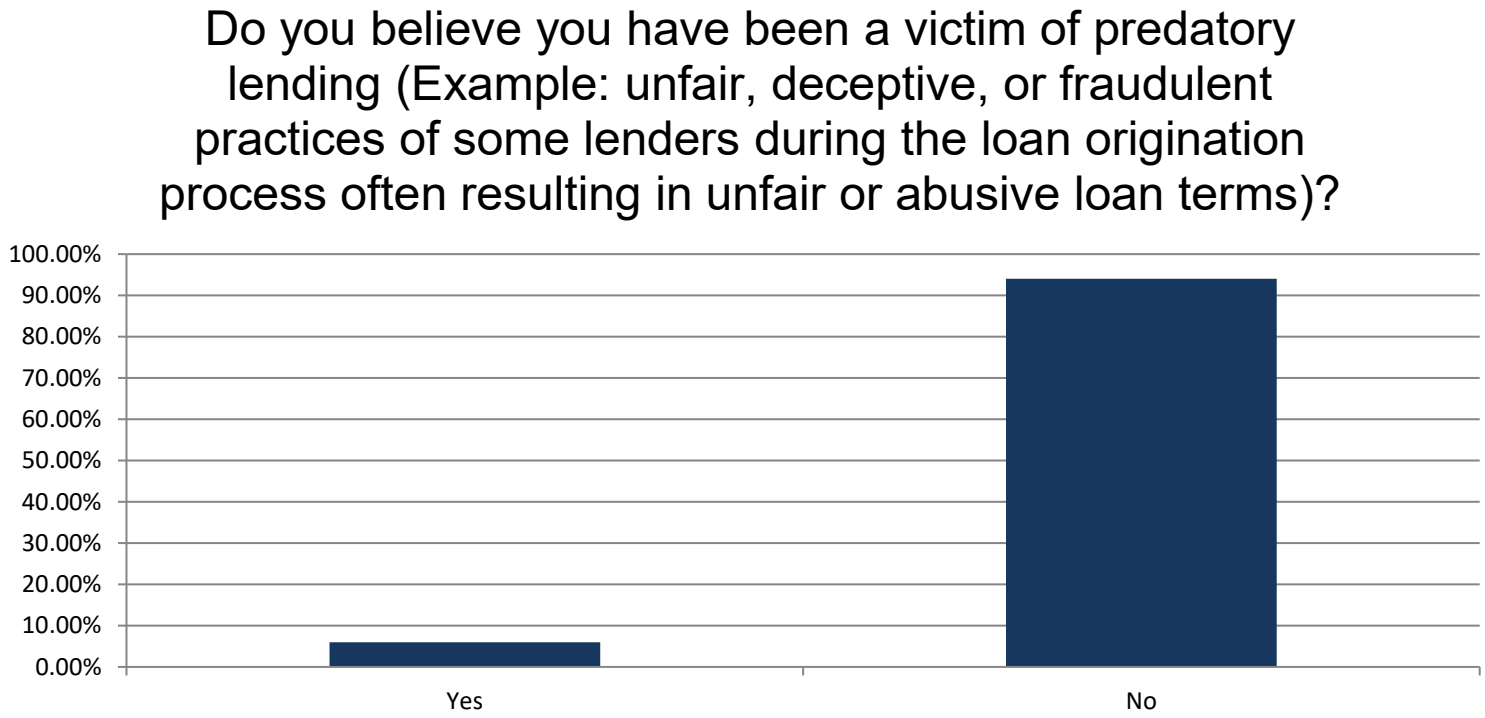
Do you believe you have been a victim of predatory lending (Example: unfair, deceptive, or fraudulent practices of some lenders during the loan origination process often resulting in unfair or abusive loan terms)?
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Yes
No

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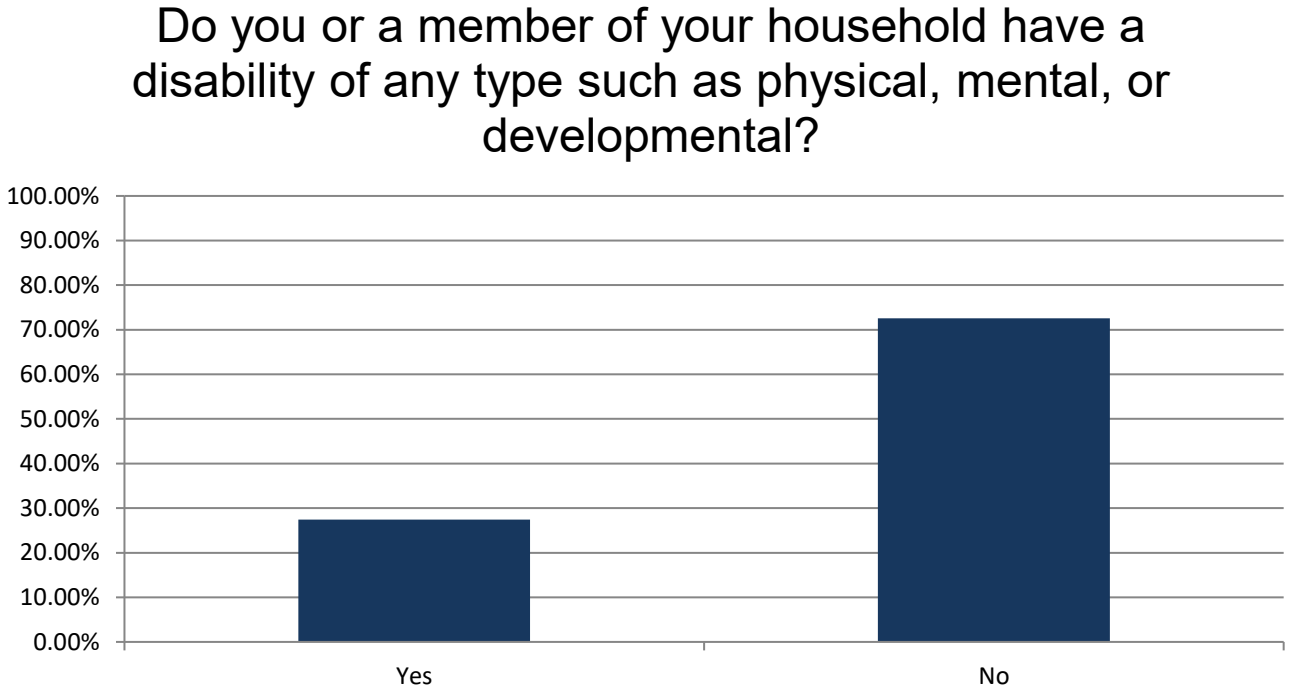

Exhibit B

CDBG Entitlement Program Projects
Program Planning and Administration
Housing Rehabilitation Administration Activity Delivery
Section 108 Loan Repayment
Economic Development
Public Facilities
Affordable Housing – Acquisition, Rehabilitation, homelessness
Public Services

Revolving Loan Fund Activities
Affordable Housing – Owner Occupied Housing Rehabilitation
Affordable Housing – Acquisition

Public Services
Up to 15% of the City's CDBG annual allocation may be used for public service activities, however, in response to COVID-19, HUD has waived the 15% threshold in FY 2020-2021 to allow communities to assist in the response to related public service needs.

Emergency Solutions Grant (ESG)

The ESG program supports essential services to homeless individuals and families through street outreach and engagement, rapid re-housing assistance, homeless prevention, and provision of vital services in emergency shelters. The City competitively awards ESG grants to eligible organizations that aid individuals and families experiencing homelessness and those at risk of experiencing homelessness.

HOME Investment Partnerships Program (HOME)

The HOME program supports projects that purchase, construct, and/or rehabilitate affordable housing for rent or homeownership to low income individuals.

The Annual Action Plan includes HOME funding recommendations for the following projects:

HOME Entitlement Program
Program Planning and Administration
Affordable Housing: Archway Commons Phase II
CHDO Set-Aside
CHDO Operating Support

Exhibit C
Regional Analysis of Impediments to Fair Housing Choice (AI)

Stanislaus County

Fiscal Year 2020-2025 Regional Analysis of Impediments to Fair Housing Choice

For HUD Entitlement Grantees:

Stanislaus Urban County, City of Modesto, City of Turlock

&

HUD Public Housing Authority: Stanislaus Regional Housing Authority

This is the final version of the "Fiscal Year 2020-2025 Regional Analysis of Impediments to Fair Housing Choice". New wording is indicated in bold font and deleted wording is reflected in strikethrough font. *

*Note: Bold and strikethrough text was not used for administrative cleanup.

FINAL DRAFT MAY 12, 2020

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EXECUTIVE SUMMARY

The Federal Fair Housing Act of 1968 banned discrimination against groups who historically faced unequal treatment in all types of housing. These groups are called "protected classes" under the law. It is important to acknowledge historical discrimination and segregation as well as current ongoing discrimination and barriers to housing choice. Housing barriers are influenced by policies and ordinances developed at all levels of government as well as commercial decisions such as mortgage lending criteria and housing development.

The Department of Housing and Urban Development (HUD) enforces the Federal Fair Housing Act, and as such requires communities receiving HUD funds to "affirmatively further fair housing" or make meaningful actions to remove barriers to housing choice.

The Analysis of Impediments to Fair Housing Choice (AI) is developed to identify the potential barriers ("impediments to fair housing choice") that residents of Stanislaus County may face by exploring housing, demographic, fair housing data, and neighborhood opportunity for outward signs of housing discrimination and indicators of patterns of discrimination that may not be obvious.

The impediments identified in this document will work to inform policy and programs throughout the County. The Stanislaus County Regional AI has been created as a collaborative document between the Stanislaus Regional Housing Authority, Stanislaus Urban County (including the cities of Ceres, Hughson, Newman, Oakdale, Patterson, Riverbank, and Waterford), the City of Modesto, and the City of Turlock.

Summary of Key Findings

1. There is currently a low supply of affordable housing and limits on new housing development, with long waitlists for existing affordable housing units. There is a particular shortage in housing for farmworkers and students.
2. Homeowner housing (both single-family homes and condos) values have increased steadily in all Stanislaus County municipalities since 2012. The highest values are in Oakdale, with a typical housing unit worth $368,000 in 2019. The lowest value for a typical house in 2019 is in Waterford, about $270,000.
3. California's Assembly Bill 686 (AB-686) sets forth many housing regulations including the requirement that all public agencies working within housing and community development must "affirmatively further fair housing".
4. Stanislaus County is projected to grow by 800,000 residents, a 37 percent increase, in the next 40 years. The County has grown more diverse in terms of race and ethnicity over the past 30 years, reflected in current geographic residence patterns and primary language spoken at home.
5. Housing affordability is affected by low wages, experienced on average at a higher rate by seniors on fixed incomes, those with at least one disability, and certain racial and ethnic groups.
6. 44 percent of Stanislaus County households earning $20,000 or less annually do not have Internet access, while only 6 percent of households making at least $75,000 do not have access.
7. Disability remains the highest reported category for fair housing discrimination in the County.

Analysis of Impediments Overview

The Analysis of Impediments to Fair Housing Choice (AI) is a requirement imposed on recipients of certain federal grants from the U.S. Department of Housing and Urban Development (HUD). The development of the AI is part of each HUD grant recipient's obligation to 'affirmatively further fair housing' (AFFH). Section 808 of the Fair Housing Act defines AFFH as a legal requirement that federal grantees conduct HUD funded programs in a manner that furthers fair housing within the jurisdiction.

To accept funding from HUD, entitlement grantees must certify to affirmatively further fair housing by taking actions to further the goals identified in this AI and to not take actions that are inconsistent with their obligation to affirmatively further fair housing. (24 CFR §91.225(a)(1))

The Community Development Block Grant (CDBG) program also requires jurisdictions to certify compliance with anti-discrimination laws found in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), the Fair Housing Act (42 U.S.C. 3601-3619), and implementing regulations. 24 CFR §91.225(b)(6)

This document is the Stanislaus Urban County, City of Modesto, City of Turlock, and the Stanislaus Regional Housing Authority's first regional AI. Previously, Stanislaus Urban County and the City of Turlock conducted a regional AI together for the 2020-2025 AI, the City of Modesto and the Housing Authority have joined the efforts.

Although the AI is not required as part of the annual submission to HUD, HUD recommends that each jurisdiction regularly update its AI. HUD has suggested that the AI be conducted at least as often as the Consolidated Plan, which is required every five years. The Stanislaus Urban County, the City of Modesto, and the City of Turlock's current Consolidated Plans are valid through June 2020. The Stanislaus Regional Housing Authority is required to submit a plan every 5 years and is currently working within the *5-Year Plan for Fiscal Years 2019-2023*.

An AI is conducted so that communities are provided an opportunity to examine their progress toward their goals of eliminating illegal housing discrimination and providing current and future residents access to equal housing opportunities. As part of the AI process, communities identify specific barriers ("impediments") to fair housing choice and create action steps to remove or reduce these barriers.

This AI document assesses the extent of fair housing issues among specific groups by analyzing data for all Stanislaus County cities and the general region in relation to housing, demographics, and neighborhood opportunity. This AI also analyzes conditions in the private market and public sector that may limit the range of housing choices or impede access to housing.

Geography

This Stanislaus County Regional AI is a collaborative document between the Stanislaus Regional Housing Authority the three entitlement grantees within the County:

- Stanislaus Urban County
- City of Modesto
- City of Turlock

Stanislaus Urban County includes all unincorporated areas of the County and the following cities:

- Ceres
- Hughson
- Newman

- Oakdale
- Patterson
- Riverbank
- Waterford

Throughout this document, the following geographic terms may be used. To be clear, below is an explanation of each geographic term.

- **Stanislaus County (countywide)**: Includes all cities within Stanislaus County as well as the unincorporated areas.
- **Stanislaus Urban County**: Includes the cities of Ceres, Hughson, Newman, Oakdale, Patterson, Riverbank, and Waterford. The Urban County also includes the unincorporated areas.
- **Unincorporated areas/County**: Areas of Stanislaus County that are not part of any municipality.
- **Entitlement Grantee**: The Community Development Block Grant (CDBG) entitlement grantees are Stanislaus Urban County, Modesto, and Turlock.
- **HOME Consortium**: The members of the HOME Consortium are the Stanislaus Urban County and the City of Turlock. The City of Turlock is the lead entity of the HOME Consortium.

BACKGROUND

Fair Housing Laws

Federal Law(s)

All municipalities in the United States are subject to the Fair Housing Act, administered and enforced by HUD.

In 1968, the Civil Rights Act was signed into law by President Lyndon Johnson to prohibit housing discrimination on the basis of race, religion, color, sex, and national origin. Title VIII of the act is also known as the Fair Housing Act. The law was passed after years of advocacy within the United States against overt race-, gender-, and religious-based discrimination and segregation in the sale and rental of housing. Additional protections were added for family status (women who are pregnant or the presence of children under 18) and disability in an amendment to the Fair Housing Act signed in 1988.

The Fair Housing Act applies to almost any person or group involved with housing in the United States, including landlords, realtors, homeowners associations (HOAs), mortgage lenders, and homeowners insurance companies. These people or groups cannot discriminate on the basis of race, religion, color, sex, national origin, familial status, or disability, which are also known as "protected classes." It is illegal to take any of the following actions on the basis of protected class:

- Refuse to rent or sell housing
- Refuse to negotiate for housing
- Otherwise make housing unavailable
- Set different terms, conditions, or privileges for sale or rental of a dwelling
- Provide a person different housing services or facilities
- Falsely deny that housing is available for inspection, sale, or rental
- Make, print, or publish any notice, statement, or advertisement with respect to the sale or rental of a dwelling that indicates any preference, limitation, or discrimination

- Impose different sales prices or rental charges for the sale or rental of a dwelling
- Use different qualification criteria or applications, or sale or rental standards or procedures, such as income standards, application requirements, application fees, credit analyses, sale or rental approval procedures, or other requirements
- Evict a tenant or a tenant's guest
- Harass a person
- Fail or delay performance of maintenance or repairs
- Limit privileges, services, or facilities of a dwelling
- Discourage the purchase or rental of a dwelling
- Assign a person to a particular building, neighborhood, or section of a building or neighborhood
- For profit, persuade or try to persuade homeowners to sell their homes by suggesting that people of a particular protected characteristic are about to move into the neighborhood (blockbusting)
- Refuse to provide or discriminate in the terms or conditions of homeowners insurance because of the race, color, religion, sex, disability, familial status, or national origin of the owner and/or occupants of a dwelling
- Deny access to or membership in any multiple listing service or real estate brokers' organization
- Refuse to make a mortgage loan or provide other financial assistance for a dwelling
- Refuse to provide information regarding loans
- Impose different terms or conditions on a loan, such as different interest rates, points, or fees
- Discriminate in appraising a dwelling
- Condition the availability of a loan on a person's response to harassment
- Refuse to purchase a loan

It is also illegal to threaten, coerce, intimidate, or interfere with anyone exercising a fair housing right or assisting others who exercise the right, or retaliate against a person who has filed a fair housing complaint or assisted in a fair housing investigation.

Exempted from the federal law are owner-occupied buildings with no more than four units, single-family houses sold or rented by the owner without an agent, and housing operated by religious organizations or private clubs that is limited to members. The State of California or local laws can add additional protections but cannot take away Fair Housing Act protections.

Table 1: Protected Classes in Stanislaus County by Enforcement Jurisdiction

Federal	State
• Race • Color • National Origin • Religion • Sex • Familial Status • Disability	• Source of Income • Marital Status • Sexual Orientation • Gender Identity • Domestic Partnership

Examples of illegal housing actions under the Fair Housing Act are:

- An apartment manager only offering apartment units to families with children within one half of an apartment building.

- A landlord giving a $10 application fee discount to housing applicants who attended the local high school.
- A realtor falsely declaring a house already has a purchase offer when showing a house to a couple who recently immigrated to the United States.
- An apartment manager running a credit check only on applicants under 30 years old.
-

Housing for Seniors

The Housing for Older Persons Act of 1995 (HOPA) creates an exception to Title VIII of the Fair Housing Act to allow for senior housing developments.

HOPA exempts specific types of housing for seniors ("older persons" in the law) from family status discrimination liability. To qualify for the "housing for older persons" exemption, the housing must fit certain criteria and comply with all the requirements of the exemption. These types of housing may be:

1. Provided under a state or federal program that the Secretary of HUD has determined to be specifically designed and operated to assist elderly persons (as defined in the state or federal program); or
2. Intended for, and solely occupied by persons 62 years of age or older; or
3. Intended and operated for occupancy by persons 55 years of age or older. (At least 80 percent of the units must have at least one occupant who is verified to be 55 years of age or older.) (Pub.L. 104–76, 109 Stat. 787, enacted December 28, 1995

All other Fair Housing Act protects apply to housing for seniors including the prohibition from discrimination on the basis of race, color, religion, sex, disability, or national origin. (The Fair Housing Act: Housing for Older Persons, HUD Office of Fair Housing and Equal Opportunity)

Additional Protections for Persons with Disabilities
:

Housing providers are required to make reasonable accommodations and allow reasonable modifications that allow persons with disabilities to enjoy their housing. Under the Fair Housing Act, a person with a disability includes: Individuals with a physical or mental impairment that substantially limits one or more major life activities; individuals who are regarded as having such an impairment; and individuals with a record of such an impairment. Major life activities include walking, seeing, hearing, speaking, breathing, and working.

An accommodation is a change in any rule, policy, procedure, or service needed in order for a person with a disability to have equal access to and enjoyment of their home. For example, allowing a service animal despite a "no pets" policy or allowing a tenant to mail in a rent check when others must physically deliver checks to a drop box.

A modification is a structural change made to the existing premises occupied or to be occupied by a person with a disability in order to afford such person full enjoyment of the premises. A ramp installed into the front entrance of a house where there are only stairs, changing doorknobs to levers for someone with a mobility disability, or allowing a tenant with a sight impairment to install visual doorbells are all examples of reasonable modifications.

Advertising:

All types of housing advertising are governed by the Fair Housing Act, including paper flyers, newspaper ads, advertising on websites, and lawn signs. Advertisements cannot show a preference, a limitation, or discrimination based on protected class. Examples of illegal advertisements are:

- A lawn sign outside an apartment building that includes "sorry, no kids."
- A realtor's flyer for an open house only distributed in local churches.
- Website ads that claim an apartment is "perfect for young professionals."

The National Fair Housing Alliance recommends that instead of focusing on who an ideal tenant would be or what type of person would likely not like a housing unit, an advertisement for housing should focus on the property characteristics and the amenities. Advertisements should be available to a broad number of people.

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Section 504

Section 504 of the Rehabilitation Act of 1973 ("Section 504") states that "no qualified individual with a disability in the United States shall be excluded from, denied the benefits of, or be subjected to discrimination under" any program or activity that receives Federal financial assistance.

The law applies to housing with 5 or more units funded with Federal funds by requiring accessibility features in some dwelling units (a unit that is located on an accessible route and can be approached, entered, and used by individuals with physical disabilities) and all public areas in all new construction or substantial rehabilitation. At least 5 percent of new construction units in a federally funded development, or at least one unit, must meet accessibility standards to people with physical disabilities, and at least 2 percent, or at least one unit, must meet accessibility standards for hearing or visual disabilities. The standards for these units are found in the Uniform Federal Accessibility Standards (UFAS).

Section 504 regulations also apply to public buildings operated by agencies funded by federal assistance like housing authorities and schools.

Other Federal Laws

Other federal laws governing housing rights are:

- Title VI of the Civil Rights Act of 1964
- Age Discrimination Act of 1975
- Title II of the Americans with Disabilities Act of 1990
- Violence Against Women Act of 1994
- Equal Credit Opportunity of 1974

In addition, all HUD-funded housing programs are prohibited from discriminating based on sexual orientation, gender identity, or marital status under the 2016 Equal Access Rule.

While not law, the National Association of Realtors Code of Ethics prohibits licensed Realtors from discriminating based on sexual orientation. This code of ethics applies to all members of the California Association of Realtors.

California Law

The state of California expands Fair Housing Act protections under the Fair Employment and Housing Act (FEHA) enforced by the Department of Fair Employment and Housing within the Business, Consumer Services, and Housing Agency. All jurisdictions within California, including all in Stanislaus County, are governed by the FEHA, which prohibits discrimination in housing on the basis of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, source of income, disability, or genetic information.

Additional Protected Groups

The Unruh Civil Rights Act adds the additional protected classes: immigration status, primary language, citizenship, and arbitrary characteristics (age, occupation, etc.)

Until 2019, the definition of "source of income" in the FEHA did not include Section 8 Housing Choice Vouchers or other types of rental assistance. SB 329, passed in 2019, expands the definition of source of income to all "federal, state, or local public assistance and federal, state, or local housing subsidies," including Section 8 Housing Choice Vouchers. This law will go into effect January 1, 2020.

Another bill that went into effect January 1, 2020 (SB 222) adds Veterans and Military Status to the persons protected under the FEHA.

California Civil Code 1946.7 gives housing protections to victims of domestic violence, sexual assault, stalking, abuse of an elder or dependent adult, or human trafficking. Under this law, a landlord may not terminate a tenancy or fail to renew a tenancy based upon a tenant or a tenant's household member being a victim of one of these crimes.

Additional Protected Housing

The California FEHA covers additional types of housing not covered under the Federal Fair Housing Act. The California FEHA covers *any building, structure, or portion thereof that is occupied as, or intended for occupancy as, a residence by one or more families and any vacant land that is offered for sale or lease for the construction thereon of any building, structure, or portion thereof intended to be so occupied.*

An exception to this law is rent or lease of a portion of an owner-occupied single-family house to a person as a roomer or boarder living within the household. Though these types of houses are exempt from most FEHA requirements, in this type of housing, discriminatory advertisements are not allowed; the only exception is housing advertised as available only to persons of one sex where living spaces will be shared, e.g., "looking for female roommate."

AB 1497, which went into effect January 1, 2020, extends the types of housing covered by the FEHA to include housing posted to online hosting platforms like AirBnB or VRBO.
California's FEHA also applies to government actions for property, such as restrictive covenants, zoning laws, approval or denial of use permits, and other actions authorized under California's Planning and Zoning Law that make housing opportunities unavailable.

Housing for Seniors

In California, there is an exemption for seniors to the Unruh Civil Rights Act which prohibits discrimination based on sex, race, color, religion, ancestry, national origin, age, disability, medical condition, genetic information, marital status, or sexual orientation.
To restrict sale or rental of a property to seniors in California and be exempt from age discrimination under Unruh, the resident must:

1. Be 62 years of age or older; or
2. Be 55 years of age or older in a "senior citizen housing development".

A "Senior citizen housing development" is "a residential development developed, substantially rehabilitated, or substantially renovated for, senior citizens that has at least 35 dwelling units." Furthermore, the Unruh Civil Rights Act states:

> Any senior citizen housing development which is required to obtain a public report under Section 11010 of the Business and Professions Code and which submits its application for a public report after July 1, 2001, shall be required to have been issued a public report as a senior citizen housing development under Section 11010.05 of the Business and Professions Code. No housing development constructed prior to January 1, 1985, shall fail to qualify as a senior citizen housing development because it was not originally developed or put to use for occupancy by senior citizens. (51.3(b)(4))

Under California law, all the units in a dwelling must be designated for seniors rather than 80 percent of units under the FHA/HOPA. State law also allows a senior to live with someone 45 years of age or older that is their spouse, domestic partner, or person providing primary physical or economic support to the senior. The senior may also live with a disabled child or grandchild or disabled spouse/partner who must permanently reside in the household due to a disability. (Fair Housing Law Exemptions for Senior Housing, Community Housing Law, Sustainable Economies Law Center)

AB-686 Housing Discrimination: Affirmatively Furthering Fair Housing

The Fair Housing Act includes a requirement that the federal government work to dismantle segregation and to create equal housing opportunities or "affirmatively further fair housing." (AFFH) This law applies to all state and local governments that receive federal funding from HUD.

There is currently debate at the national level about the interpretation of affirmatively furthering fair housing within the Fair Housing Act. To establish control over how this law is interpreted and enforced

at the state level, California's Assembly Bill 686 (AB-686) was signed into law in 2018 and codifies California's commitment to "affirmatively further fair housing." The law defines the term "affirmatively furthering fair housing" as taking meaningful actions that "overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity," and requires all public agencies working within housing and community development to affirmatively further fair housing.

Existing law requires the housing element to include an inventory of land suitable and available for development, and requires that inventory be used to identify sites that can be developed for housing within the planning period and that are sufficient to provide for the jurisdiction's share of the regional housing need for all income levels.

The new law requires the state, cities, counties, and public housing authorities to administer their programs and activities related to housing and community development in a way that affirmatively furthers fair housing. The law prohibits these authorities from taking actions inconsistent with their AFFH obligation and requires that the AFFH obligation be interpreted consistent with HUD's 2015 regulation, regardless of federal action regarding the regulation. To ensure AFFH obligations are incorporated into local housing decisions, AFFH analysis must be added to the housing element for plans that are due beginning in 2021. This includes an examination of issues such as segregation and resident displacement and identification of fair housing goals.

Other California Laws

Other state laws governing housing discrimination within California are:

Unruh Civil Rights Act: Provides protection from discrimination by all business establishments in California, including housing and accommodations, because of age, ancestry, color, disability, national origin, race, religion, sex, and sexual orientation.

Ralph Civil Rights Act (California Civil Code Section 51.7): Forbids acts of violence or threats of violence because of a person's race, color, religion, ancestry, national origin, age, disability, sex, sexual orientation, political affiliation, or position in a labor dispute. "Violence" under this law can take the form of verbal or written threats, physical assault or attempted assault, graffiti, vandalism, or property damage.

Bane Civil Rights Act (California Civil Code Section 52.1): Protects all people in California from interference by force, or threat of force, with an individual's constitutional or statutory rights, including a right to equal access to housing. The Bane Act also includes criminal penalties for hate crime, though convictions under the act are not allowed for speech alone unless that speech itself threatened violence. The rights protected under the Bane Act include the rights of association, assembly, due process, education, employment, equal protection, expression, holding of public office, housing, privacy, speech, travel, use of public facilities, voting, worship, and protection from bodily harm.

California Civil Code Section 1940.3: Prohibits landlords from questioning potential residents about their immigration or citizenship status. In most states, landlords are free to inquire about a potential tenant's immigration status and to reject applicants who are in the United States illegally. In addition, this law forbids local jurisdictions from passing laws that direct landlords to make inquiries about a person's citizenship or immigration status.

Government Code Sections 11135, 65008, and 65580-65589.8: Prohibit discrimination in programs funded by the State and in any land-use decisions.

Sections 65580-65589.8 require local jurisdictions to address the provision of housing options for special needs groups, including:

- Housing for persons with disabilities (SB 520)
- Housing for homeless persons, including emergency shelters, transitional housing, and supportive housing (SB 2)
- Housing for extremely low-income households, including single-room occupancy (SRO) units (AB 2634)
- Housing for persons with developmental disabilities (SB 812)

Local Law(s)

No local laws within Stanislaus Urban County, Turlock, or Modesto expand either protected classes or housing covered under the FEHA.

The Stanislaus County Housing Authority does not expand the definition of protected classes or housing covered under the FEHA but is required to follow additional housing regulations as directed by HUD.

AI Development Process

The development of the AI includes an analysis of laws, regulations, housing conditions, public policies, banking and mortgage data, as well as demographic and community characteristics. Paired with this analysis is feedback from the public through survey responses, public meetings, and phone consultations. Because the AI is developed in conjunction with Consolidated Plans, citizen participation requirements for the Consolidated Plans were often combined with feedback on fair housing issues.

Community Meetings

Community meetings were held in Modesto, Turlock, Stanislaus Urban County, and the Stanislaus County Housing Authority. The meetings were an opportunity for the public to learn about fair housing laws and share their issues and concerns regarding fair housing in the community. Meetings included the following:

Stanislaus Urban County: Meetings were held at Municipal Advisory Councils (MACs), advisory bodies of residents that exist to represent the local community to the Board of Supervisors. Meetings were also held with the Stanislaus Community System of Care and Stanislaus Homeless Alliance to talk about issues facing homeless individuals throughout the County.

Modesto: Meetings were ninety (90) minutes and covered both Consolidated Plan and AI topics. Modesto's community meetings were held in different aldermanic districts to ensure the variety of housing conditions and community opinions were captured.

Stanislaus County Housing Authority: Discussed fair housing and housing access issues at the Board of Commissioners Meeting.

Turlock: Held a meeting with the Turlock Community Collaborative, a network of public service agencies, businesses, and individuals in Turlock interested in improving the quality of life. The collaborative meets regularly to address needs in the community.

Meetings were held on the following dates and locations:

Modesto

- District 1 – October 29, 2019 @ Fire House #6
- District 2 – November 1, 2019 @ West Modesto King Kennedy Center
- District 2 – November 7, 2019 @ The Center Church
- District 3 – October 29, 2019 @ Trinity United Presbyterian Church
- District 4 – November 6, 2019 @ Airport Neighborhood Center
- District 5 – October 30, 2019 @ Veteran's Resource Center
- District 6 – November 12, 2019 @ St. Joseph's Catholic Church
- Public Hearing – April 16, 2020 @ Tenth Street Place
- Public Hearing – May 12, 2020 @ Modesto City Council

Stanislaus Urban County

- Salida MAC Meeting- October 22, 2019
- Empire MAC Meeting- October 23, 2019
- Knights Ferry MAC Meeting- October 24, 2019
- Denair MAC Meeting- November 5, 2019
- South Modesto MAC Meeting- November 14, 2019
- Stanislaus Community System of Care (CSOC) Meeting- January 16, 2020
- Stanislaus Homeless Alliance (SHA) Meeting- February 12, 2020
- City of Ceres City Council- Public Hearing- April 13, 2020
- City of Hughson City Council- Public Hearing- April 27, 2020
- City of Newman City Council- Public Hearing- April 28, 2020
- City of Oakdale City Council- Public Hearing- May 4, 2020
- City of Patterson City Council- Public Hearing- May 5, 2020
- City of Riverbank City Council- Public Hearing- April 28, 2020
- City of Waterford City Council- Public Hearing- May 7, 2020

Stanislaus County Housing Authority

- Board of Commissioners Meeting- TBD
- Stanislaus County Board of Supervisors- Public Hearing – May 12, 2020

Turlock

- Meeting-Turlock Community Collaborative February 18, 2020
- City of Turlock City Council Public Hearing- May 12, 2020

DEMOGRAPHIC AND HOUSING MARKET ANALYSIS

Population Trends

Stanislaus County is currently home to about 531,000 residents, 39 percent of whom live in the City of Modesto, 21 percent in unincorporated areas, and 13 percent in the City of Turlock. The rest live in smaller cities and unincorporated communities throughout the County. Most of Stanislaus County is sparsely populated, with less than 200 people per Census Block. By comparison, some areas of Modesto and Turlock have over 1,000 people per Block. (See Map X)

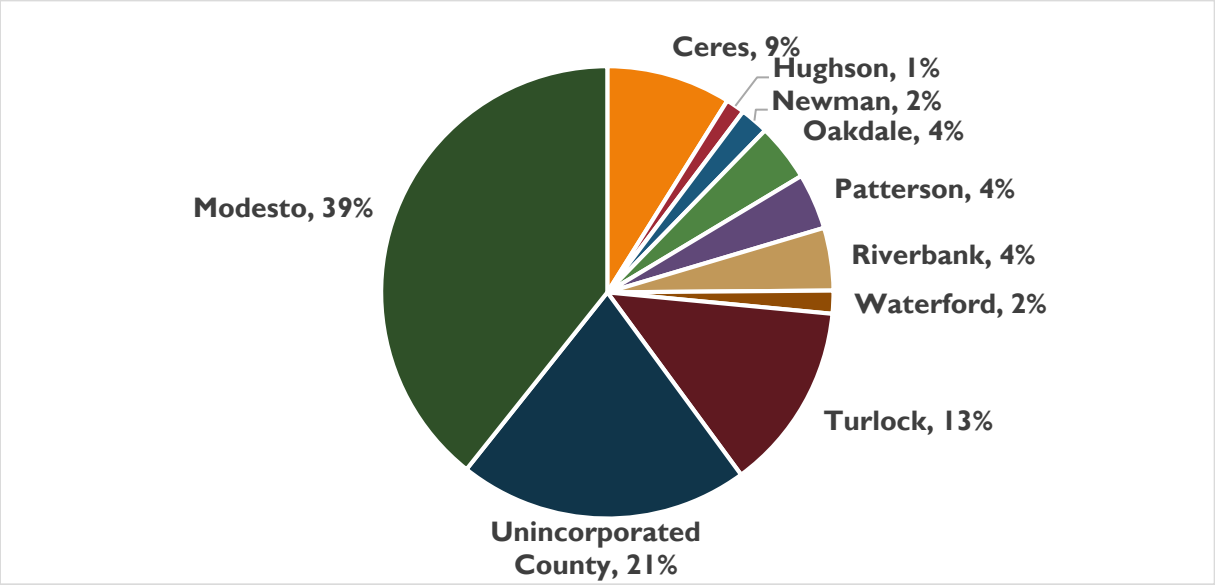
The County's population was born primarily in the United States, with 79 percent born in the County and 66 percent born in the State of California. Twenty percent of County residents were born in a foreign country.

Table 1. Stanislaus County Population by Municipality

Ceres	Hughson	Newman	Oakdale	Patterson	Riverbank	Waterford	Turlock	Stanislaus Urban County	Unincorporated County	Modesto
47,231	7,160	10,808	21,796	21,205	23,761	8,708	71,166	250,883	110,214	208,512

Source: 2012-2016 ACS

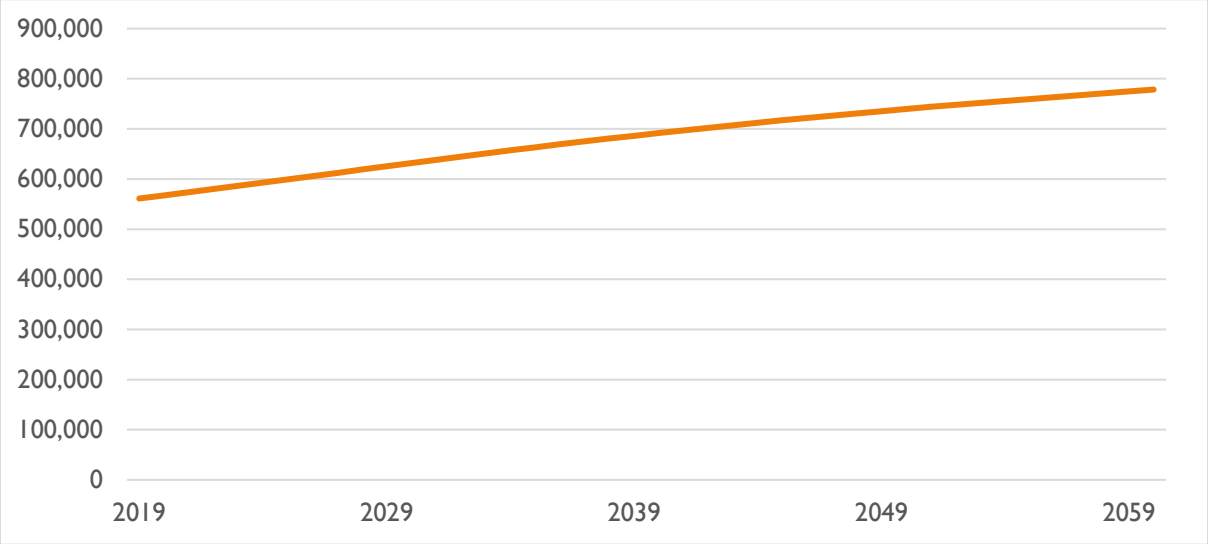
Chart 1. Population Share by Municipality in Stanislaus County



Source: 2012-2016 ACS

In the next 40 years, the Stanislaus County population is projected to grow to about 800,000 residents, a 37 percent increase. Most incorporated areas in the County are expected to grow by about 1 percent annually. The City of Patterson is anticipated to grow the most of all the incorporated areas. According to projections, Patterson will increase from containing 4 percent of the County's population to 6 percent of the population by 2060. (California Department of Finance)

Chart 2. Population Projections 2020-2060 in Stanislaus County



Source: Total Estimated and Projected Population for California and Counties, Demographic Research Unit, California Department of Finance, May 2019

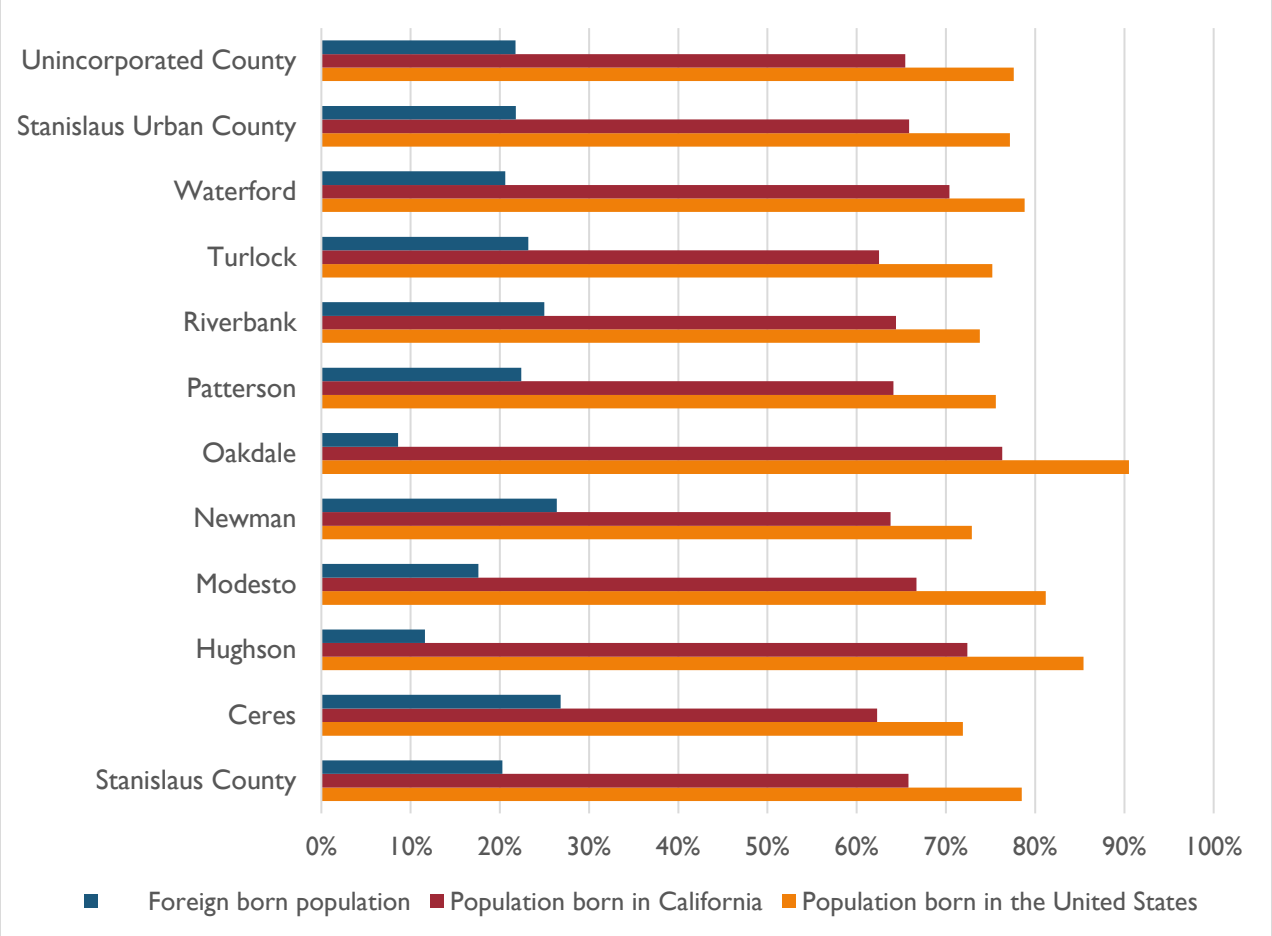
Race/ Ethnicity

Since 1980, the racial and ethnic makeup of the County has changed significantly and the County has become more diverse. For example, the County was 80 percent non-Hispanic White and 15 percent Hispanic or Latino (of any race) in the 1980 U.S. Decennial Census and by 2010, these figures were 47 percent and 42 percent, respectively. In addition, Asian residents grew from 1.4 to 6.7 percent of the population during the same timeframe, and non-Hispanic Black/ African American residents grew from 1.1 to 3.2 percent of the population.

The County's Hispanic or Latino population generally lives outside of Modesto and Turlock, a reflection of the population's connection to the local agricultural industry. (Map X)

In the next 40 years, Asian and Hispanic or Latino populations are expected to increase by the highest percentages compared to current population numbers. During this time period, the Asian population in Stanislaus County is expected to increase more than 150 percent, adding about 40,000 residents, and the Hispanic population by 100 percent, adding 214,000 residents. (Stanislaus County Forecast Summary, Eberhardt School of Business and Policy Research, 2016)

Chart 3. Place of Birth by Municipality



Source: 2012-2016 ACS

The Cities of Ceres, Riverbank, and Newman have the highest percentage of residents who were born in another country, while Hughson, Oakdale, and Waterford have the highest percentage of current residents who were born in California.

Chart 4. Population Race and Ethnicity in Stanislaus County, 1980

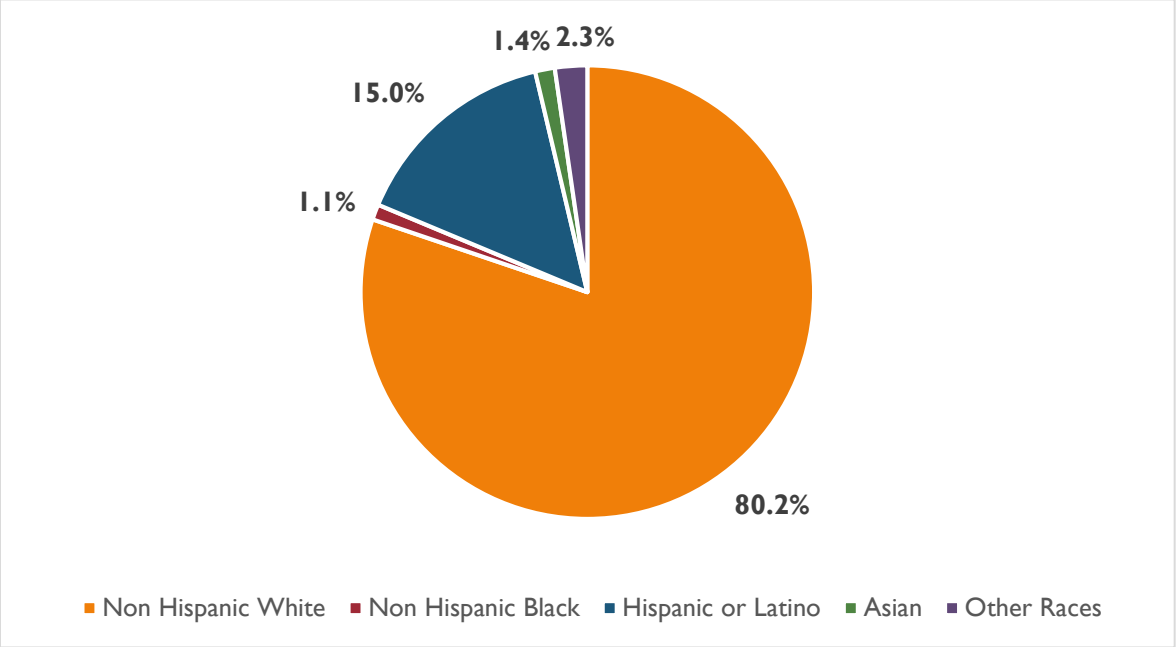
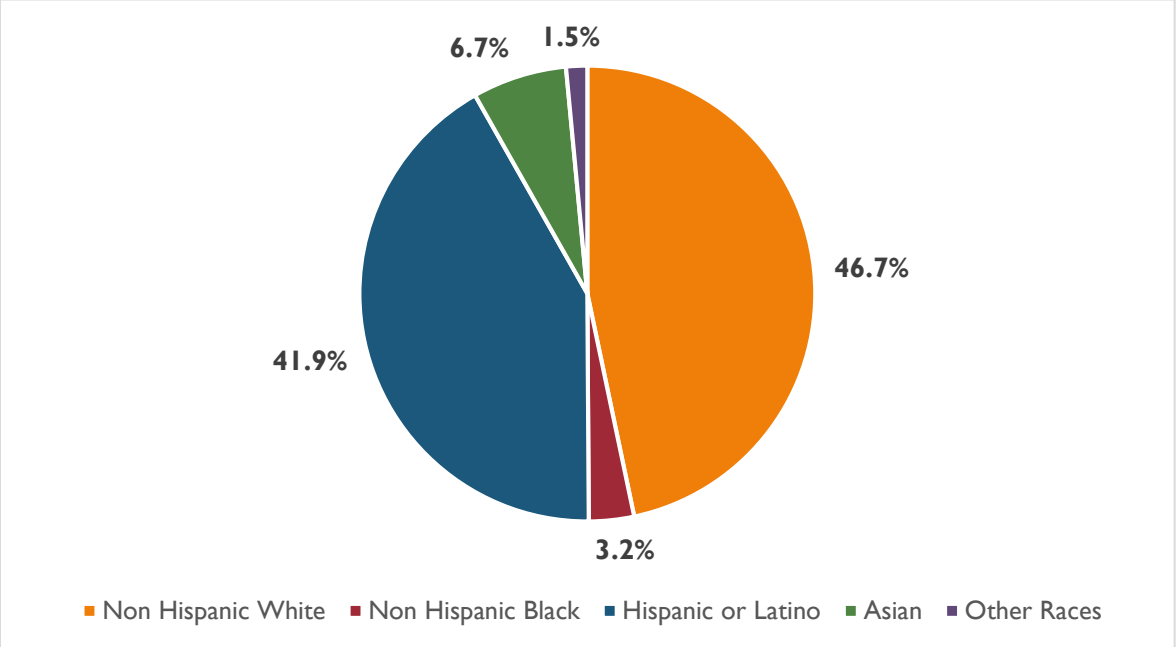


Chart 5. Population Race and Ethnicity in Stanislaus County, 2010



Source: 1980, 2010 Decennial U.S. Census

Language

The primary language spoken at home by residents over five years old varies by jurisdiction. Figure 6 indicates that English is the most prevalent language among residents of Hughson, Modesto, Oakdale, Patterson, Turlock, Waterford, and the Unincorporated County. In other communities such as Ceres, Newman, and Riverbank, the majority of residents prefer to speak a language other than English within their household.

Though many people who speak a language other than English at home are bilingual, there are also residents who report speaking English "less than very well". More than 20 percent of residents in Waterford, Newman, Ceres, and the Unincorporated County report speaking English less than "very well". While Spanish is the predominant language of these residents, Ceres, Turlock, and the Unincorporated County also have at least 5 percent of residents who speak another language and speak English less than "very well".

Communication with residents in these areas needs to be particularly aware of the language needs of some residents. Figure 7 presents the share of the population who speak English "less than very well" by language and jurisdiction. English language education services may also be needed to help non-English-speaking residents enter the workforce or increase opportunities for higher earnings.

Chart 6. Language Spoken at Home by Jurisdiction

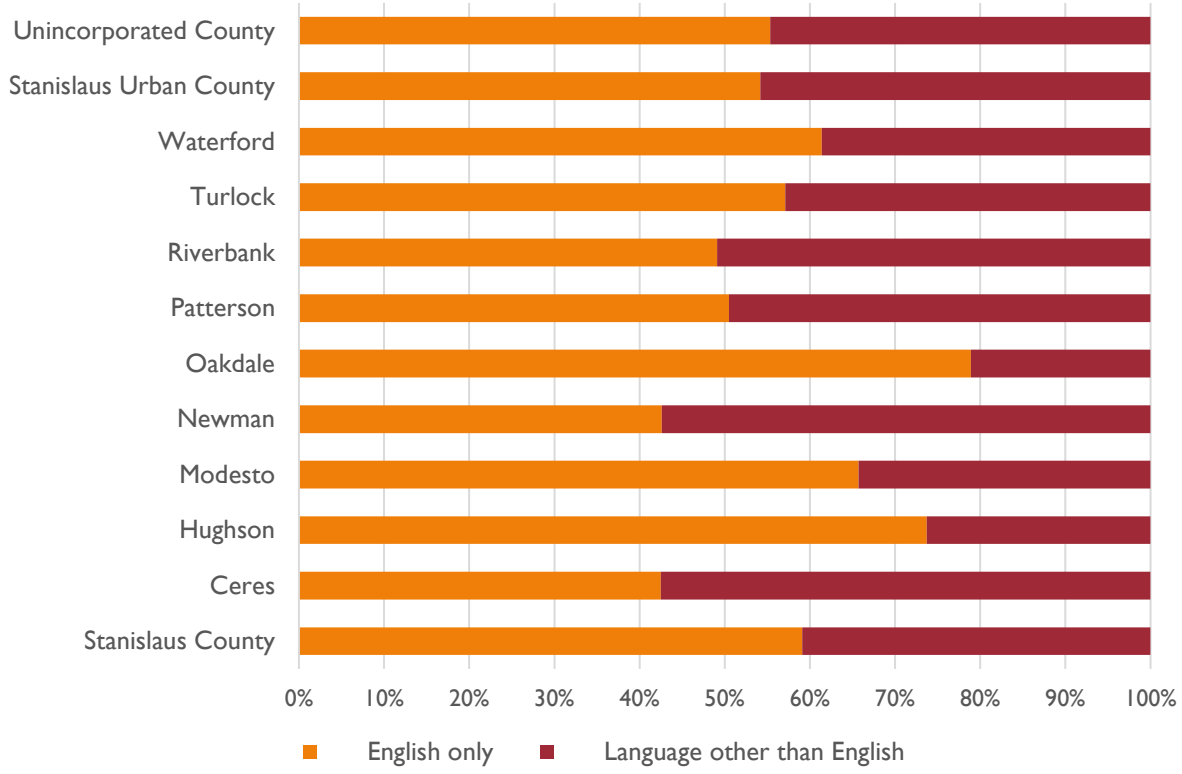
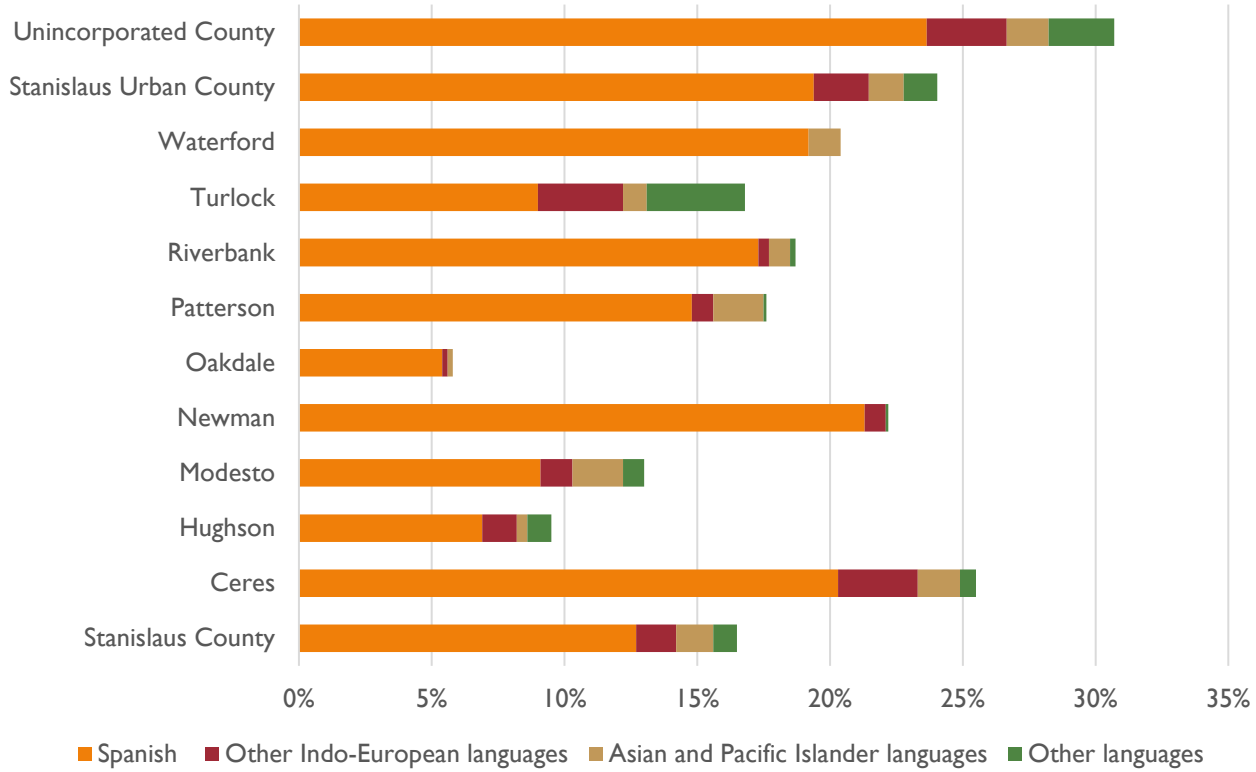


Chart 7. Population That Speaks English Less Than "Very Well" by Language and Jurisdiction.



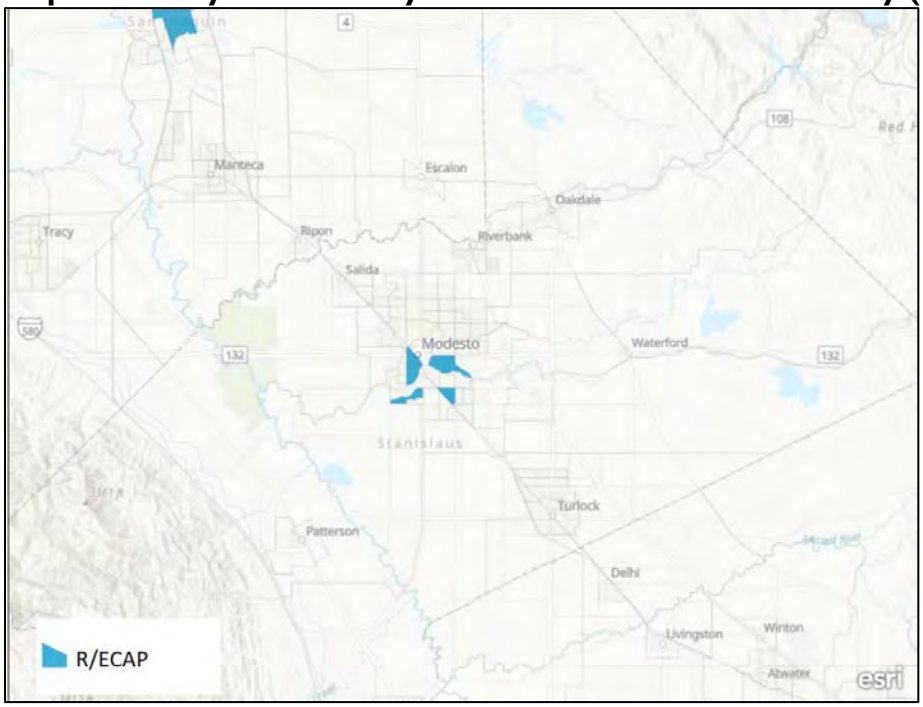
Source: 2012-2016 ACS

Racial/Ethnic Concentrations

Racially or Ethnically Concentrated Areas of Poverty (R/ECAP) is a designation by HUD to measure areas where both race or ethnicity and poverty overlap. Such areas could be a sign of unequal housing opportunity on a population scale. A census tract can be designated as a R/ECAP when more than half the population is non-White and either 40 percent or more of the population is in poverty, or, the tract's poverty rate is greater than three times the average poverty rate in the area.

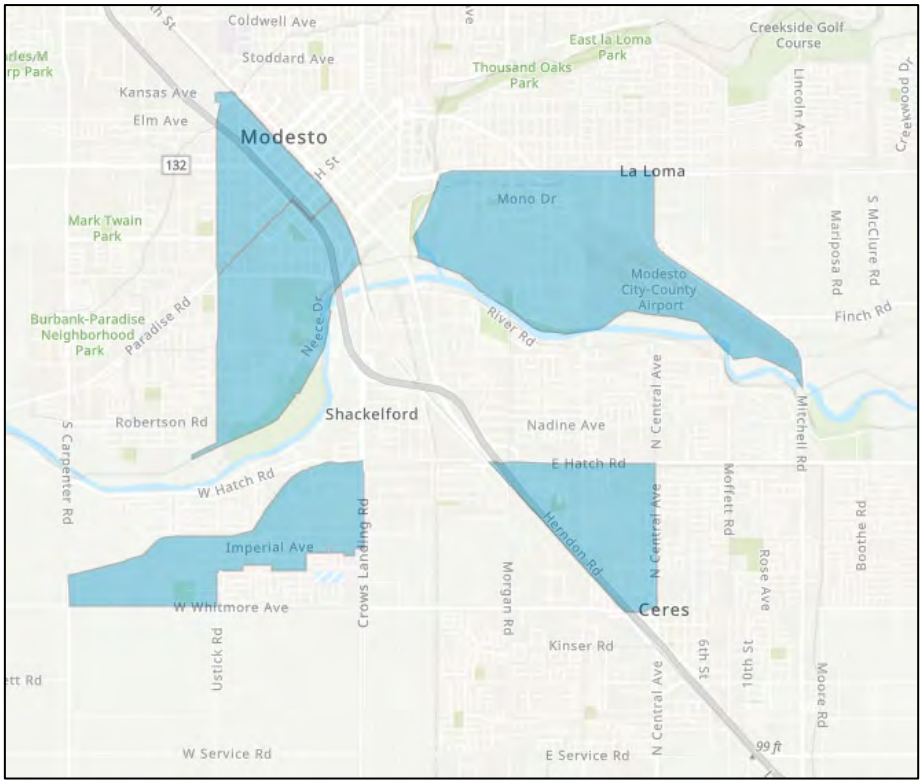
Within Stanislaus County, there are five census tracts considered R/ECAPs all within the area of the Cities of Modesto and Ceres. Figure 8 presents two maps depicting these areas.

Map 1. Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs)



Source: Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs) HUD-eGIS Open Data http://hudgis-hud.opendata.arcgis.com/ ACS 2009-2013

Map 2. Racially or Ethnically Concentrated Areas of Poverty (Zoomed)



Source: Racially or Ethnically Concentrated Areas of Poverty (R/ECAPs) HUD-eGIS Open Data http://hudgis-hud.opendata.arcgis.com/ ACS 2009-2013

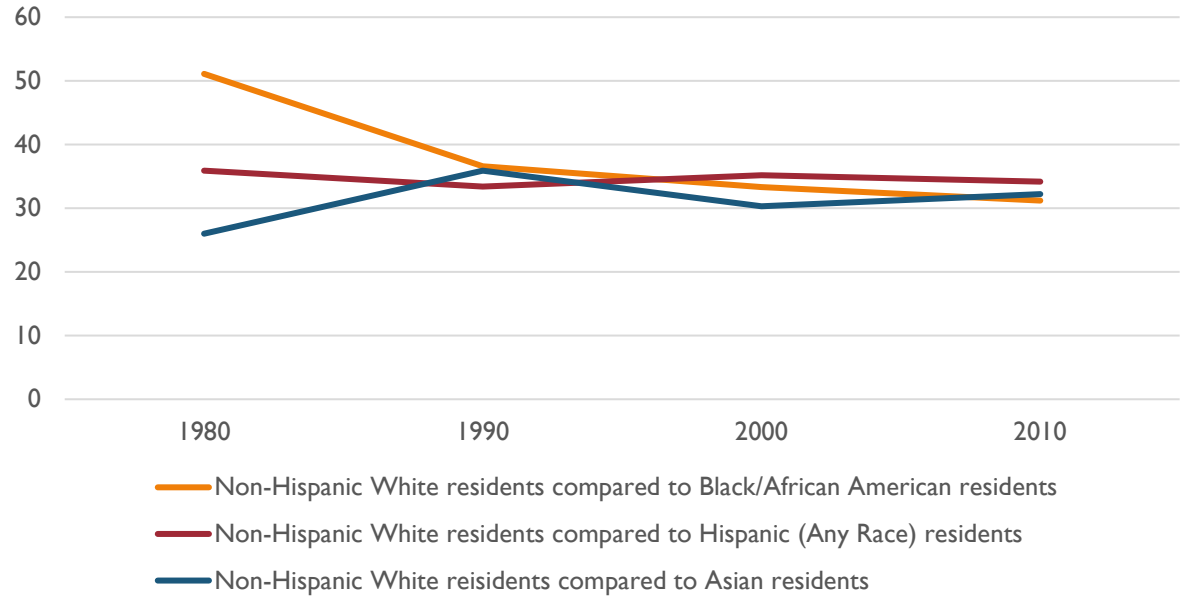
Dissimilarity Index

The "Dissimilarity Index" is a measure of whether members of one group are located evenly across census tracts. The value of this index ranges between 0 and 100, with low values indicating a low amount of segregation and high values indicating a high amount of segregation. The exact value represents the percentage of people who would need to move census tracts for the groups to be evenly distributed within the County. For example, if the County's dissimilarity index for White residents compared to Black/African American residents was 40, this would mean that 40 percent of Black/African American residents would need to move into other census tracts to make the White and Black/African American populations evenly distributed within the County. Note that when looking at race or ethnic Dissimilarity Index values, the values only account for the location of residents rather than those of incomes, housing, or neighborhood quality.

The Dissimilarity Index for Stanislaus County for non-Hispanic White residents compared to Black/African American residents shows that these residents have become more integrated within Stanislaus County between 1980 and 2010.

The Dissimilarity Index between Non-Hispanic White and Hispanic or Latino residents stayed constant within Stanislaus County between 1980 and 2010, indicating the increase in the Hispanic or Latino population has been proportional across the County. In other words, compared to the 1980 distribution by ethnicity, integration between non-Hispanic White residents and Hispanic or Latino residents in the County has not changed over time.

Chart 8. Dissimilarity Index: Stanislaus County

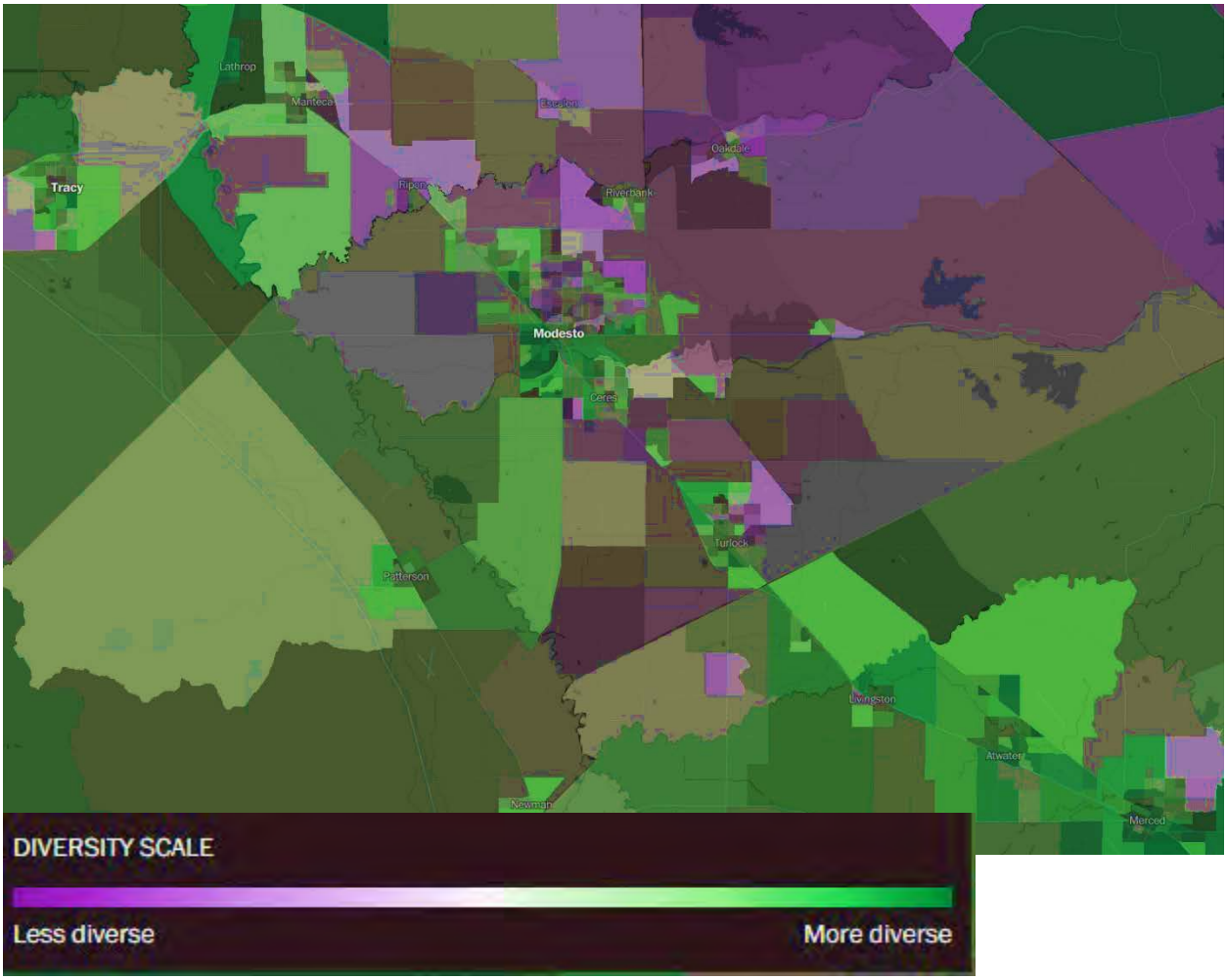


Source: Diversity and Disparities, American Communities Project, Brown University, Modesto MSA

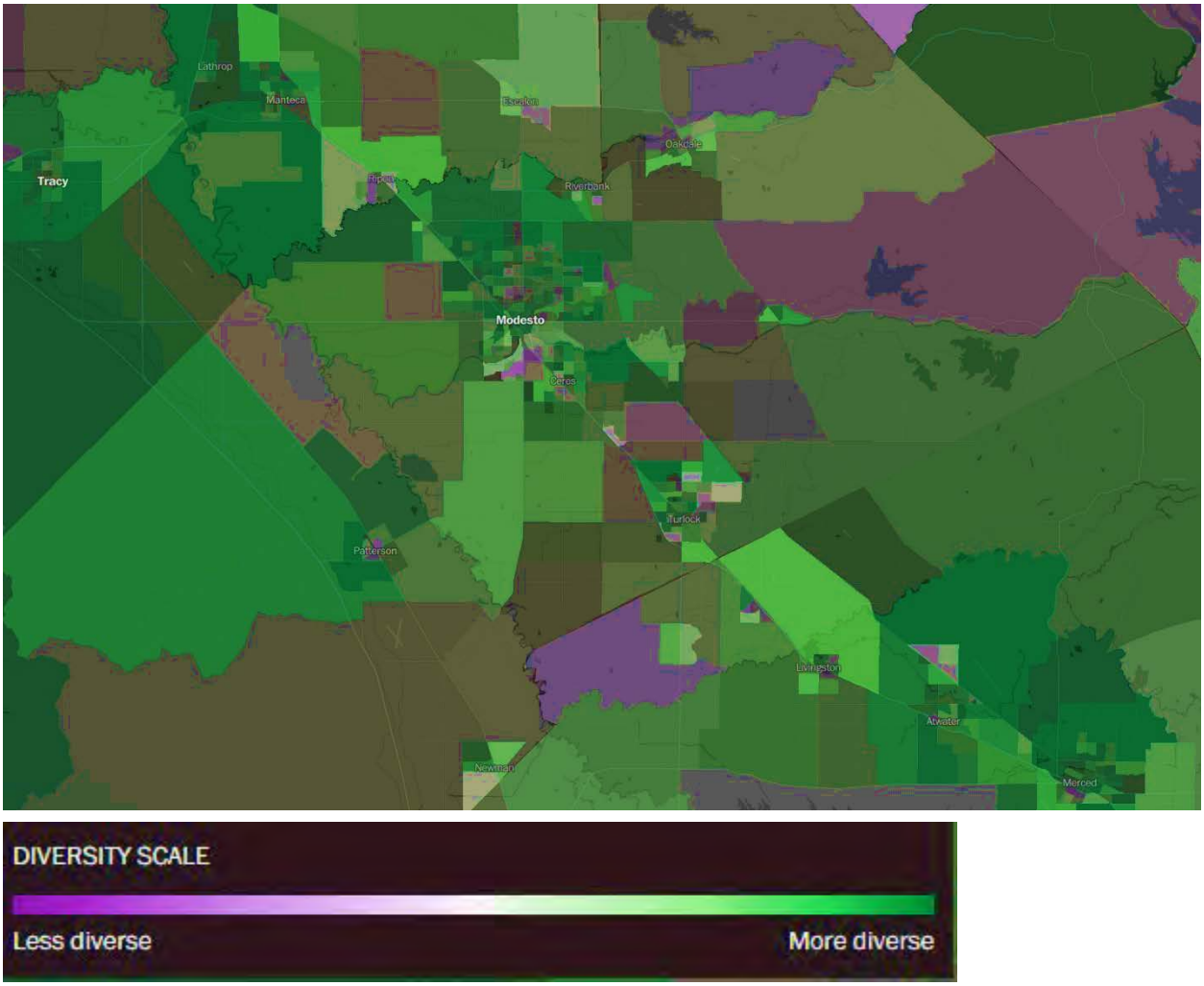
Entropy Index

A related calculation of diversity is an "entropy index", which measures the spatial distribution of race in a given area. The more clustered together a single racial group is, the less diverse that area is under this metric. If the group is distributed evenly throughout the County, then the area is considered more diverse. Between 1990 and 2016, Stanislaus county became more diverse under this measure, supporting the interpretation of the Dissimilarity Index.

Map 3. Entropy Index, 1990



Map 4. Entropy Index, 2016



Source: Washington Post: How integrated is your city? Diversity mapping tool. Published May 2, 2018.

Age and Disability

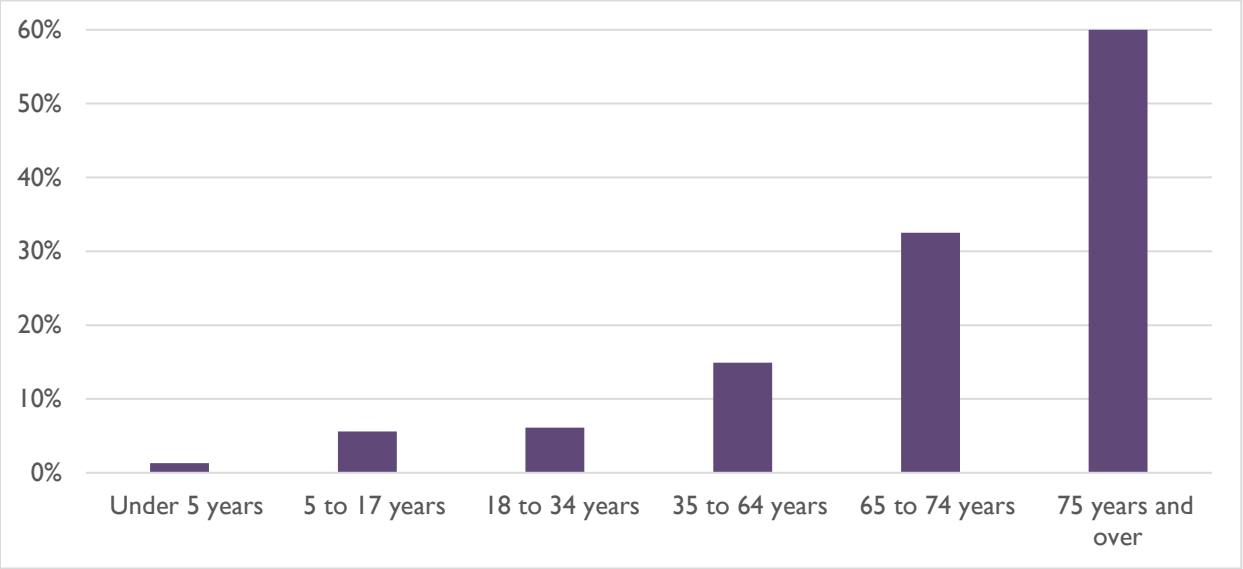
In Stanislaus County, about 44 percent of residents over age 65 report having some sort of disability. For individuals age 75 and over, this figure increases to 60 percent. Figure 12 depicts the share of the County population with a disability by age bracket. In comparison, Figure 13 presents the projected population growth by age in Stanislaus County. Between 2020 and 2040, the State of California Department of Finance anticipates the largest population growth in Stanislaus County for residents in two age brackets: those ages 30-48 and those over the age of 70.

In areas with a high number of seniors, there may be need for specific services and disability accommodations (changing a rule or policy for a person based on disability) and modifications (changing a physical structure for a person based on disability).

Disability accommodations and modifications may be needed in any number of venues like rental and homeowner housing, government service counters, community centers, and walkways. Services in demand for with disabilities include meal programs, home care and medical services, transportation, and other social services. Subsidies to provide these services to low- and moderate-income residents are

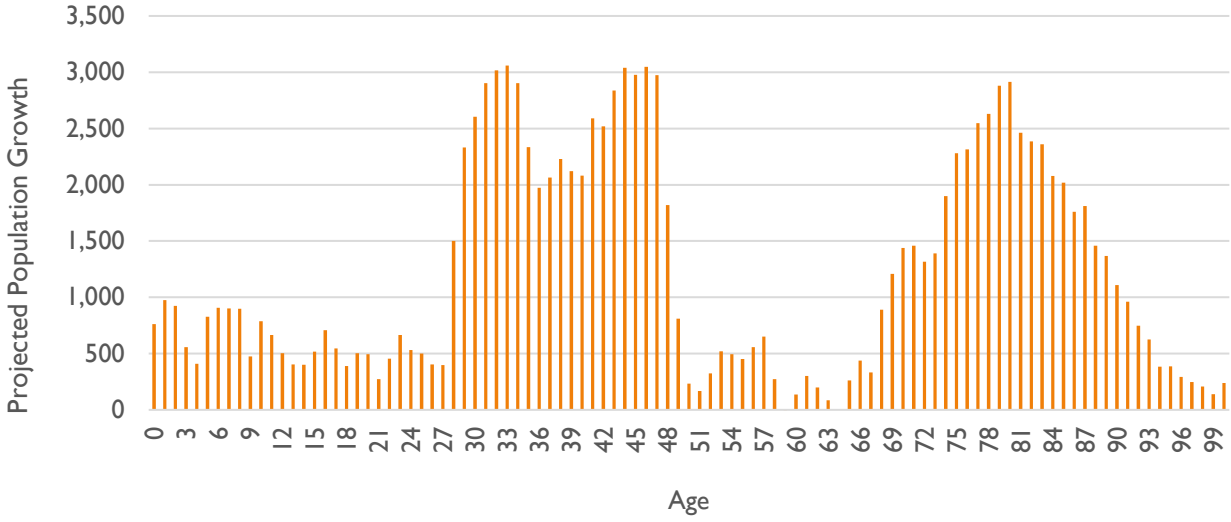
particularly needed in these areas. Between 2020 and 2040, the State of California Department of Finance anticipates population growth in Stanislaus County among two age categories: those 30 to 48 and those over the age of 70. (Chart 9)

Chart 9. Population with a Disability by Age in Stanislaus County



Source: 2012-2016 ACS 5-Year Average

Chart 10. Projected Population Change by Age 2020-2040



Source: State of California Department of Finance County Population Projections (2010-2060): County Population by Age (1-year increments) Baseline 2016

Income Trends

Disability and Income

About 9 percent of the County's population reports having a disability. Figure 14 presents the distribution of annual earnings for residents in Stanislaus County by disability status. The median annual earnings for a person with a disability is $24,404 in Stanislaus County. Without a disability, median annual earnings are $29,816, a difference of more than five thousand dollars annually. Likewise, of the population with a disability in the County, 21.4 percent are under the federal poverty level compared to just 14.1 percent of people without a disability.

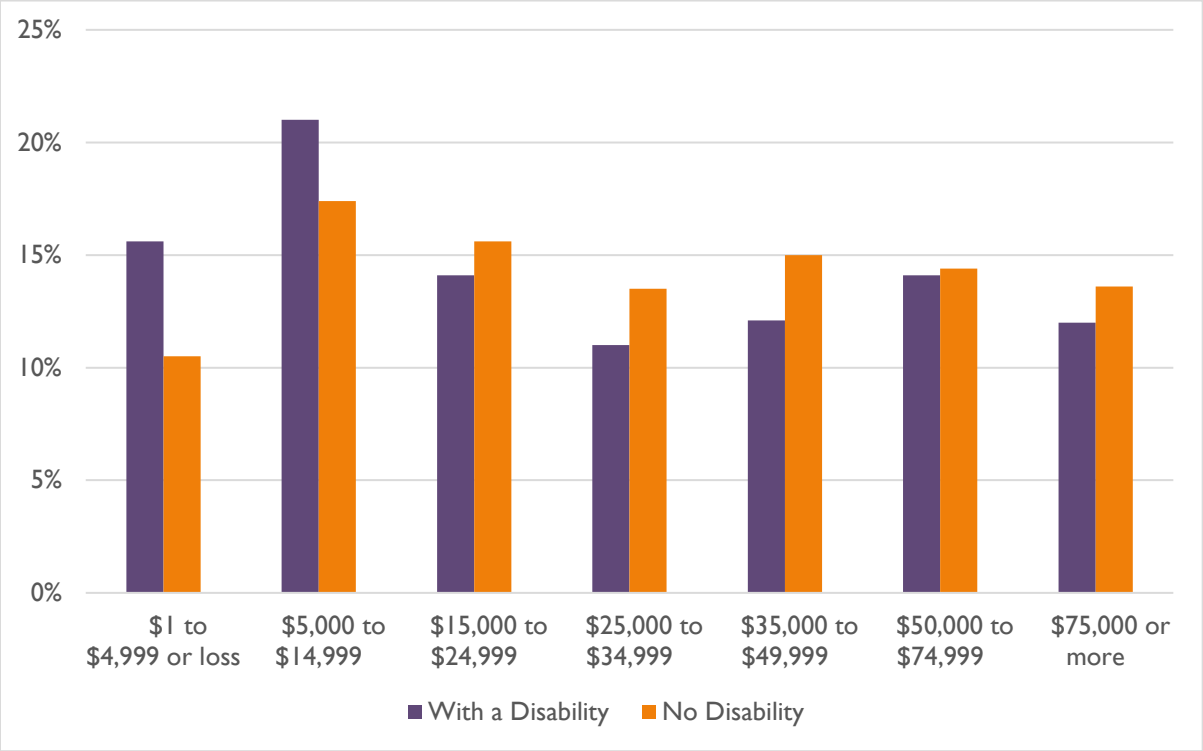
The income discrepancy is most likely due to the fact that the majority of the Stanislaus County population with a disability and over age 16 are not in the labor force (Table 2).

Table 2. Total Population and Population with a Disability in Labor Force in Stanislaus County

	Total Population	Population with a Disability
Employed	54.6%	19.7%
Not in Labor Force	38.2%	75.4%

Source: 2013-2017 ACS

Chart 11. Disability Status by Annual Income Brackets in Stanislaus County

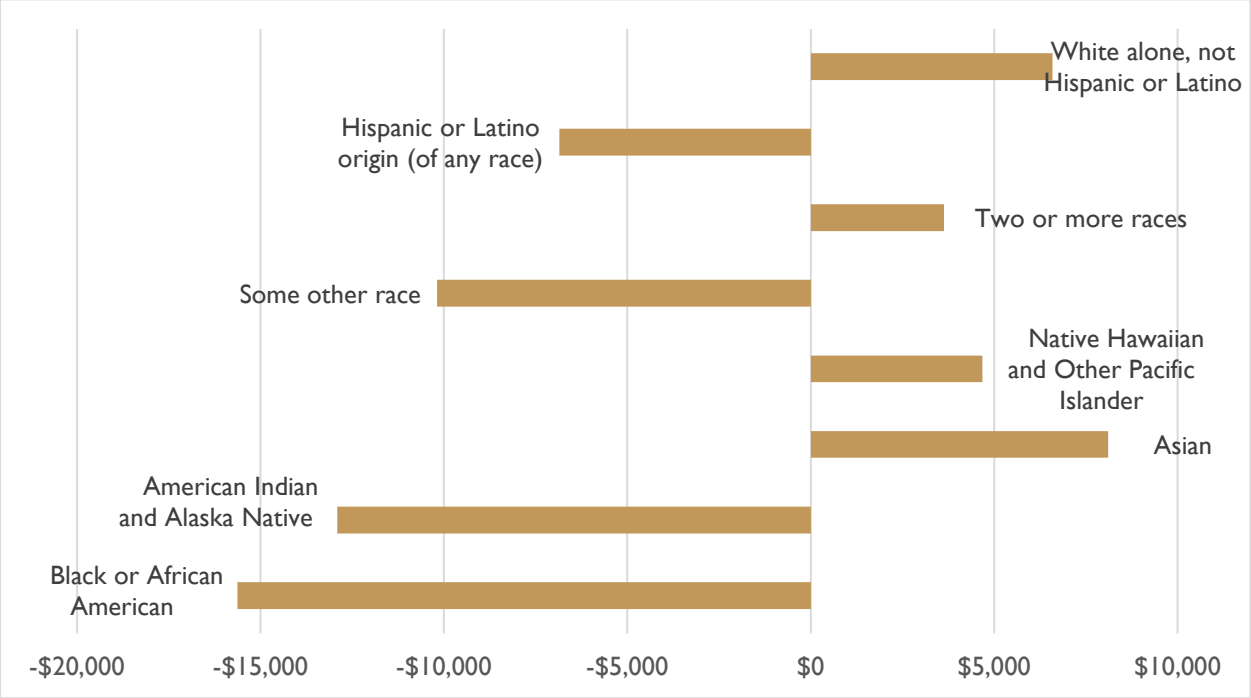


Source: 2013-2017 ACS

Race/Ethnicity and Income

The median household income in Stanislaus County is $54,260, which varies by over $15,000 per year depending on household race and ethnicity. Non-Hispanic White and Asian households earn more than $5,000 per year above the County median income, while Hispanic or Latino, American Indian and Alaska Native, Black/ African American, and people of another race make $5,000 to $15,000 less annually per household.

Chart 12. Difference in Annual Median Income from County Median Income by Race and Ethnicity



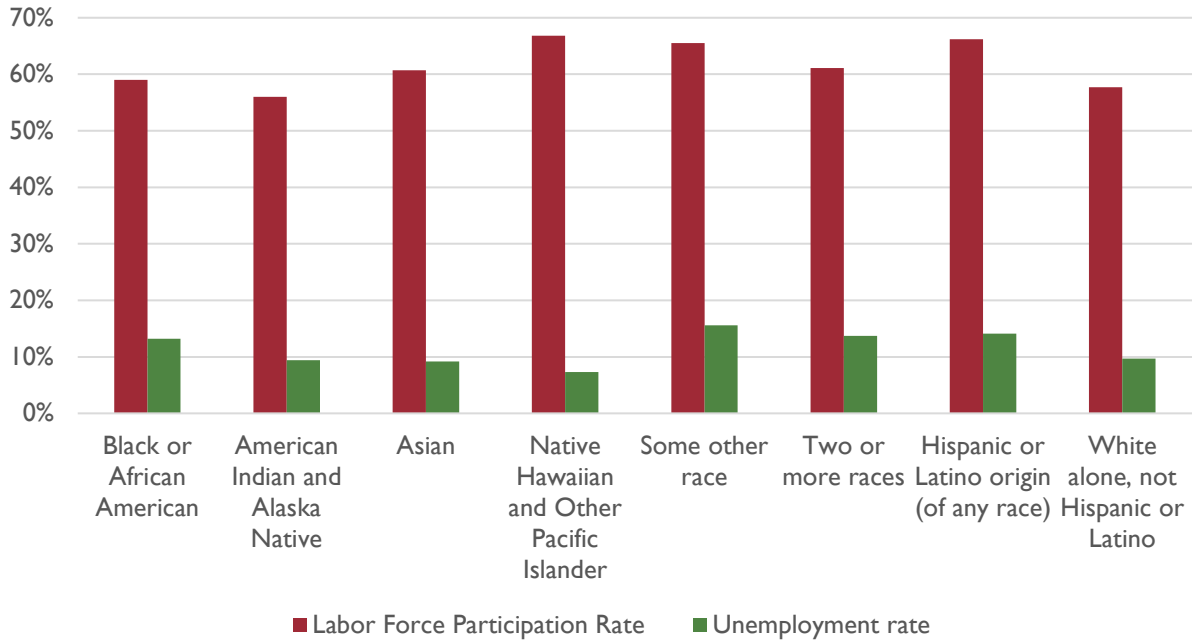
Source: 2013-2017 ACS

Employment Trends

Employment by Race/Ethnicity

Participation in the labor force as well as unemployment vary by race and ethnicity. There could be several reasons for this including historic differences in access to education, participation in industries which have undergone significant change, and different sized populations of retired individuals in each racial or ethnic group. Chart 13 depicts the share of individuals participating in the labor force and are unemployed by race and/or ethnicity.

Chart 13. Labor Force Participation and Unemployment by Race and Ethnicity

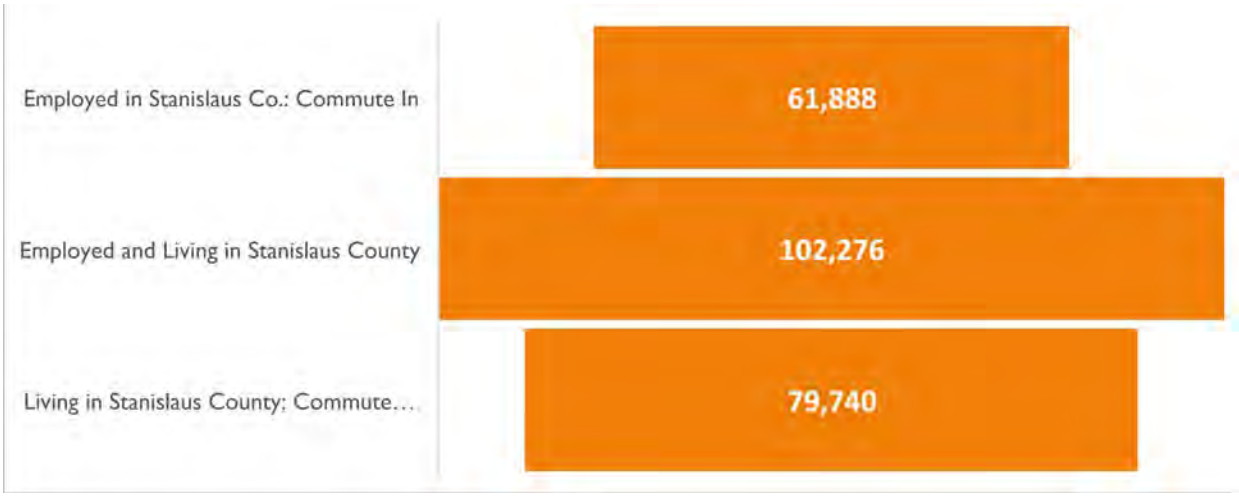


Source: 2013-2017 ACS

Commuting Time/Type

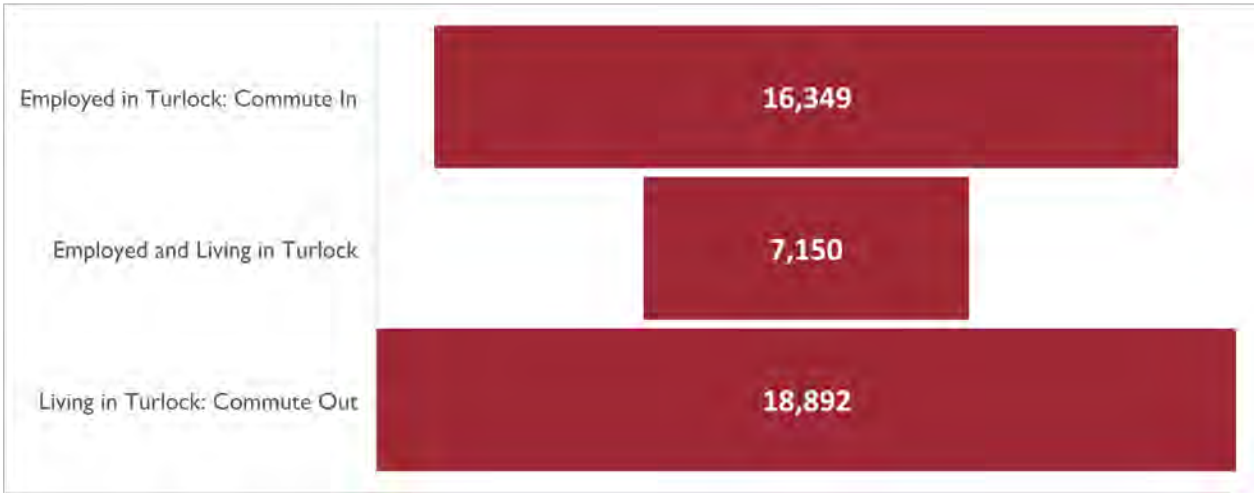
Countywide, more people both work and live in Stanislaus County (42 percent) than commute outside the County for work (33 percent). In comparison, a significant number of residents in both Turlock and Modesto commute outside the City for work. Access to and methods of transportation for employment can therefore be a determinant in an individual's ability to access and maintain various jobs. Charts 14, 15, and 16 depict the number of residents in Stanislaus County, Modesto, and Turlock who commute within or outside of the County for work.

Chart 14. Primary Job Inflow/Outflow: Stanislaus County



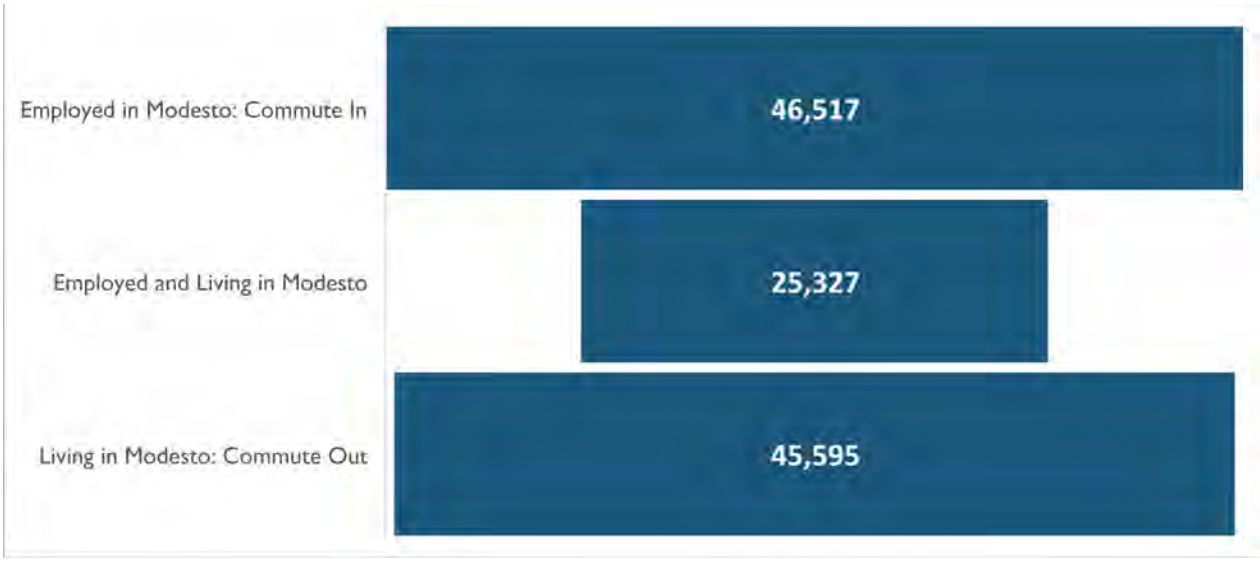
Source: U.S. Census OnTheMap

Chart 15. Primary Job Inflow/Outflow: City of Turlock



Source: U.S. Census OnTheMap

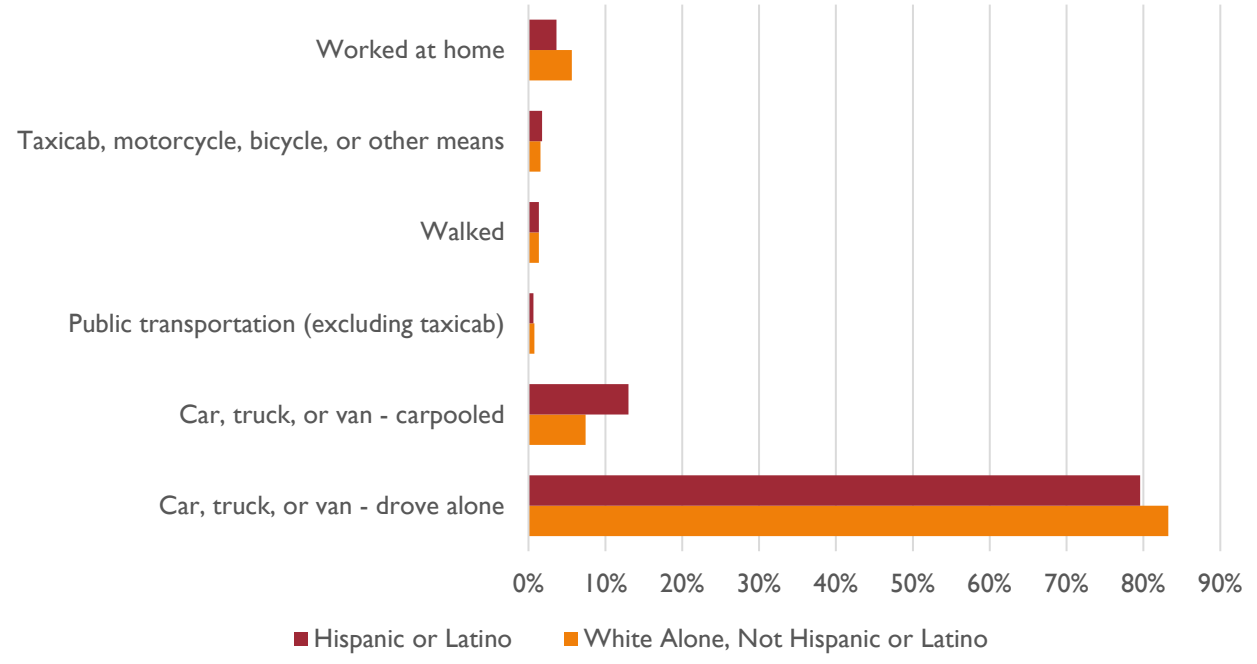
Chart 16. Primary Job Inflow/Outflow: City of Modesto



Source: U.S. Census OnTheMap

Chart 17 presents the different forms of transportation residents use to get to work for White Non-Hispanic and Hispanic/Latino residents. The chart indicates that there are slight differences in the commuting method between White, non-Hispanic residents and Hispanic or Latino residents in Stanislaus County. More Hispanic or Latino residents commute to work by shared car, truck, or van (carpooled) than White non-Hispanic residents, while more White non-Hispanic residents either drove alone or worked at home.

Chart 17. Means of Transportation to Work by Race and Ethnicity



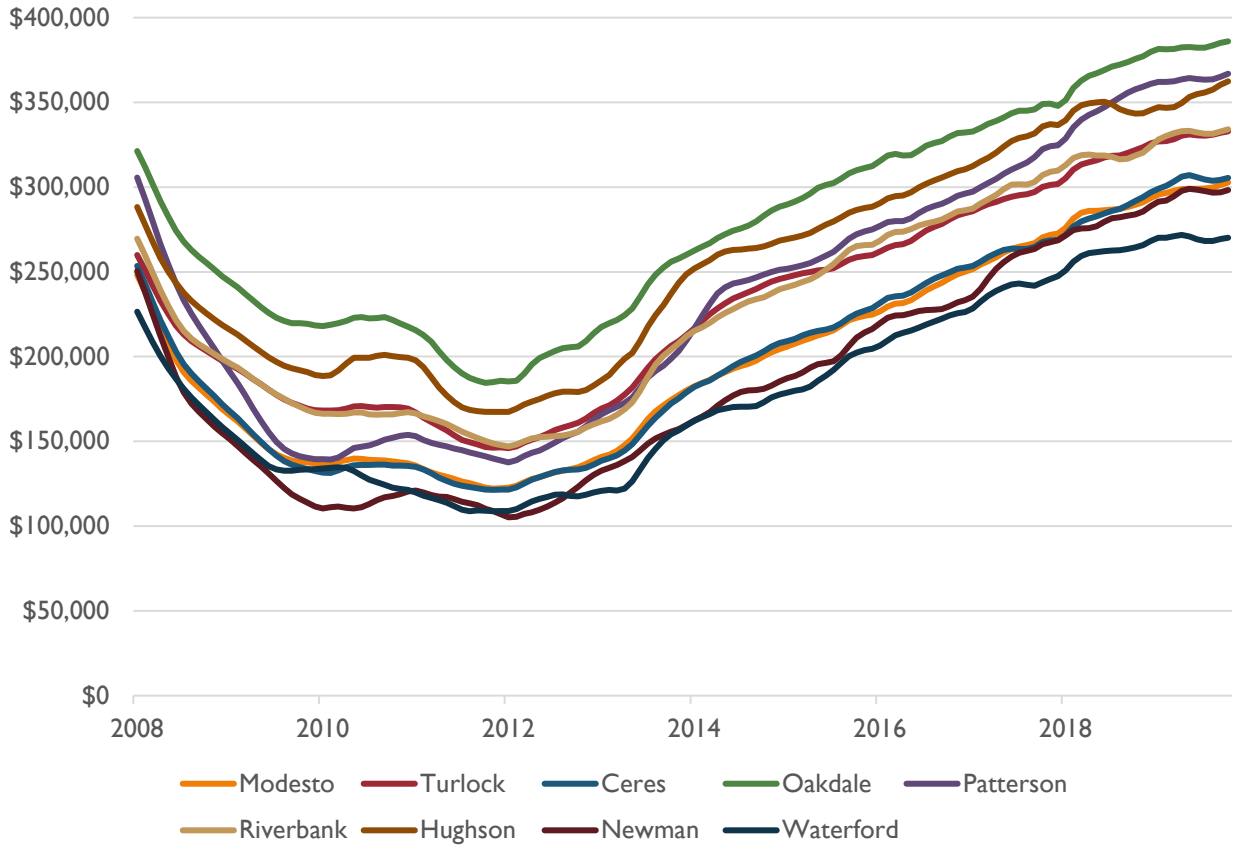
Source: 2013-2017 ACS 5-Year Estimates

Housing Trends

Homeowner housing (both single-family homes and condos) values have increased steadily across Stanislaus County since 2012. The highest values are in Oakdale, with a typical housing unit worth $368,000 in 2019. The lowest value for a typical house in 2019 is in Waterford, about $270,000.

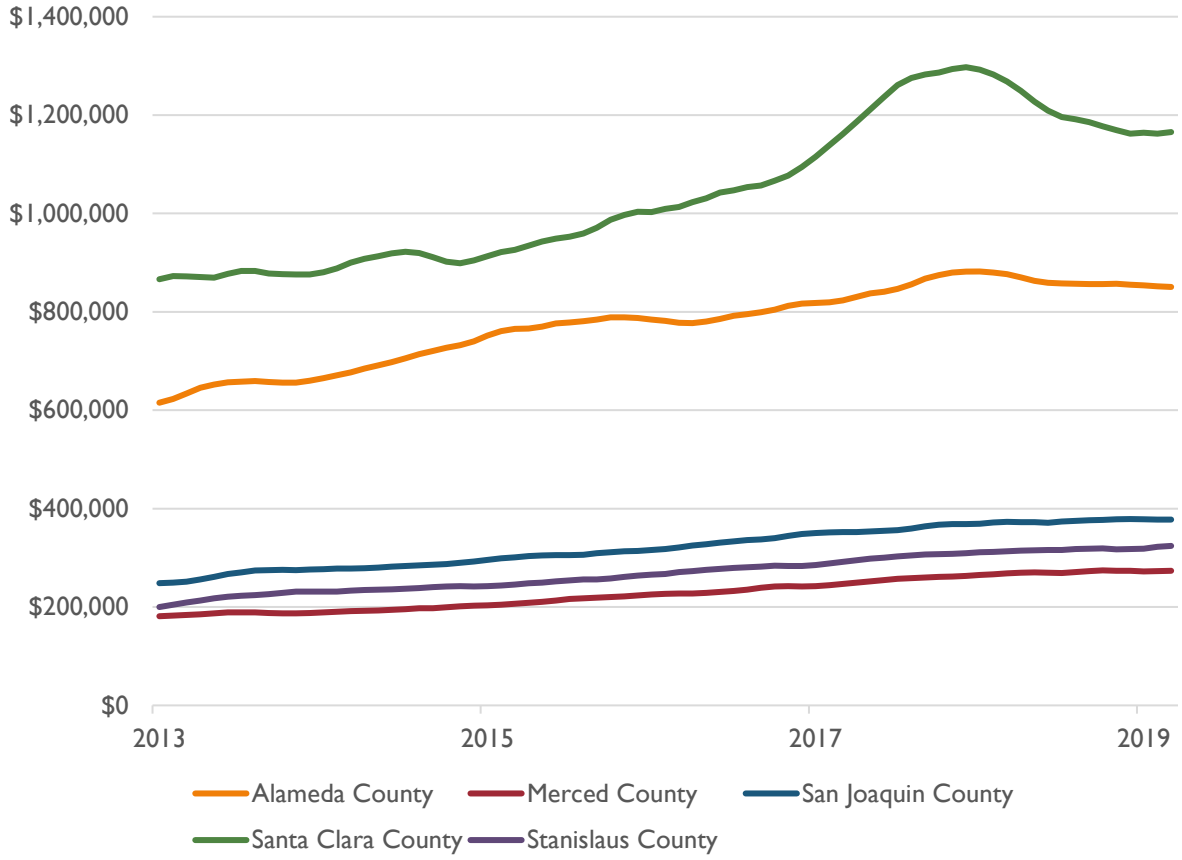
Regionally, homeowner housing values in counties surrounding Stanislaus County are divided between the Bay Area (Alameda, Santa Clara Counties) and those inland (Merced, Stanislaus, and San Juaquin Counties). Chart 18 presents typical home values for jurisdictions within Stanislaus County. In comparison, Chart 19 depicts the typical housing value in Stanislaus County and surrounding counties.

Chart 18. Typical Home Value (Zillow Home Value Index)



ZHVI All Homes (Single-Family Rental, Condo/Coop) Time Series

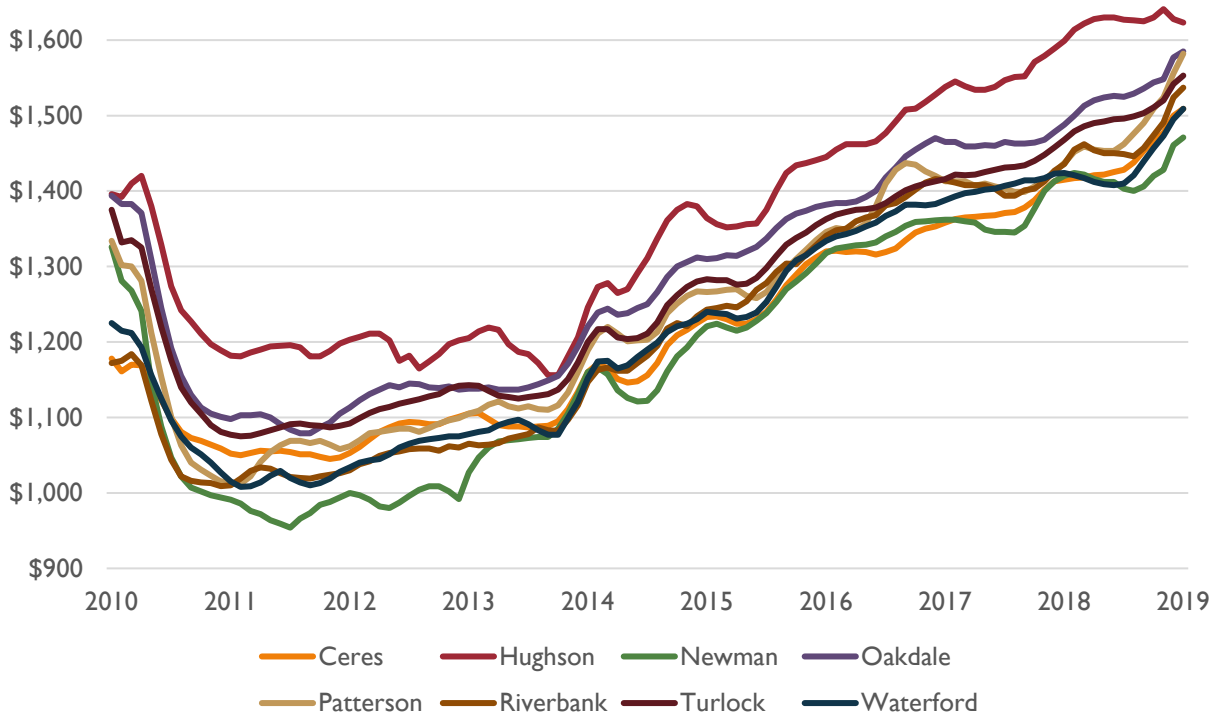
Chart 19. Typical Home Value in Regional Counties (Zillow Home Value Index)



Source: Zillow data: ZHVI All Homes (Single-Family Rental, Condo/Coop) Time Series

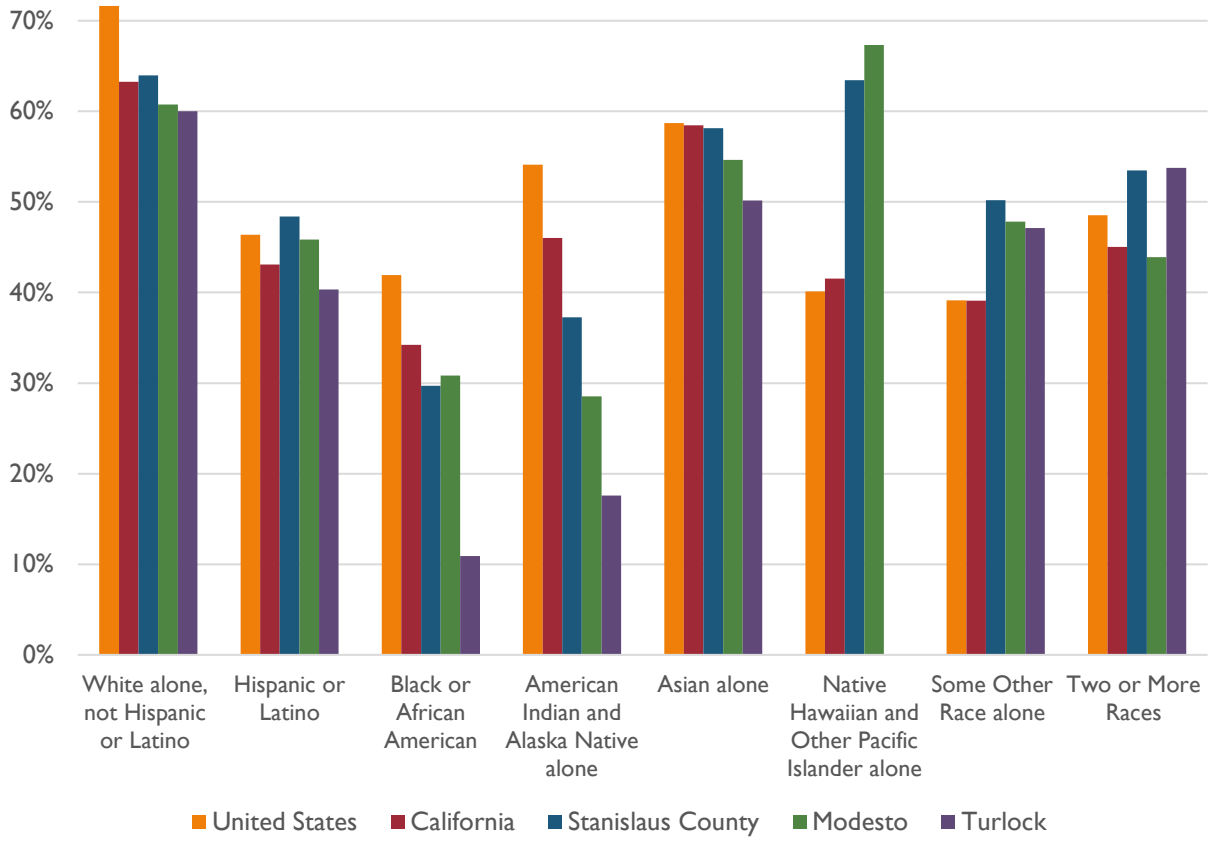
Chart 20 depicts the change in typical rental housing prices by jurisdiction in Stanislaus County. The figure indicates that rental housing prices have increased in all Stanislaus County municipalities, with the highest typical rental price in Hughson ($1,623) and the lowest in Newman ($1,471) as of 2019.

Chart 20. Typical Housing Rental Price (Zillow Rent Index)



Source: Zillow Data: ZRI Time Series

Chart 21. Homeownership Rate by Race and Ethnicity



Source: 2013-2017 ACS 5-Year Estimate

Chart 21 presents homeownership rates by race and ethnicity for residents of Stanislaus County, Turlock, and Modesto as well as California and the United States. For most race and/or ethnicities depicted, homeownership rates for the County and Entitlement Communities more closely resemble those for California than the United States. In addition, for some race/ethnic groups, homeownerships rates for Stanislaus County, Modesto, and Turlock are well above or below average. For instance, the homeownership rate for Black/African American residents in Turlock is 10.9 percent whereas the rate for Modesto is 30.8 percent, 29.7 percent for Stanislaus County, 34.2 percent for California, and 41.9 percent for the United States. This may be because of a small sample size or population of Black/African American residents in Turlock.

Access to Opportunity

Transportation

Transportation is a component in equal access to neighborhoods, employment, healthcare, and other services for those who cannot or choose not to drive a car due to factors like disability, financial constraints, or legal barriers. Most transportation in Stanislaus County is through personal vehicles, though public transportation exists as a regional bus system, city bus systems, ADA paratransit services (Dial-a-Ride), and interstate train system.

Stanislaus County has numerous public transportation and alternative transportation methods, particularly for seniors or those with mobility disabilities. Less than 10 percent of all workers commute using a shared vehicle or public transportation, however, partly due to the lack of transit options during non-traditional business hours.

Bus Systems

Stanislaus Regional Transit (StaRT) serves Stanislaus County with eight bus routes that travel throughout the County. All bus stops are shown on Map X

Ceres Area Transit (CAT) serves Ceres and the surrounding unincorporated area.

Modesto Area Express (MAX) offers bus service throughout the Modesto urban area with 21 routes.

Turlock Transit provides transit service with six routes within the City of Turlock.

Ride Services

Ceres Dial-A-Ride (CDAR) is a curb-to-curb demand service for use only by people with disabilities that prevents them from riding the CAT Scheduled Fix Route Bus System. CDAR is presently operated by Storer Transit Systems, Inc., under contract with the City of Ceres.

Modesto Area Dial-A-Ride (MADAR) is provided by the City of Modesto as a transportation service for persons with disabilities, and people 65 and older.

Stanislaus Regional Transit (StaRT) Dial-A-Ride is a pre-scheduled cur-to-curb service within the County. Dial-A-Ride is available in the following communities:

Newman Dial-A-Ride Newman, Crows Landing, Gustine
Oakdale Dial-A-Ride Oakdale
Patterson Dial-A-Ride Patterson, Westley, Grayson
Riverbank Dial-A-Ride Riverbank, Eastside

Stanislaus Regional Transit (StaRT) Shuttles is a curb-to-curb transportation service open to the general public between cities in the County. The following shuttles operate within the County:

Waterford/Modesto Shuttle: Modesto, Empire, Oakdale, Waterford, Hickman, Hughson, Ceres
Eastside Shuttle: Modesto, Oakdale, Riverbank
Turlock/Modesto Shuttle: Modesto, Keyes, Turlock, Denair

Stanislaus Regional Transit (StaRT) ADA Paratransit service is available to individuals with disabilities which prevent them from using fixed-route buses. The service is provided within a 3/4-mile radius of a StaRT Fixed Route bus and is a direct origin-to-destination shared-ride transit service.

Stanislaus Regional Transit (StaRT) Medivan takes pre-scheduled passengers from Modesto to non-emergency appointments at Bay Area Medical Centers Monday through Thursday.

BRIDGES Volunteer Driver Program provides reimbursement to individuals with a disability or senior citizens who are unable to drive or use public transit**.** Eligible participants select a volunteer driver

who is able to drive them to destinations. Participants receive $0.50 per mile to reimburse the volunteer driver.

Veterans Van Volunteer Driver Program (VetsVan) is a service through a partnership between the Stanislaus County Area Agency on Aging and the Veterans Service Office (VSO) that helps veterans get to medical appointments. VetsVan serves homebound veterans and occasionally those who are not able to take other forms of transportation due to a medical condition. Rides are provided by volunteer drivers and can take veterans to regional Veterans Affairs (VA) locations.

Turlock Transit Dial-a-Ride provides paratransit service to eligible individuals. Within a specified zone in Turlock, the service is available only to persons who have received ADA paratransit eligibility, those 65 years of age and over, Medicare card holders, or elementary school students. In other Turlock-area zones, the service is open to everyone.

Regional Rail

Amtrak stations on the San Joaquins regional line are located near Modesto and Turlock. The San Joaquins line runs to Bakersfield southbound and Oakland or Sacramento northbound. The San Joaquin Joint Powers Authority, of which StanCOG is a member, operates the line.

The Modesto Amtrak station was built in 1999 and has ADA Accessible bathrooms, waiting room, water fountain, ticket office, and platform. Denair Station near Turlock is an unstaffed Amtrak station. The train platform is ADA Accessible.

Altamont Commuter Express (ACE) is a commuter train used by residents of Stanislaus County. It runs between Stockton and San Jose and stops in the Bay Area.

Connecting Services

Modesto Area Express (MAX) offers commuter services to ACE, Amtrak, and Bay Area Rapid Transit (BART).

StaRT Commuter is a bus that transports commuters from Turlock and Patterson to the Dublin/Pleasanton BART station.

California Vanpool Authority (CalVans) *CalVans* operates as a Public Transit Agency that operates two programs: the Farmworker Vanpool Program and the General Public Vanpool program. CalVans supplies volunteer drivers with vans to drive themselves and others to work or school and pays for the gas, maintenance, repairs, and insurance.

Transportation Planning

StanCOG The Stanislaus Council of Governments (StanCOG) is the Metropolitan Planning Organization (MPO) for the Stanislaus Region tasked with, among other things, creation of the Regional Transportation Plan (RTP). The RTP is a 25-year plan that describes future needs and goals for all local transportation systems including roadways, transit, bicycle/pedestrian improvements and aviation. The last RTP published was the *2018 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/ SCS).

Non-Motorized Transportation Plan The *2013 Non-Motorized Transportation Master Plan*, details bicycle and pedestrian transportation in the County and is being updated in 2020. One stated goal of the

plan update is to "develop a non-motorized transportation network that focuses on equity and inclusivity to address the region's unique needs."

MOVE The California Social Services Transportation Improvement Act was passed in 1979 and allowed and suggested that each California county create a Consolidated Transportation Services Agency to coordinate the transportation needs of seniors, people with disabilities, and others with lowered mobility or special transportation needs. In 2010, StanCOG established the Consolidated Transportation Services Agency (CTSA) of the Stanislaus Region, now called "MOVE". MOVE works to reduce gaps in the region's public transit systems, assists other human services agencies with transportation technical assistance, and provides mobility training ("travel training").

Measure L In 2016, a one-half cent sales tax was approved by Stanislaus County voters ("Measure L"), to fund transportation in the County. Over the measure's lifetime of 25 years, 65 percent of the revenue will be used for local projects, $48 million for bicycle and pedestrian network improvements, and $20 million for need-based transportation services for seniors, veterans, and disabled residents. In all, Measure L is expected to collect $960 million dollars.

General Plan The "Circulation Element" of the Stanislaus County General Plan addresses transportation issues from a land-use perspective. It encourages land use that supports public transit and other transportation modes.

Transit Discrimination and Housing Choice Issues

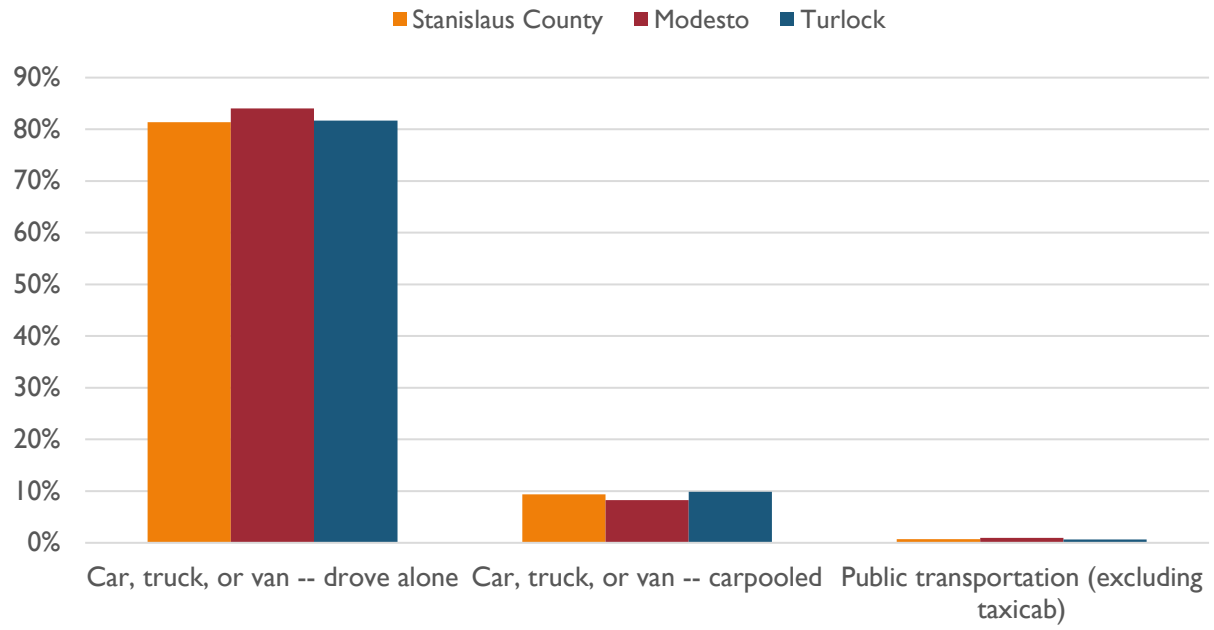
Title VI of the Civil Rights Act of 1964 protects the right to not be excluded from participation in, or denied the benefits of, public transportation services on the basis of race, color, or national origin. People who believe that they have experienced discrimination or have been denied rights may file a complaint with California's Department of Fair Employment and Housing (DFEH) or with the Federal Transit Administration.

Public Transit Use

Chart 22 depicts the share of commuters in Stanislaus County by the method of transportation to work. The figure indicates that a very small percentage of workers in Stanislaus County take public transportation to commute to work. Only 0.7 percent, or 7 out of every 1,000 workers, take public transportation countywide. In Modesto, the largest city in the County, 0.9 percent take public transportation to work. Using a personal vehicle (whether alone or part of a rideshare/carpool) to travel to work takes far less time than taking public transportation in Stanislaus County. People driving alone to work take an average of 22 minutes, and people who share rides take an average of 26 minutes. Those who take public transportation take 47 minutes, more than double the time driving a vehicle alone. (Chart 23)

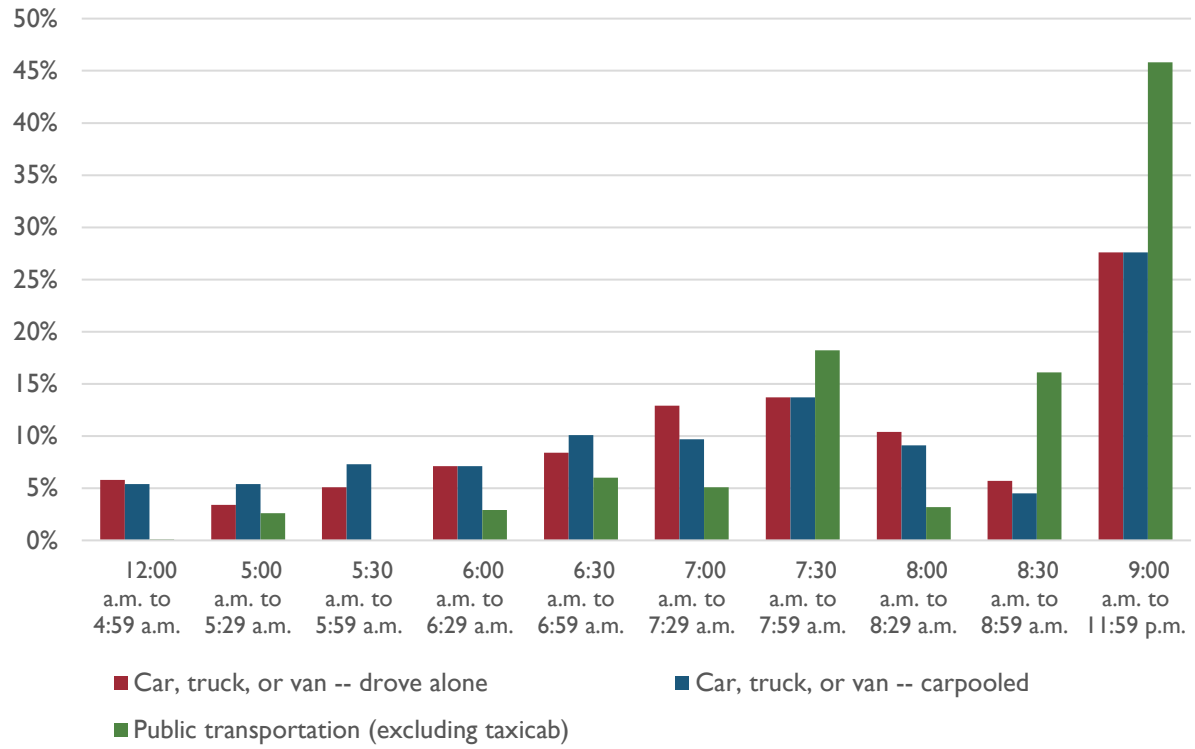
For those who do take public transportation, Chart 23 indicates that the majority begin work during traditional first-shift or "office" hours after 8:30 am. Almost no workers who begin work between midnight and 6:00 am use public transportation but rely on their own vehicle or a rideshare/carpool. A higher percentage of people who drive to work start working between midnight and 8:30 am.

Chart 22. Commuting Method of Workers Over 16 in Stanislaus County



Source: 2013-2017 ACS 5-Year Estimates; Table S0804

Chart 23. Arrival Time to Work in Stanislaus County



Source: 2013-2017 ACS 5-Year Estimates; Table S0804

Schools

Education outcomes are correlated with housing and neighborhood choice because success in education drives an individual's ability to participate in the labor force, occupation, and wage prospects. The collective educational success in an area is a factor in the local economy, average wages and overall housing and neighborhood quality. If educational outcomes are not equal among members of specific groups, the local economy and housing and neighborhood quality will be impacted.

Likewise, housing discrimination segregates some children into distressed neighborhoods and high-poverty, low-quality schools. Specific housing and neighborhood policies can help students' education outcomes by investing in current struggling neighborhoods where children already are and by enabling families to live in communities with higher-quality schools. While increasing educational outcomes is complex and both individual education intervention for students and work stabilizing neighborhood safety and quality are needed, HUD has found the effects of increased neighborhood stability (and home environment) to be a larger factor in increasing educational outcomes. (Breaking Down Barriers: Housing, Neighborhoods, and Schools of Opportunity, HUD Office of Policy Development and Research)

Within Stanislaus County, there are 25 individual school districts and about 115,000 students between kindergarten and 12th grade. Around 110,000 are enrolled in public schools and 5,000 in private schools. Among public school students in the County, 60 percent are Hispanic or Latino, 26 percent are non-Hispanic White, 4 percent are Asian, and the remaining are Black/ African American or Two or More Races. Twenty four percent of all students are learning English, slightly higher than 19 percent in California. Sixty-nine percent of students qualify for free and reduced-price meals based on household income. (Stanislaus County Office of Education Annual Report to the Community 2019)

Chart 24 presents the share of students by race and ethnicity in Stanislaus County. Over 60 percent of students in Stanislaus County schools are Hispanic or Latino, about 26 percent are non-Hispanic White, and the rest are another race, thought the demographics of students varies widely geographically. In Ceres, Newman-Crows Landing, and Riverbank School Districts, more than 75 percent of students are Hispanic or Latino. More than 50 percent of students are non-Hispanic White at Valley Home Joint Elementary, Gratton Elementary, Oakdale Joint Unified, Knights Ferry Elementary, Hickman Community Charter School, and Gratton Elementary. Only Stanislaus Union Elementary has more than 25 percent of students who are not Hispanic or Latino, or non-Hispanic White ("Other").
Graduation rates vary by student race, though not by large margins. Black/ African American students have the lowest graduation rate in the County at 74.4 percent and are also the most likely to be suspended. Filipino students have the highest graduation rate at 89.4 percent. (California Department of Education 2018-2019) These rates are both less than ten percentage points away from the countywide graduation rate of 83.9 percent. (Chart 27)

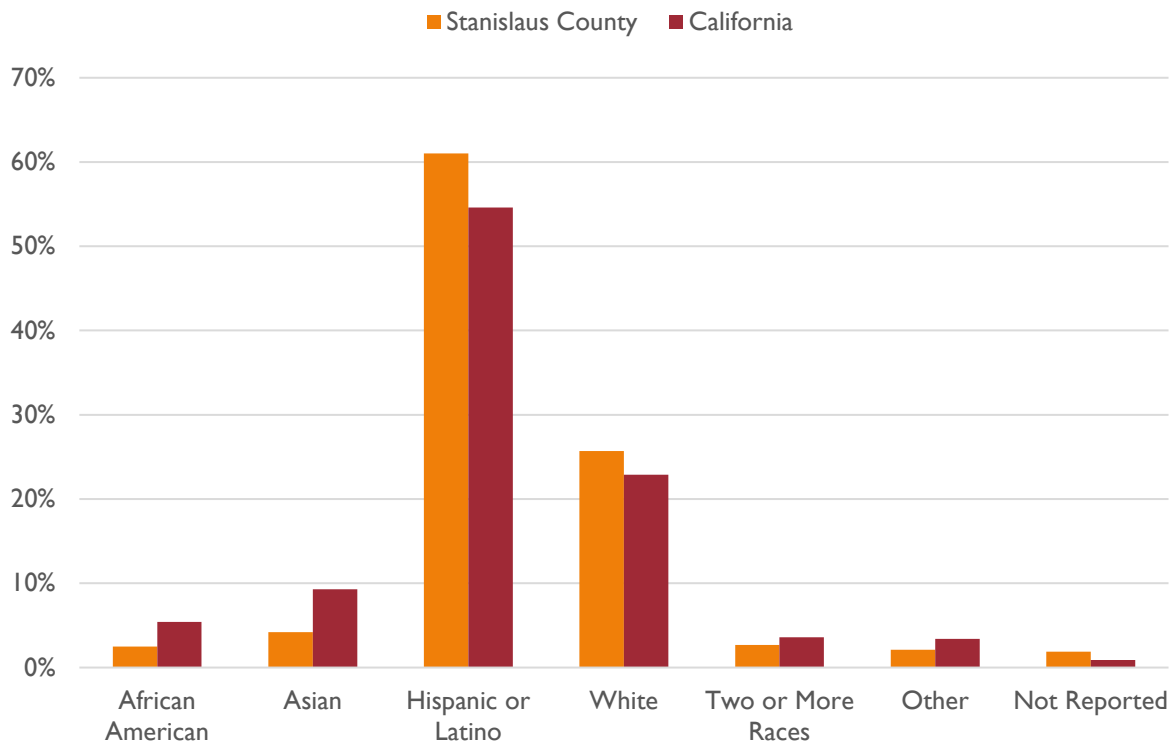
Students' ability to read, write, and speak English varies geographically as well. California students' English language ability is measured using the Initial English Language Proficiency Assessments of California (ELPAC). "English Only" (EO) students are native speakers of English with no additional language support needed. Initial Fluent English Proficient (IFEP) students need minimal language support, and "Reclassified Fluent English Proficient" (RFEP) are those students who, through learning English, are now at the IFEP level. "English Learners" need language education support to learn English for both social and academic use. (California Department of Education)

A number of schools and school districts have a large number of students who are English Learners, or not yet proficient at English for their grade level. Chart 26 indicates that Shiloh Elementary, Riverbank

Unified, Patterson Joint Unified, Paradise Elementary, Modesto City Elementary, Keyes Union, and Chatom Union all have more than a third of students who are considered English Learners.

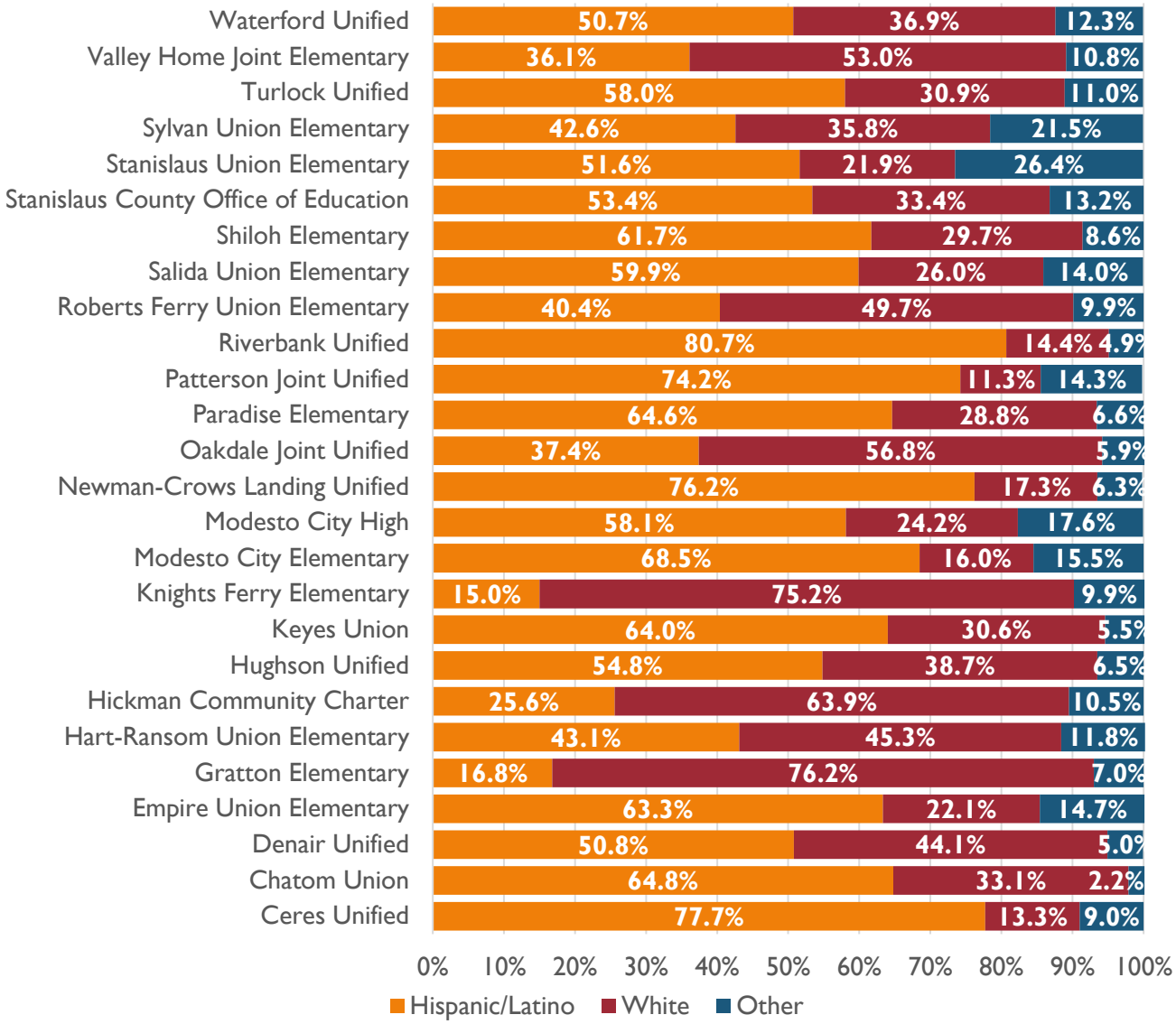
Students still in the process of becoming proficient in English have the significant hurdle of language in the way when competing academically with their peers, though many English Learners achieve the level of RFEP in time, particularly at Modesto City High where more than 31 percent of students achieved the level of RFEP after starting out as English Learners. Turlock Unified, Riverbank Unified, Patterson Joint Unified, Newman-Crows Landing Unified, Hughson Unified, and Ceres United School Districts all have at least 15 percent of students who have achieved the level of RFEP.

Chart 24. Share of Students by Race in Stanislaus County and California



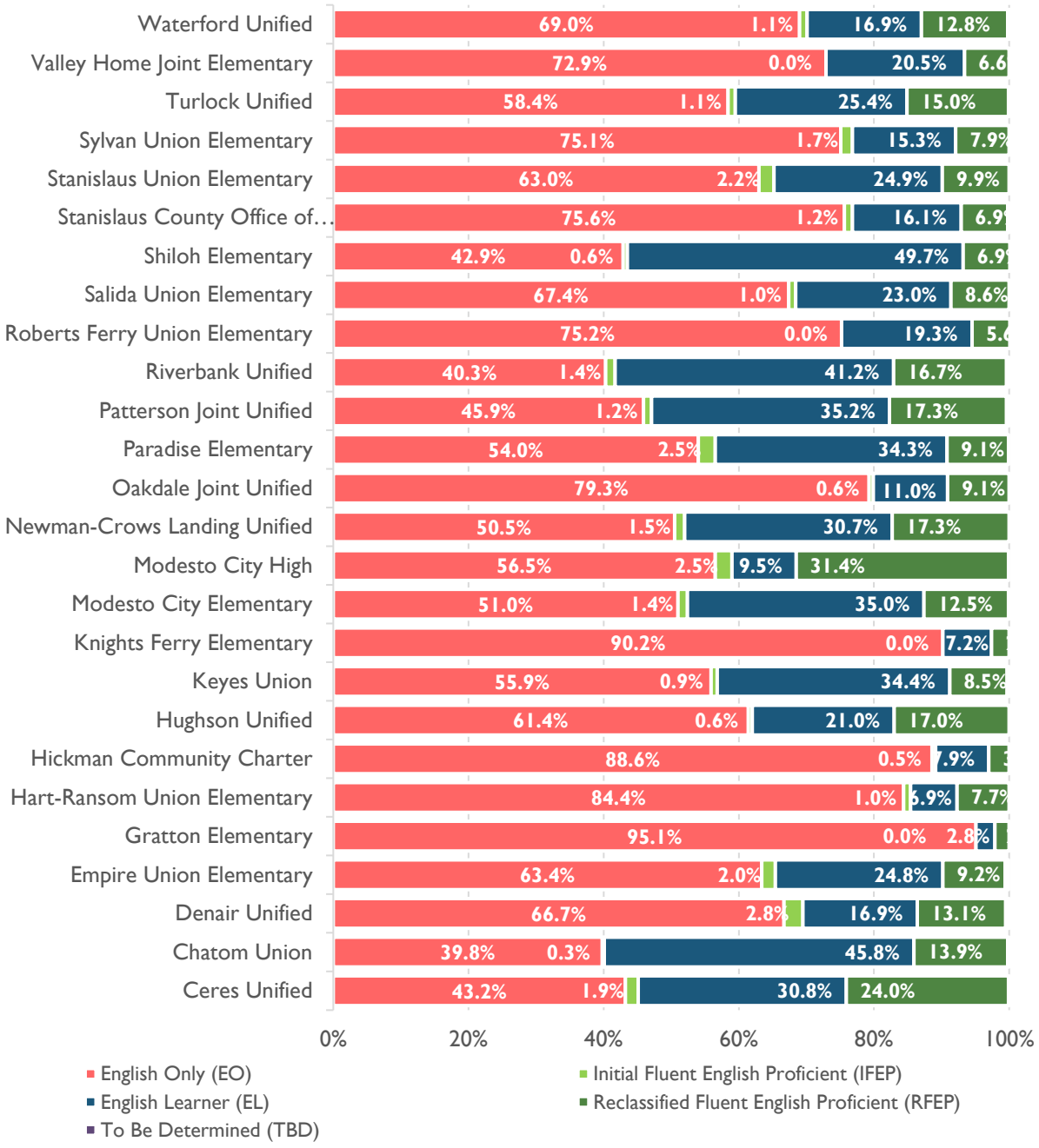
Source: California Department of Education 2018-2019

Chart 25. Share of Students by Race/Ethnicity and School District in Stanislaus County



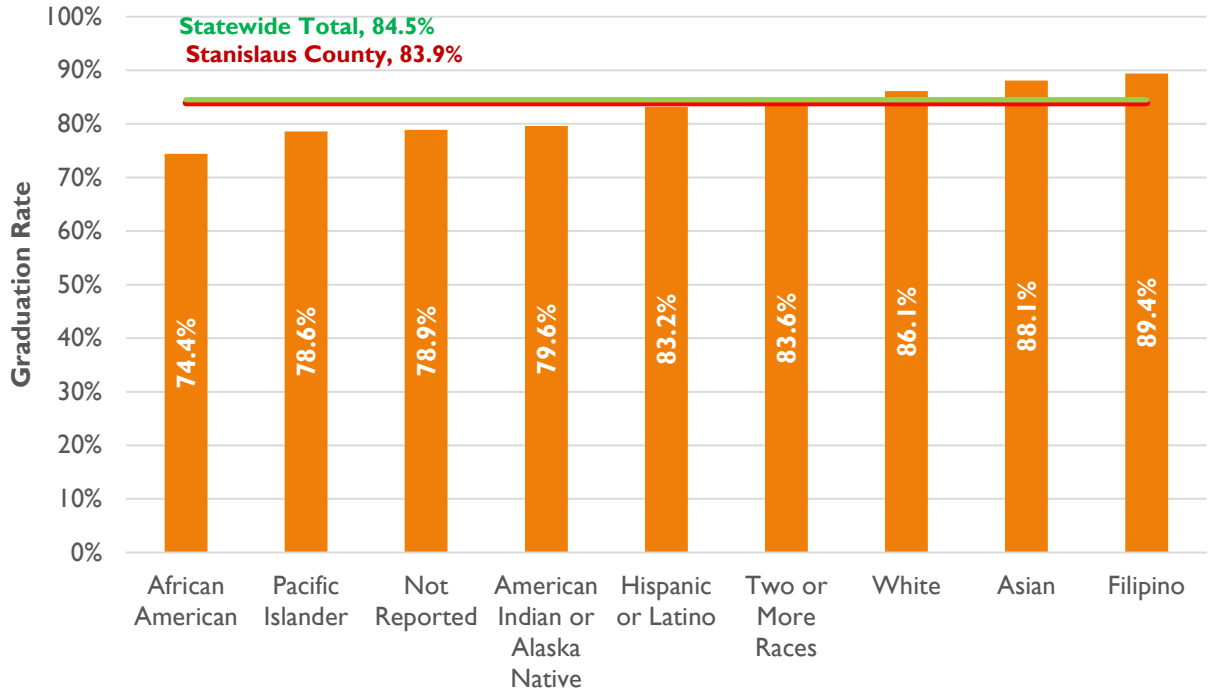
Source: California Department of Education 2018-2019

Chart 26. English Proficiency of Students by School or School District



Source: California Department of Education 2018-2019

Chart 27. Cohort Graduation Rates by Race in Stanislaus County

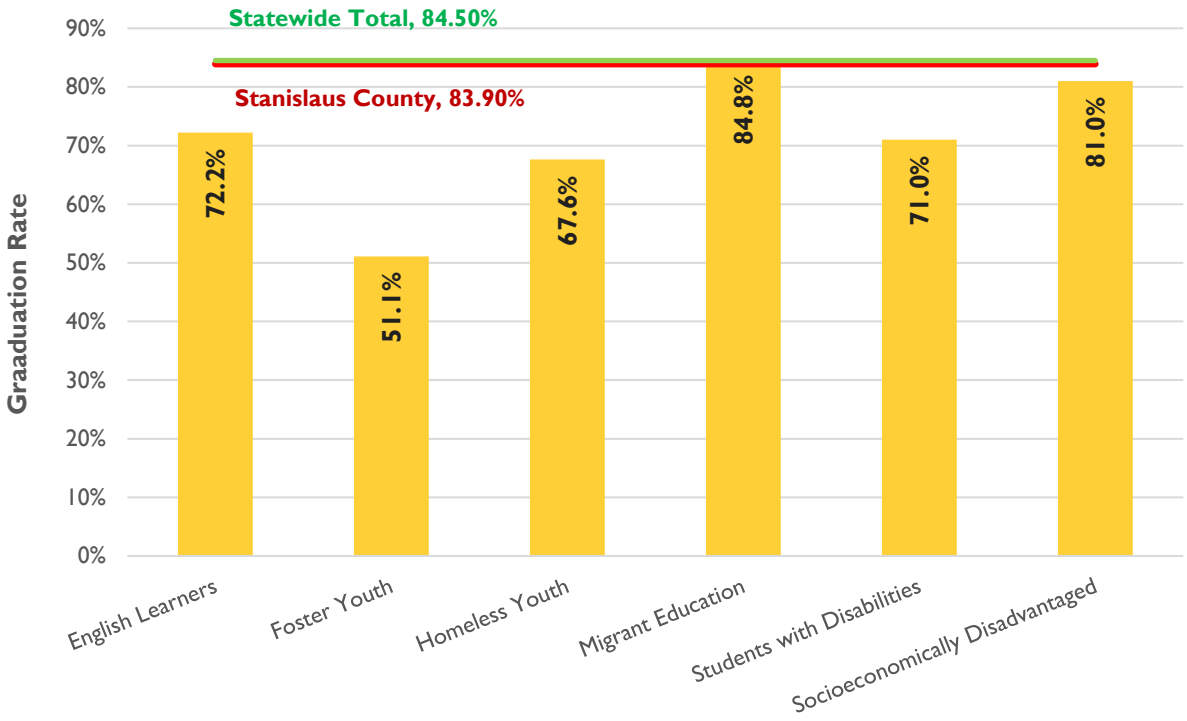


Source: California Department of Education 2018-2019 Four-Year Adjusted Cohort Graduation Rates

Other groups of students may also face academic challenges due to physical or social circumstances. In addition to English Learners, California also calculates the number of students who are "socioeconomically disadvantaged" (students eligible for free or reduced priced meals and/or have parents/guardians who did not receive a high school diploma), migrant, homeless, foster youth, and those with a disability. These students typically need additional resources to succeed and the number of students in these categories helps determine funding from the State. Data on graduation rates and suspensions can also help a school or school district gauge success in meeting these students' needs.

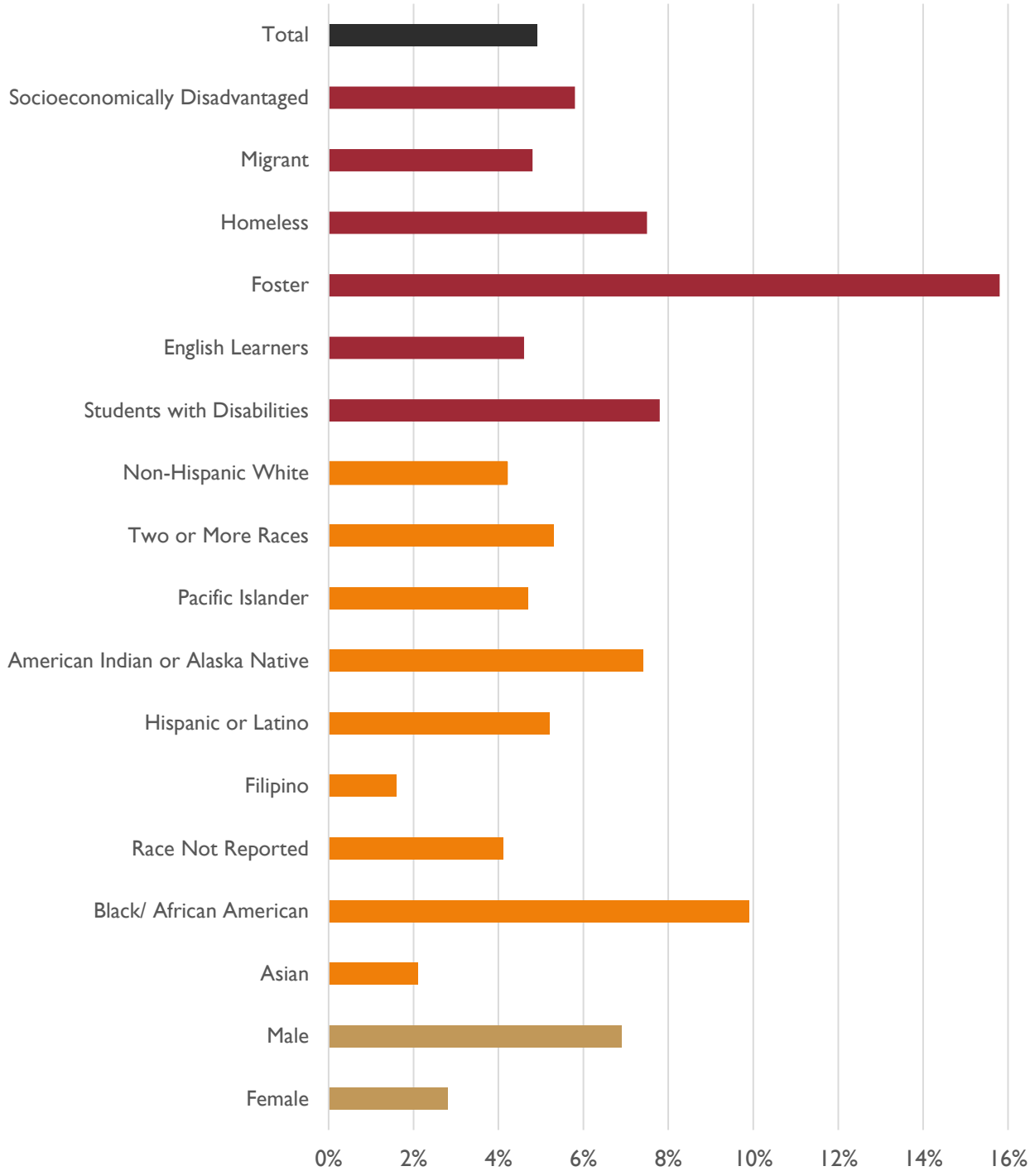
Charts 28, 29, and 30 indicate that in Stanislaus County, foster and homeless youth have the lowest graduation rates and highest school dropout rates. Roughly half of all foster youth in the County graduate. Foster students also have the highest suspension rate of all student groups, with high rates for homeless and disabled students as well. (California Department of Education 2018-2019) In addition, almost 85 percent of migrant students graduate and during the 2018-2019 school year had a graduation rate higher than the County average.

Chart 28. Cohort Graduation Rate Stanislaus County



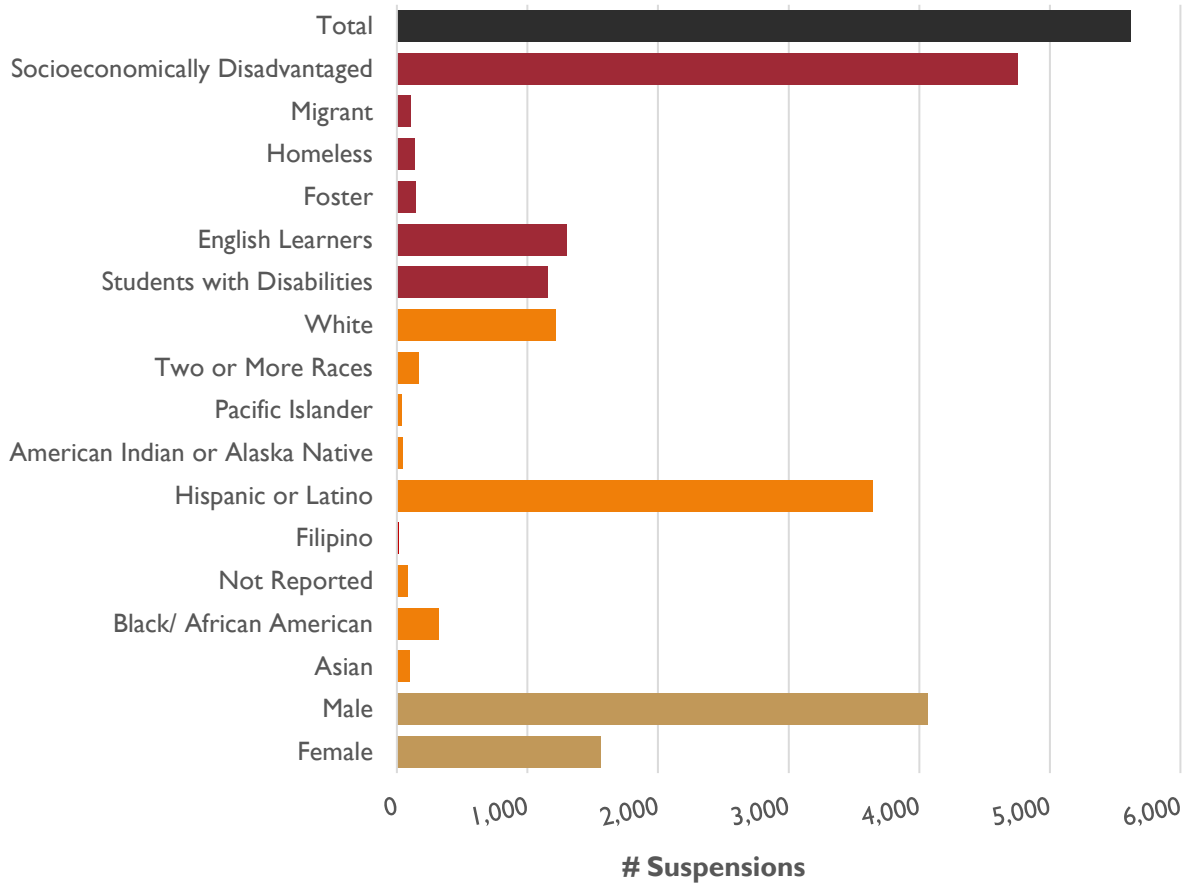
Source: California Department of Education 2018-2019 Four-Year Adjusted Cohort Outcome

Chart 29. Suspension Rate by Student Group, Stanislaus County



Source: California Department of Education 2018-2019 Note: Students may belong to multiple groups.

Chart 30. Number of Unduplicated Students Suspended by Group in Stanislaus County



Source: California Department of Education 2018-2019 Note: Students may belong to multiple groups.

Parks

Park access is a community amenity that may not be accessible proportionately to all resident demographics. The California Department of Parks and Recreation measures park access for all California communities as part of the Statewide Comprehensive Outdoor Recreation Program (SCORP), measuring the population density of areas physically farther than a half mile from a park and the density of parks in each census tract per 1,000 residents. The measurements help identify areas that are not within walking distance of a park and any populated areas with few parks per person. Figure 34 depicts areas across the County without park access within a half mile.

The Department of Parks and Recreation estimates that 24 percent of Stanislaus County residents live further than a half mile from a park, a proportion equal with the State of California. Stanislaus County residents also have a slightly higher number of people with adequate parkland density available per person than the California average. Fifty-eight percent of Stanislaus County residents live in areas with less than 3 acres of parks/open space per thousand residents (a benchmark for adequate park density) versus 62 percent of all Californians.

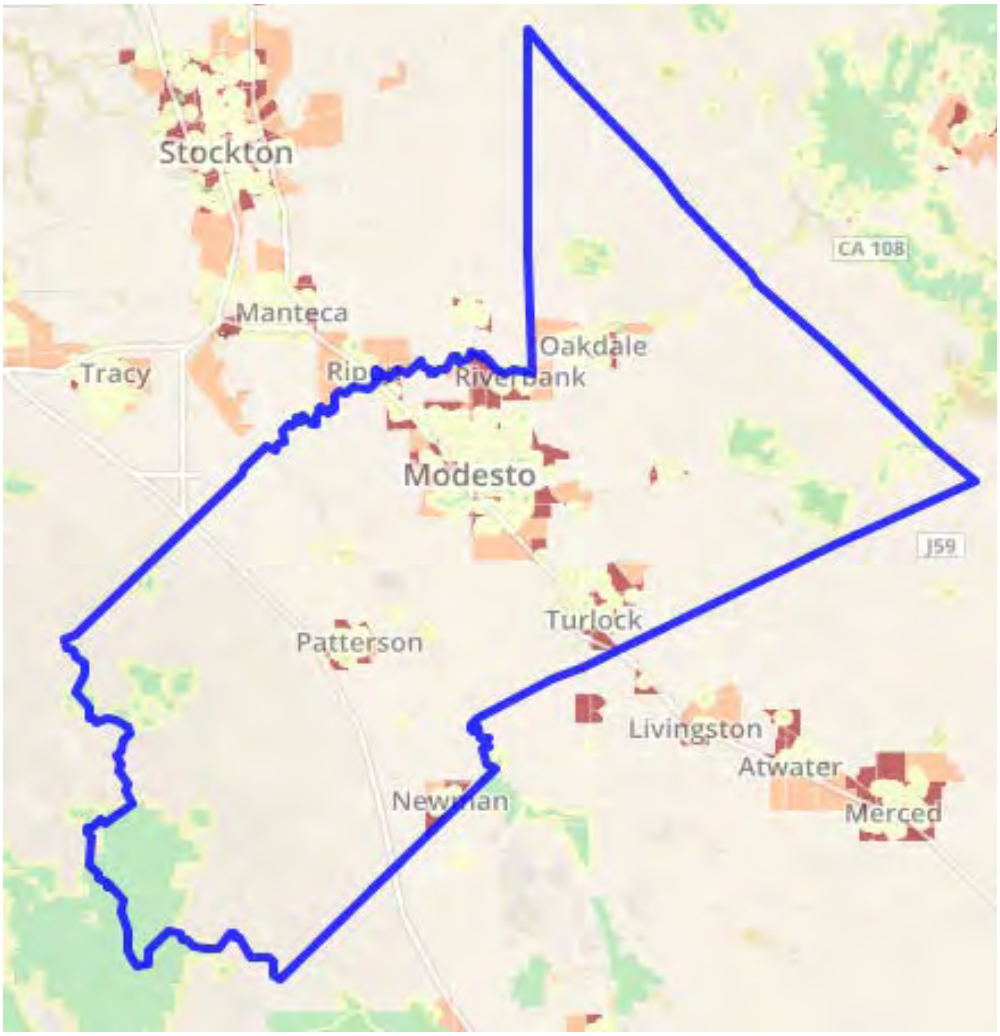
The Cities of Modesto and Turlock both have park access within a half mile for nearly all residents within city boundaries. The developed areas around the city boundaries, however, have gaps in park access. To a lesser extent, this pattern also exists for Patterson, Oakdale, Riverbank, Ceres, and Newman.

It is important that park access by members of protected classes be a part of the planning process and reflect the demographics in the community. The 2018 Stanislaus County Parks & Recreation Master Plan notes change in ethnicity in the County as there has been an overall increase in the County's Hispanic or Latino population. It states, "Stanislaus County's Hispanic/Latino population has increased from 31.7 percent of the total County population in 2000 to 43.6 percent by 2015. This statistic must be acknowledged as a driver for future County parks and recreation planning and programming efforts." (2018 Stanislaus County Parks & Recreation Master Plan)

Language is also a consideration in park planning within Stanislaus County's Parks & Recreation Master Plan. The report states that, "the provision of Spanish language materials is perhaps the greatest take-away for increasing presence specifically within the Hispanic/ Latino community. Provisions must be made in the form of bilingual parks signage, handouts, and other exhibits promoting Stanislaus County Parks and Recreation offerings and initiatives." (2018 Stanislaus County Parks & Recreation Master Plan) Acknowledgement of changing ethnicity and primary language of residents in the County will help ensure active participation and access to parks.

Although overall population demographics should be considered in park planning, geographic population demographics should also be used by all jurisdictions within the County to assess equal access to parks, especially small neighborhood parks where walking distance factors into park usage and demographics may shift.

Map 5. Populated Areas with No Park Access Within ½ Mile



Population Density (No park access within ½ mile)

Park or preserved area

Area within ½ mile of a park

<200 people per square mile

200 – 1,000 people per square mile

> 1,000 people per square mile

Source: California Department of Parks and Recreation, SCORP Park Access Tool

Internet Access

Internet access is vital for households to participate fully in modern society. Those without this technology are at a disadvantage, such as students completing schoolwork, teens and adults applying for a job, or individuals taking online classes to expand workforce skills to gain or change employment. Internet access can help households take fewer vehicle trips, access medical information, and manage finances. (Broadband Survey: Digital Divide Persists in California but Schools Are Helping to Improve Access for Students, California Emerging Technology Fund, March 12, 2019)

In 2017, 90 percent of California households had access to the Internet and 74 percent had broadband Internet at home, an 8 percent increase in overall access and 4 percent increase in home broadband access since 2013. (California's Digital Divide, Public Policy Institute, March 2019) "Computer" use has expanded to include smartphones, tablets, laptops, and other similar devices. Figure 35 indicates that about as many households now access the Internet through a smartphone as a laptop or desktop computer.

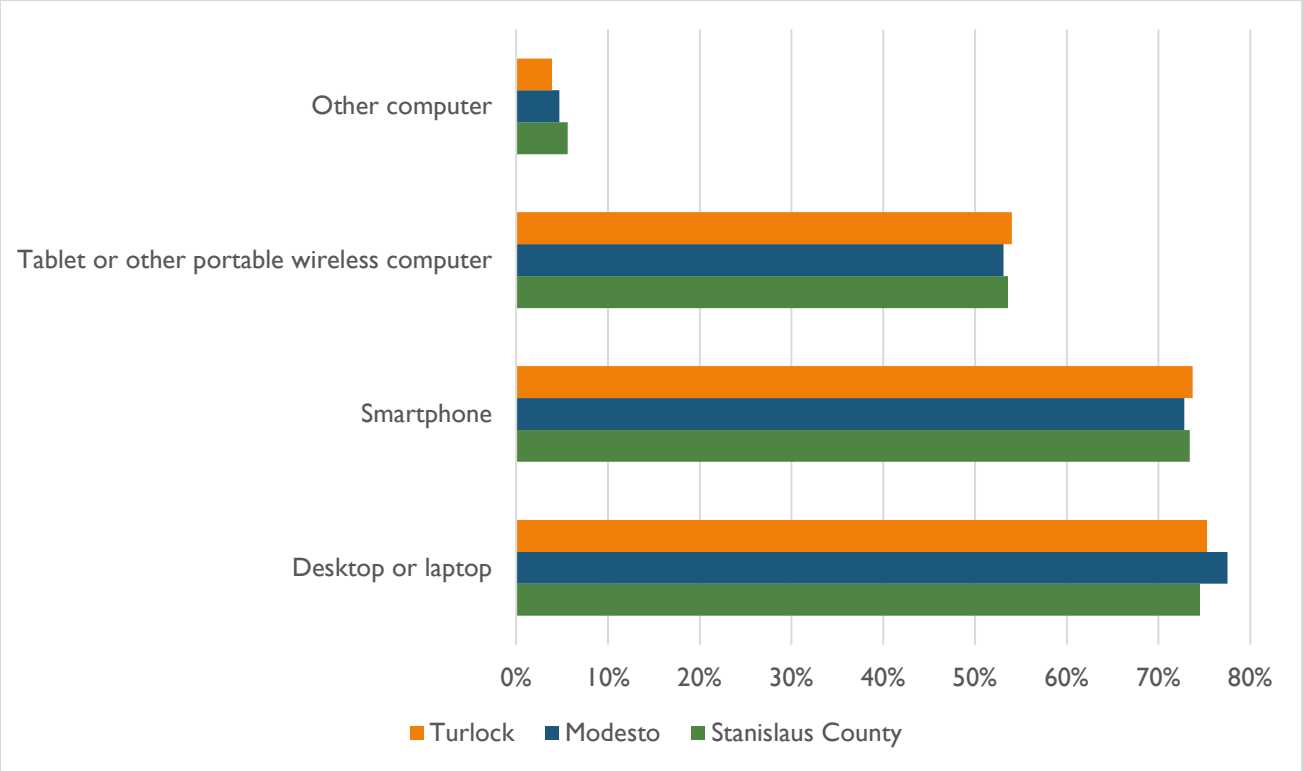
Throughout California, several demographic groups have broadband Internet access rates below the State average. This includes households earning $20,000 per year or less, seniors (adults 65 years or older), Hispanic or Latinos with limited English proficiency, those with a disability, and adults who did not graduate high school. (Internet Connectivity and the "Digital Divide" in California Households: 2016 California Emerging Technology Fund/ The Field Poll)

Household income and age have the largest gaps in Internet access. In Stanislaus County, 44 percent of households earning $20,000 or less annually do not have Internet access, while only 6 percent of households making at least $75,000 do not have access. Across the state, about half of households without Internet access cite the cost of broadband service or a computer/device for their lack of access. Three in four of these households do not know they may qualify for discounted, income-based Internet service in California. (Broadband Survey: Digital Divide Persists in California but Schools Are Helping to Improve Access for Students, California Emerging Technology Fund, March 12, 2019)

About one third of Stanislaus County residents age 65 or older do not have Internet access. This percentage is only 28 percent in Modesto but 38 percent in Turlock. By comparison, 13 percent of those under 18 years of age do not have Internet access. This figure is assisted by the fact many schools assign a mobile computing device to students.

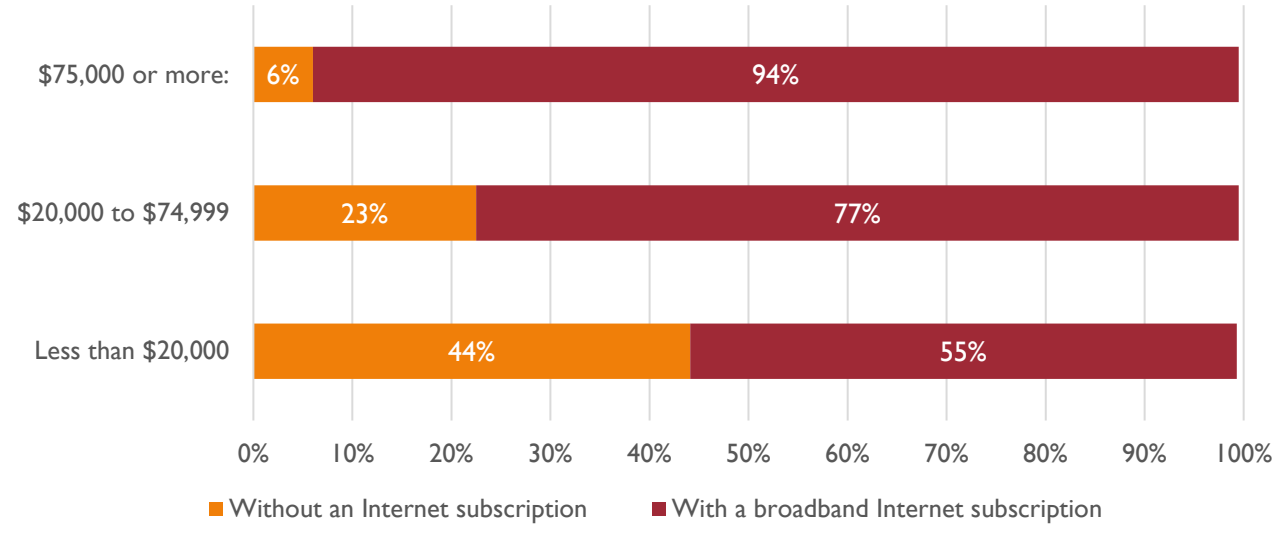
There are some differences in Internet access between different racial and ethnic groups. About 18.6 percent of Hispanic or Latino residents in Stanislaus County do not have Internet access compared to 14.3 of non-Hispanic Whites. (Access for both groups is improved within Modesto and Turlock.) It is worth noting that Hispanic or Latino Californians are more likely to use smart phones alone for Internet access, and among Spanish-speaking Hispanic or Latinos in California, almost half of all Internet access is only through use of a smart phone. (Internet Connectivity and the "Digital Divide" in California Households: 2016 California Emerging Technology Fund/ The Field Poll)

Chart 31. Type of Computer Used in Households in Stanislaus County



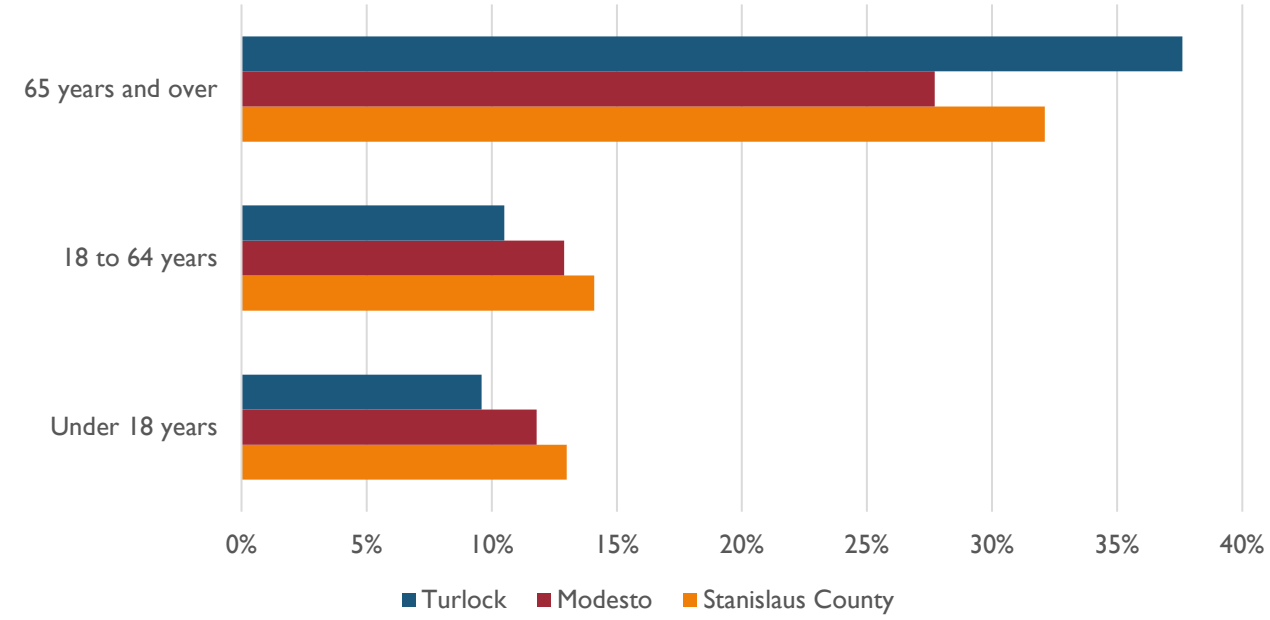
Source: 2013-2017 ACS 5-Year Average, Table S2801

Chart 32. Broadband Internet Access by Household Income in Stanislaus County



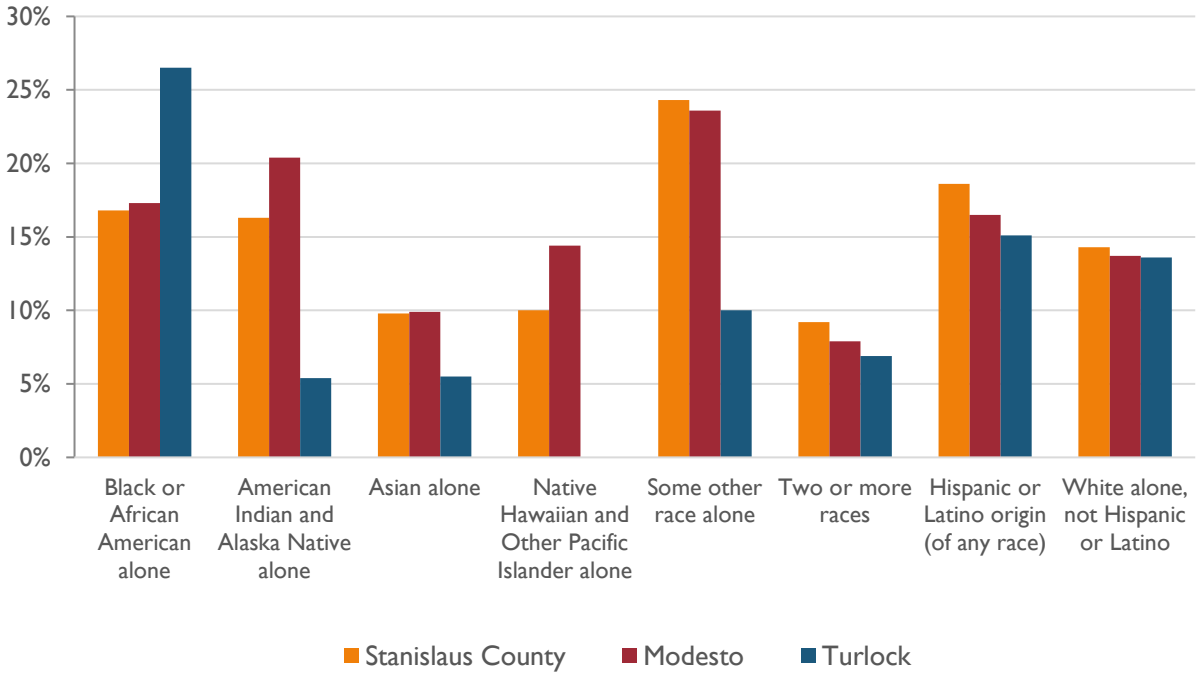
Source: 2013-2017 ACS 5-Year Average Table, S2801

Chart 33. Population with Lack of Internet (With Computer) or No Computer by Age



Source: 2013-2017 ACS 5-Year Average Table, S2802

Chart 34. Lack of Internet (With Computer) or No Computer in Household by Race and Ethnicity and Jurisdiction



Source: 2013-2017 ACS 5-Year Average Table, S2802

PUBLIC SECTOR POLICY REVIEW

Introduction

National, state, and local public policies affect fair housing choice and neighborhood availability by influencing the amount, cost, and location of available housing. Public policies also affect what amenities are available in a given neighborhood such as grocery stores, parks, and health clinics, and affect transportation options that connect the neighborhood to schools, jobs, and other regional opportunities. Policies that disproportionately limit housing and neighborhood opportunities for specific groups of people are considered impediments to fair housing or actions that do not actively affirmatively further fair housing.

Public policies designed and adopted with good intentions can result in unintended consequences when implemented if the effect is a restriction on fair housing choice for people who belong to a protected class. For this reason, it is worth reviewing both the intent of public policies and their consequences.

An assessment of government regulations, policies, and practices enacted by jurisdictions across Stanislaus County can help determine potential policy-created impediments to fair housing choice.

Federal Laws and Local Housing Choice

Fair Housing Amendment Act (FHAA) 1988

A significant update to the Fair Housing Act was enacted into law in 1988 that gave specific housing protections to people with disabilities in addition to any rights codified in earlier laws. Called the Fair Housing Amendment Act (FHAA), the update includes several protections that may influence public policies and laws at different levels of government. The law states that it is illegal to:

> Refuse to permit reasonable modifications, at the expense of the handicapped renter, except that a landlord may condition interior modifications where reasonable; to refuse to make reasonable accommodations in rules, policies, or services to afford handicapped individuals equal use and enjoyment of a dwelling; and to fail to design and construct multifamily dwellings with specified adaptive accessibility and usability designs.

The FHAA applies to local governments as well as private housing providers. Under the FHAA, local governments are required to "reasonably accommodate" housing for persons with disabilities in their land-use planning and policies. Jurisdictions must grant variances and zoning changes, if necessary, to make new construction or rehabilitation of housing for persons with disabilities feasible but are not required to fundamentally alter their zoning ordinance. The failure to allow for reasonable accommodations in policies to allow persons with disabilities to live in the community will violate the Fair Housing Act regardless of whether there is discriminatory intent.

Regarding multifamily dwelling design and construction, the law requires that state and local governments incorporate specific accessibility and usability standards into their new construction and design requirements as well as building codes.

Although most local governments are aware of state and federal requirements for landlords to provide reasonable accommodations, if specific reasonable accommodation policies or procedures are not present at the jurisdictional level, residents with disabilities may be unintentionally displaced or discriminated against. All jurisdictions within the County include reasonable accommodation policies to meet the needs of their communities. (29 U.S.C. § 794)

Americans with Disabilities Act (ADA) 1990

The Americans with Disabilities Act (ADA) gives broad protections to people with disabilities in the workplace, schools, transportation, and places (public or private) open to the general public. Title II of the ADA specifically applies to all state and local governments and protects individuals with disabilities from discrimination in programs, activities, and services funded by public entities.

When constructing or renovating new public buildings, State and local governments are required to follow specific architectural standards to make them accessible to people with physical disabilities. They must also relocate or provide access to programs in older buildings inaccessible to people with disabilities and have methods to communicate with people who have hearing, vision, or speech impairments.

Included within the category of State and local services are activities related to local planning and zoning. It can also include government activities like constructing sidewalks, creating snow removal policies, and managing public park reservations.

Title III of the ADA applies to public accommodations within non-government establishments such as retail stores, restaurants, movie theaters, and day care centers. Private transportation services are covered by Title III, as are nonprofit organizations, and any other venue open to the general public. This section of the ADA requires that public accommodations prohibit exclusion, segregation, and unequal treatment of people with disabilities. Public accommodations also must comply with architectural standards for new and renovated buildings; accommodate reasonable modifications to policies, practices, and procedures; and be able to communicate with people with hearing, vision, or speech disabilities. Additionally, public accommodations must remove barriers in existing buildings where it is possible without much difficulty or expense. Religious buildings without public funding are exempt. (42 U.S.C. §§ 12101 et seq., 28 CFR Parts 35-36) (*What is the Americans with Disabilities Act (ADA)?* ADA National Network, https://adata.org/learn-about-ada, Web. February 5, 2020.)

State Laws and Local Housing Choice

California has many housing laws related to housing, zoning and land-use, permitting, planning, and housing financing policies. These include:

Housing Permitting

- Cities and counties must allow for housing for persons with disabilities, homeless persons (including emergency shelters, transitional housing, and supportive housing), and extremely low-income households including single-room occupancy (SRO).
- Replacement housing when allowing conversion or demolition of housing occupied by low- and moderate-income households. (§ 65008 and § 65580-65589.8)

Growth Limits

- Public growth initiative ordinances are allowed under state law.
- Zoning regulations and ordinances that limit housing must state the rationale behind the regulations in terms of the city's police powers: the public health, safety, and welfare of the community. (§ 65863.6)

Inclusionary Zoning

- Inclusionary zoning is allowed under state law to increase the number of deed-restricted lower-income housing units in exchange for housing permitting. (§65589.8)

Density Bonuses

- Local governments are authorized to allow density incentives for private housing development in exchange for the inclusion of deed restricted lower- income housing units. (§§ 65915-65917)

Accessory Dwelling Units (ADUs)

- Accessory Dwelling Units (ADUs) or "Granny unit" regulations allow for specific types of secondary residential dwelling units through California law, with special consideration for units intended for adults over the age of 62. (§ 65852.1.)

Local Laws and Housing Choice

Occupancy Standards

Just as regulations on the definition of "family" can result in a disparate impact, restrictions on the allowable number of individuals within a housing unit can violate fair housing laws on the basis of family status.

Historically, strict occupancy standards have been used either by local jurisdictions or individual landlords to keep families from renting housing in an area. Families with children and large households often face discrimination in the housing market, particularly in rental housing, which can take the form of occupancy standards under the guise of health or safety regulations. As a result of being denied housing due to occupancy standards, families (particularly larger families with children) may not be able to live within their desired household makeup or may be forced to find poor quality housing that breaks local ordinances. Occupancy standards may therefore be an impediment to fair housing choice and may be found in zoning, health, land-use, building or other codes.

No State or federal fair housing laws create exact numeric values for occupancy standards. Both government and landlords can set an occupancy standard, but fair housing violations are decided on a case-by-case basis by the courts. The FHA states that, "nothing in this title shall limit the applicability of any reasonable local, state, or federal restrictions on the maximum number of occupants permitted to occupy a dwelling unit". The word 'reasonable' is the key word and is a matter of court interpretation.

The HUD standard for occupancy is two persons per bedroom, however this figure has not been codified into federal law. The California Department of Fair Employment and Housing (DFEH) has used the "two-plus-one" rule (two persons per bedroom plus an additional person) when considering a reasonable maximum standard in fair housing cases, though there have been key exceptions. The amount and distribution of "habitable space" in a housing unit, and the number and size of bedrooms, are also factors.

Under either federal or State occupancy guidelines a landlord cannot, for example, restrict occupancy to more than three persons in a three-bedroom unit, or increase the rent for a one-bedroom unit if a baby is added to the household by a couple. A city could not impose a one-person-per-bedroom provision in their zoning ordinance.

Other issues related to occupancy, such as lack of parking or gender of the children occupying one bedroom, should not be factors considered by the landlord when renting to a household.

A jurisdiction can use the Uniform Housing Code (Section 503(b)) to set maximum occupancy for residential units, a federal standard that has been adopted by California. Under this building code, a dwelling unit must have at least one room which is more than 120 square feet in area. Other habitable rooms, except kitchens, are required to have a floor area of at least 70 square feet. So, for the smallest housing unit legally permitted to be constructed, there may be two occupants. For every additional occupant there must be an additional 50 square feet. California Fire Code also determines residential occupancy standards, but the number of people per unit or per square foot generally imposes fewer limitations than the building code.

No Stanislaus County jurisdictions have additional occupancy limits beyond adopted building and fire code.

Rental Registration

Rental registration ordinances can help a municipality ensure housing conditions are safe and sanitary for renters who may not have the knowledge or ability to advocate for themselves and contact the proper authorities for housing issues. Correcting housing issues may require overcoming specific language, education, or other barriers (such as knowledge of health regulations and building code) and can be an impediment to housing choice when the burden of notification and inspection is placed on tenants and not the landlord. Provided the ordinances do not add conditions such as occupancy limits that restrict fair housing choice, these ordinances can be considered a best practice in affirmatively furthering fair housing. If a rental registration ordinance is not present, clear points of contact for code enforcement issues can help tenants navigate correcting housing issues.

Modesto's Rental Housing Safety Program (effective October 2019) applies to all rental residential housing units over 10 years old in the City or those inspected as part of a government program (e.g. the Housing Authority). The program, run by the Neighborhood Preservation Unit, requires rental properties to be registered with the City by the property owner and comply with all local health, building, and safety codes. Modesto does not have a rental registration ordinance that requires additional requirements of rental buildings beyond existing city code.

Rent Control

California's Costa-Hawkins Rental Housing Act, passed in 1995, prohibits local governments from using rent control on housing first occupied after February 1, 1995, and other specific types of housing such as condos, townhouses, and single-family homes. No cities in Stanislaus County, including Modesto, have rent-control ordinances.

Development Fees

Housing development imposes short- and long-term costs upon local government, such as the cost of providing site reviews, permitting and inspection, and maintaining General Plan and zoning regulations addressing housing development. Jurisdictions also charge impact fees to offset the cost of providing the infrastructure and public facilities that are required to serve new housing development. To help recoup costs and ensure that essential services and infrastructure are available when needed, Stanislaus County jurisdictions charge various types of development fees. The fee amounts vary based on the needs of each jurisdiction and the services provided.

The fees can be a significant factor in housing development throughout California by raising housing costs and disincentivizing new residential development, factors that contribute to statewide high housing costs. Among California jurisdictions, fees account for between six and eighteen percent of the price of housing. (Terner Center for Housing Innovation- UC Berkeley, It All Adds Up: The Cost of Housing Development Fees in Seven California Cities, March 2018)

As a best practice, the public and developers should be able to access a jurisdiction's current fee schedules to estimate fees as a part of total development project costs in advance.

Until 1978, property taxes were the primary revenue source for financing the construction of infrastructure and improvements for residential development in California. Proposition 13, passed in 1978, limited a local jurisdiction's ability to raise property taxes and increasing reliance on other funding sources to provide infrastructure, public improvements, and public services. An alternative funding source widely used among local governments in California is the development impact fee, which is charged to the project developers/owners, for publicly provided infrastructure that supports the development, including water and sewer facilities, parks, and transportation.

For jurisdictions to charge an impact fee, the California Mitigation Fee Act requires that the jurisdiction demonstrate the "nexus" between the type of development in question and the impact being mitigated by the proposed fee, and that fee amount be proportional to the impact caused by the development. Fees not covered by the California Mitigation Fee Act include inclusionary housing ordinance in-lieu fees, permit processing fees, utility connection fees, and fees included within specific development agreements between a jurisdiction and a developer.

Despite state law limiting direct impact fees, the fees can be a large part of a jurisdiction's total fee requirements for housing development. Because developers tend to pass these fees onto the final housing owner, the effects of reducing these fees on housing affordability depend on the amount of the fee reduction and current home prices. Because the eventual owner bears the brunt of fees, high fees limit development of lower-cost housing more than higher-cost housing. (Terner Center for Housing Innovation- UC Berkeley, Current Practices and Policy Considerations to Improve Implementation of Fees Governed by the Mitigation Fee Act, August 2019)

A reduction in development fees for low-income housing may help these projects become financially feasible. A jurisdiction deferring development fees until a certain time after project completion can also help add flexibility the project's upfront costs and assist in the development of low-income housing.

The General Plan and Zoning Ordinance

General Plan

The General Plan is a planning document that serves as a framework for cities and counties to establish long-term goals and policies to guide land use and development in the community. The State of California requires that all localities completing a General Plan include seven elements in their Plan: land use, circulation, housing, conservation, open space, noise, and safety. Some communities also must address environmental justice and/or air quality in their Plans and any community can add any additional elements in their General Plan that they desire. (§ 65302) Two of the required elements, the housing and land-use elements, can directly impact local housing markets because they define key parameters for housing development such as permitted density, required fees, and allowable zoning uses.

California law requires that local governments adequately plan to meet the existing and projected housing needs of all members of the community. The law acknowledges that for the private market to adequately address housing needs and demand, local governments must adopt land-use plans and regulatory systems that provide opportunities for, and do not constrain, housing development. The state outlines requirements for each community's Housing Element of the General Plan, which are then subject to review by the California Department of Housing and Community Development (HCD) for compliance with State law before they can be adopted by the local government. The Housing Element of the General Plan details a local government's strategy to address their jurisdiction's housing needs and regulates existing and future housing development opportunities. A Housing Element must:

- Identify sites which will be made available through appropriate zoning and development standards that have adequate services and facilities needed to facilitate and encourage the development of a variety of types of housing for all income levels in order to meet the community's housing goals;
- Assist in the development of adequate housing to meet the needs of low- and moderate-income households;
- Address, and if appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing;
- Conserve and improve the condition of the community's existing affordable housing stock; and
- Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, disability, sexual orientation, gender identification, or any other arbitrary factor.

Within a Housing Element, a jurisdiction specifically details how a set number of housing units can be produced that meet the housing needs of different income groups, a housing goal called the Regional Housing Needs Assessment (RHNA). The RHNA projects how many and what types of housing units will be needed within the jurisdiction. In their General Plan Housing Element, jurisdictions show how the given allocations could be met through zoning, available sites, funding, local regulations, etc. and how the jurisdiction is addressing impediments to housing development.

Though these goals are not a mandate for housing production, actions taken by a jurisdiction to make these units possible should result in additional housing units being developed because of high housing demand. For lower-income housing unit goals, each jurisdiction needs to identify sites that meet specific criteria which should accommodate projects that could support lower income housing.

The RHNA housing goals are calculated based on a jurisdictions projected population demographics during the future RHNA cycle, particularly the number of people within "low-" (50 to 80 percent of AMI), "very low-" (30 to 50 percent of AMI), and "extremely low-" (0 to 30 percent of AMI) household income categories. A region's Council of Governments (COG) allocates the actual housing numbers per jurisdiction. In Stanislaus County, this body is the Stanislaus Council of Governments (StanCOG).

The Land-Use Element of the General Plan also influences housing choice by defining uses for specific geographic areas including allowable development densities and the general description of what the community would like to see the land used for such as residential, commercial, industrial, open space, and agricultural purposes. As it applies to housing, the Land-Use Element establishes a range of residential land-use categories, specifies densities (typically expressed as dwelling units per acre [du/ac]), and suggests the types of housing appropriate in a community. While the Land-Use Element establishes different parameters for residential development, it is a jurisdiction's zoning ordinance which details the specific development standards for the community. In other words, the Land-Use Element serves as a guiding

framework for a community's land-use policy, while the zoning ordinance is the explicit code that lays out permitted uses within each zone.

Land-Use Elements may also describe other community components related to housing choice like transportation plans including bicycle and pedestrian routes, flood zones and information on known hazards, and social equity analysis.

Zoning Ordinance

A jurisdiction's zoning ordinance is the section of its municipal code that details and sets requirements for the specified land-use designations laid out in the General Plan. A zoning ordinance establishes zoning districts that correspond with the locality's land-use element and contains two key components: a set of legal descriptions for each zone and an official zoning map. Each zone description sets development standards and permitted uses for each zoning district to govern the density, type, and design of different land uses for the purpose of protecting the health, safety, and welfare of the community. (§ 65800-65863).

As the zoning ordinance relates to fair housing, several of its components can restrict housing development and access (and through them, housing choice) by constricting the local supply of housing units or discriminating against protected groups outlined in state and federal law. While the Fair Housing Act does not pre-empt local zoning laws, it does apply to municipalities and other local government entities and prohibits them from enacting or implementing land-use policies that exclude or otherwise discriminate against protected persons. Local policies that are "facially neutral" (that is, they apply to all persons, not just those included in a protected group) could be violations of the Fair Housing Act if they have a disparate impact or discriminatory effect on protected persons, whether intentionally or not. For instance, land-use policies such as density or design requirements that make residential development prohibitively expensive, limitations on multi-family housing, or a household occupancy standard may be considered discriminatory if it can be proven that these policies have a disproportionate impact on minorities, families with children, or people with disabilities.

As part of the Housing Element, jurisdictions are required to evaluate their land-use policies, zoning provisions, and development regulations, and make efforts to mitigate any constraints identified within the Plan as restrictions to housing choice. One type of zoning law that courts have ruled as having a disparate impact on people with disabilities is definitions of the term "family" that allow any number of related persons to live together but limit the number of unrelated persons who may live together. Although applicable to groups of unrelated and non-disabled persons (e.g., college students, nuns, etc.), these laws may be deemed to have a disparate impact on persons with disabilities who often need to live in group settings for both programmatic and financial reasons. Although a seemingly neutral policy, such ordinances can disproportionally harm specific groups.

The Fair Housing Act addresses this type of limited housing choice by prohibiting state and local land use and zoning laws, policies, and practices to discriminate based on a characteristic protected under the Fair Housing Act. Both intentional and unintentional discrimination that is a result of public policy is in violation of the Fair Housing Act. The U.S. Supreme Court affirmed that unintentional discrimination caused by land use and zoning laws and without a legitimate purpose is illegal in *Texas Department of Housing and Community Affairs v. Inclusive Communities Project, Inc*, stating that "unlawful practices include zoning laws and other housing restrictions that function unfairly to exclude minorities from certain neighborhoods without any sufficient justification." (135 S. Ct. 2507 2015) These laws have a discriminatory effect ("disparate impact") on persons in a particular group, whether intentional or not.

In 2016, HUD and the U.S. Department of Justice (DOJ) released a Joint Statement updating guidance about how the federal Fair Housing Act applies to state and local public policies like land use (including as found within a General Plan) and zoning laws. Examples of discrimination given in the statement include:

- Placing a moratorium on the development of multifamily housing because of concerns that the residents will include members of a particular protected class.
- Citing individuals who are members of a particular protected class for violating code requirements for property upkeep while not citing other residents for similar violations.
- Requiring a proposed development provide additional security measures based on a belief that persons of a particular protected class are more likely to engage in criminal activity.
- Requiring an occupancy permit for persons with disabilities to live in a single-family home while not requiring a permit for other residents of single-family homes.

Reasonable Accommodation in Zoning

Land use and zoning discrimination based on protected characteristics related to disability is also prohibited under Title II of the Americans with Disabilities Act ("ADA"), Section 504 of the Rehabilitation Act of 1973 ("Section 504"), and Title VI of the Civil Rights Act of 1964. Residents who are disabled have a right under these laws to request a reasonable accommodation or modification to zoning ordinance requirements that restrict their use or enjoyment of their residence, usually in the form of a zoning variance.

Not all reasonable accommodation requests are required to be granted but those that are reasonable and necessary for the applicant should be granted if they do not conflict with the needs of the community. For this reason, an official reasonable accommodation policy for local planning and zoning committees may help guide accommodation decisions and treat applicants as uniformly as possible based on findings of fact. (A Primer on Disability for Land Use and Zoning Law, Journal of Law, Property, and Society Vol. 4 March 2018)

In Stanislaus County, all jurisdictions have a reasonable accommodation policy within their zoning ordinance except for Modesto who references a reasonable accommodation policy in their General Plan. Table 3 outlines the source of each jurisdiction's policy.

Table 3. Reasonable Accommodation Policies by Jurisdiction

Jurisdiction	Reasonable Accommodation Policy
Ceres	Policy outlined in Ch 18.110 of Zoning Ordinance
Hughson	Policy outlined in Ch 17.03.062 of Zoning Ordinance
Modesto	Housing Element references a reasonable accommodation policy but no mention in the Municipal Code
Newman	Zoning Ordinance cites the city's reasonable accommodation policy (Ch 1.19)
Oakdale	Zoning Ordinance cites the city's reasonable accommodation policy (36-18.32)
Patterson	Zoning Ordinance outlines the City's reasonable accommodation policy (Ch 18.89)
Riverbank	Zoning Ordinance cites the city's reasonable accommodation policy (Ch 153.221)
Turlock	Part of the city's past Housing Element stated working towards complying with federal reasonable accommodation provisions
Waterford	Zoning Ordinance outlines the city's reasonable accommodation policy (Ch 17.03.010)
Stanislaus County	Zoning Ordinance outlines the County's reasonable accommodation policy (Ch 21.86)

Source: Zoning Ordinance for each jurisdiction

Zoning Definitions

A community's zoning ordinance could restrict access to housing for individuals or groups of people based on the official definitions of specific terms. The terms "family", "disability" or "disabled person", "elderly", "homeless shelter" or "emergency shelter", "group home", "rooming house", and any number of other terms could be impediments to housing choice if they are interpreted to conflict with the Fair Housing Act (FHA) or California's Fair Employment and Housing Act (FHEA).

Federal Fair Housing Act Definitions

Disabled person: An individual with mental or physical impairments (including hearing, mobility, and visual impairments, cancer, chronic mental illness, HIV/AIDS, or mental retardation) that substantially limits one or more major life activities.

Note: the FHA uses the term "handicap" instead of "disability".

Familial Status: Includes children under the age of 18 living with parents or legal custodians, pregnant women, and people securing custody of children under the age of 18.

Family

A key definition that can restrict housing choice within a zoning code is "family" if a jurisdiction's zoning ordinance defines the term in a way that conflicts (in theory or in practice) with the FHA or FHEA. For instance, a landlord may refuse to rent to a pair of college students living together, unmarried couples, or a family with foster children due to the fact these households do not fit within the jurisdiction's definition of a "family". A landlord may also use the definition of a family as an excuse for refusing to rent to a

household based on other hidden reasons, such as household size, race, or gender identity. Even if the code provides a broad definition, deciding what constitutes a "family" should be avoided to prevent confusion or give the impression of bias or housing restriction, especially definitions that restrict how many household members may live together (other health or building codes may still apply) or how members of a family may be related (i.e., by blood, marriage or adoption, etc.)

All Stanislaus County jurisdictions' definitions of "family" appear to comply with state and federal fair housing law by avoiding describing the nature of the relationship between members of the household or the number of people that can belong to the household (except in alignment with building code).

Disability

Just as limitations on the definition of "family" can impact protected groups by restricting access to and availability of housing options, the terms "disabled individuals," "disability," and other similar references to people with a disability can be impediments to housing choice when narrowly defined in a jurisdiction's zoning code or defined in a way that conflicts with fair housing law.

No jurisdictions in Stanislaus County define "disability" in their zoning ordinance in a way that conflicts with fair housing laws. Hughson, Turlock, and Waterford define "disability" in documents other than their zoning ordinance that still appear to apply to housing decisions. Should there be any discrepancies between the Cities' definitions and fair housing act laws that result in housing restriction for people with disabilities, the Cities' definition could be found to be in violation of fair housing laws. These definitions should be examined in the context of a jurisdiction's entire legal code.

As a note, the Federal Fair Housing Act and California Fair Employment and Housing Act do not define "disability" as including psychoactive substance use disorders resulting from the current unlawful use of illegal substances or current users of illegal substances. The inclusion of this provision by Ceres and Modesto does not conflict with either fair housing law.

Other Zoning Definitions

Additional definitions of housing types or allowable residents of certain housing can also be impediments to fair housing choice. (For all zoning definitions reviewed, see Appendix 1)

Turlock's zoning ordinance definition of "housing for the elderly" has the possibility of violating federal or California law regarding housing for seniors as the definition restricts this type of housing to "persons sixty (60) years of age or older or couples where either the husband or wife is sixty (60) years of age or older.)

The Turlock zoning code states that "Housing for the elderly" shall mean "a building or group of buildings containing dwellings where the occupancy of the dwellings is restricted to persons sixty (60) years of age or older or couples where either the husband or wife is sixty (60) years of age or older." This does not include a development that contains convalescent or nursing facilities. § 9-1-202

The federal HOPA modifying the FHA definition of senior housing includes housing intended and operated for occupancy by persons 55 years of age or older and at least 80 percent of the units with an occupant who is verified to be 55 years of age or older. California law considers housing for seniors to be for those 62 years of age or older or 55 years of age or older in a (designated) "senior citizen housing development".

The Turlock and California laws do not match precisely as there is a discrepancy in the definition of "senior housing" between Turlock (60 years of age or older) and California's senior housing definition (62 years of age or older or 55 years of age or older in a designated "senior citizen housing development".) (Section 43-53.7 of the Civil Code)

There is also a difference in the allowable household relationships of senior housing residents with a non-spouse domestic partner, primary physical/economic support person, and/or disabled child, grandchild, or partner under the age of 60.

Turlock's definition of allowable residents in senior housing also includes the terms "husband" and "wife" while California law allows residents of senior housing to live with someone 45 years of age or older that is their spouse, domestic partner, or person providing primary physical or economic support to the senior. California law also includes the provision that the senior may live with a disabled child or grandchild or disabled spouse/partner who must permanently reside in the household due to a disability. (Section 43-53.7 of the Civil Code)

All other zoning definitions appear to have no conflict with fair housing laws or restrict housing choice.

Density Bonuses

A density bonus is a local incentive to increase the number of deed-restricted housing units for lower-income households by private housing developers in exchange for an increase in building height, housing density (units/acre) or building footprint (also measured as a "floor area ratio") above what allowed by right within the zoning ordinance.

While local governments create their own density bonus policies, jurisdictions in California are subject to the State's Density Bonus Law (§ 65915-65918) which incentivizes affordable and senior housing with up to a 35 percent increase in unit density. There is also a component of the law which allows density bonuses for commercial developments that incorporate affordable housing as well.

The law requires jurisdictions to provide a specified minimum density bonus for creating affordable housing units. The number and type of affordable units determine the minimum density bonus percentage to which the development is entitled by right. Eligible projects have at least:

- 5 percent of the units affordable to "very-low income" households (under 50 percent of AMI)
- 10 percent of the units affordable to "low-income" households (under 80 percent of AMI)
- 10 percent of the units affordable to "moderate-income" households (under 120 percent of AMI) if the project units are condominiums.
- 10 percent of the units are for transitional foster youth, disabled veterans, or homeless persons and charge "very-low income" rents.

The state density bonus law also applies to senior housing projects and projects that include a childcare facility. These projects, with at least 35 units, follow California's Unruh definition of "senior housing" and receive a density bonus up to 35 percent based on the amount of housing developed. (§65915 – 65918) As of January 2020, all jurisdictions within Stanislaus County have zoning ordinances that include density bonuses that comply with state law.

Parking Requirements

The number of parking spaces required for housing developments can reduce the project's density and increase per unit development costs, lowering the number of affordable housing units produced and ultimately constricting the availability of housing types in a community. Though not as severe an impediment to housing development as in larger cities such as San Francisco or Los Angeles, multifamily, affordable, and/or senior housing projects in Stanislaus County cities can be impacted by parking requirement policies. Exceptions to parking requirements for affordable and/or senior housing developments helps solve this development constraint, sometimes offered along with density bonuses.

Under California laws for accessory dwelling units (ADUs) effective January 1, 2020, cities cannot require parking within one half mile of public transit or when a garage is converted to an ADU. All Stanislaus County parking requirements for ADUs need to reflect this new statewide requirement. Jurisdictions are in the process of updating their ordinances to comply with the States new ADU requirements and, in the meantime, must apply all applicable State standards regardless of local ordinance requirements.

For multifamily developments, several communities do not differentiate between smaller and larger units. For one-bedroom units in multifamily buildings, parking requirements over one unit can be an impediment to building housing, particularly housing for seniors and persons with disabilities if parking requirements are not modified for these types of housing developments.

Some jurisdictions in California will also waive or reduce parking requirements when certain scenarios apply, such as a development's proximity to public transit or a car-share vehicle. While not current policy within Stanislaus County jurisdictions, parking requirements could be established that incentivize local goals such as mass transit from smaller cities into Modesto, or regionally from Stanislaus County to the Bay Area or Sacramento.

Land Use Densities and Designations

The allowable density range of land designated for residential land use is a particularly important government policy that, in combination with local economic conditions, strongly influences a jurisdiction's overall housing unit production. Areas with higher housing unit densities allow developers to take advantage of economies of scale in development which reduces the per-unit cost of land and improvements. This ultimately can reduce overall development costs of housing construction. Lowering the cost of housing through density also increases the feasibility of producing affordable housing.

If allowable residential density is lowered by a jurisdiction, California law requires the local government justify that any density reduction, rezoning, or downzoning that occurs and show that the density reduction is consistent with its General Plan and meeting the RHNA.

California Department of Housing and Community Development assumes housing units built with densities above 20 du/ac are affordable to extremely low-, very low-, and low-income households and encourages zones with this density permitted.

All jurisdictions in Stanislaus County allow higher single-family residential density (6 to 14 du/ac) in some zones as described in their General Plan.

Despite the economic and regulatory incentives for higher density development, all the jurisdictions in Stanislaus County allow for lower density, single-family housing units within areas zoned for higher-density use. Called "pyramid zoning" or "cumulative zoning", this public policy could restrict fair housing choice

by limiting access to and availability of affordable multi-family housing units that otherwise would have been required in this location.

Table 4. Housing Element Status Compliance

Jurisdiction	Document Status	Compliance Status	Date Reviewed
Stanislaus County	Adopted	IN	4/27/2016
Ceres	Adopted	IN	3/15/2016
Modesto	Adopted	IN	4/18/2017
Hughson	Adopted	IN	1/6/2016
Newman	Adopted	IN	8/4/2016
Oakdale	Adopted	IN	7/24/2016
Patterson	Adopted	IN	2/25/2016
Riverbank	Conditional	IN	5/21/2018
Turlock	Adopted	IN	4/25/2016
Waterford	Adopted	IN	12/17/2018

All Stanislaus County jurisdictions (including the Unincorporated County) have Housing Elements that HCD considers in compliance. One housing element (Riverbank) was submitted in May 2018 and is currently under review.

Review of Housing Opportunity

When a jurisdiction's zoning ordinance allows for a diverse range of housing types, a community can actively ensure access to fair housing choice. While this aspect of a zoning ordinance is related to housing density, diversity of housing types helps ensure a mixture of different housing unit sizes, styles, and ownership structures.

Single- and Multi-Family Uses

Single- and multi-family units, which include detached and attached single-family homes, duplexes, townhomes, condominiums, and rental apartments, are generally allowed across residential zones in Stanislaus County. Each jurisdiction's zoning ordinance specifies the zones in which each of these housing types is permitted by right. For areas that require special permits and review, additional costs and processing time can limit housing project developments, especially multifamily developments intended for lower-income households.

Accessory Dwelling Units (ADUs)

Accessory dwelling units (ADUs), also called "secondary dwelling units" or "granny flats" are attached or detached housing units that typically reside on the same property as another unit, such as a single-family home. These units offer independent living facilities for one or more inhabitants, including permanent provisions for living, sleeping, cooking, and sanitation. ADUs can increase dwelling unit density in a neighborhood and increase the abilities of extended families to live together, such as adult children and/or seniors who wish to live near each other yet still desire separate living facilities. In many high-cost

communities, this type of housing also offers a more affordable option for low-income households because they often rent for less than apartments of comparable size. They can also create more affordable homeowner housing by adding to the homeowner's income.

In the State of California, local jurisdictions are required to amend their zoning ordinances to accommodate accessory dwelling units in the community, though a separate ADU ordinance is not required. ADUs units cannot be prohibited in residential zones unless a local jurisdiction justifies the choice in that such action may limit housing opportunities in the region and that the jurisdiction finds that ADUs would adversely affect the public health, safety, and welfare in residential zones. Cities and counties that adopt an ADU ordinance must submit the ordinance to HCD within 60 days for an ordinance review.

The State's ADU law also requires use of a ministerial, rather than discretionary, process for reviewing and approving second dwelling units. A "ministerial process" is a process that can follow set standards like the zoning and building code without needing approval by a commission or board, e.g. a permit to replace a roof approved by a building department. In addition to avoiding a lengthy committee-approval process, a ministerial process is not required to be reviewed under the California Environmental Quality Act (CEQA) which can also add time delays and administrative burden to the building process.

All Stanislaus County jurisdictions allow ADUs within some zones and comply with State law while others are still in the ordinance revision process. Each jurisdiction individually specifies which zones and under what conditions ADUs are permitted within the zoning ordinance. The review process and scope of additional requirements for ADUs, such as parking standards, vary by jurisdiction as well.

Mobile Home Parks & Manufactured Housing

Mobile homes and manufactured housing represent a type of housing that is usually affordable in areas with high housing prices. A "mobile home" is a manufactured home built prior to 1976 when HUD instituted new standards for this type of housing, while "manufactured housing" is similar housing created after this time.

In California, the Manufactured Housing Act of 1980 regulates manufactured housing. (California Health and Safety Code Division 13, Part 2 Section 18000). Mobile or Manufactured Housing residents and owners in California also follow the California Mobile Home Residency Law. (§ 798) Federal laws governing manufactured housing are within Title 42, U.S. Code, Chapter 70, Section 5401.

Most jurisdictions in Stanislaus County permit mobile home parks in at least one residential zone except for Modesto. The communities that allow mobile home parks usually require either a Conditional Use Permit or allow the housing by right in zones designated specifically for mobile home development.

Individual manufactured houses on permanent foundations are allowed in all jurisdictions in at least some residential zones. State law requires local governments to permit manufactured or mobile homes on a permanent foundation that meet federal safety and construction standards in all single-family residential zoning districts (§65852.3).

Table 5. Mobile & Manufactured Home Ordinance Requirements

Jurisdiction	Mobile Home Parks		Manufactured Homes	
	Permitted? (Yes/No)	Review Process	Permitted? (Yes/No)	Review Process
Ceres	Yes	Allowed with a Conditional Use Permit in some residential zones	Yes	Permitted across most residential zones
Hughson	Yes	Allowed with a Conditional Use permit in all residential zones	Yes	Conditional Use permit/Permitted
Modesto	No	Allowed only in Planned Development zones	Yes	Permitted in all residential zones
Newman	Yes	Permitted in Mobile Home Park District	Yes	Permitted in the Mobile Home Park District
Oakdale	Yes	Allowed in multiple residential zones and the review process depends on number of proposed units.	Yes	Permitted in most residential zones
Patterson	Yes	Allowed with a Conditional Use permit in higher density zones (MR and HR)	Yes	Permitted in all residential zones
Riverbank	Yes	Allowed with a Use Permit in all residential zones	Yes	Permitted in all residential zones
Turlock	Yes	Allowed with a Conditional Use Permit in residential zones	Yes	Permitted in lower density residential zones and with a minor discretionary permit in higher density zones
Waterford	Yes	Permitted in Mobile Home Park District	Yes	Permitted in the Mobile Home Park District
Stanislaus County	Yes	Allowed with a Use Permit in all residential zones	Yes	Permitted in all residential zones

Source: Zoning Ordinance for each jurisdiction

Residential Care Facilities

The Lanterman Developmental Disabilities Services Act, passed in California in 1969, is a State law that says that mentally and physically disabled persons and their families are entitled to live in residential surroundings like people without disabilities. It also establishes a process to determine what services are needed for disabled individuals and their families and how those services will be provided. (California Welfare and Institutions Code §4500 – §5121)

The law requires that local zoning allow residential properties used for the care of six or fewer persons with mental health disorders or other disabilities. A state-authorized, certified or licensed family care home, foster home, or group home serving six or fewer persons with disabilities, or dependent and neglected children, on a 24-hour-a-day basis is considered a "residential use" that must be permitted in all residential zones. No local agency can impose stricter zoning or building and safety standards on these homes than are required of the other permitted residential uses in the same zone.

According to the California Department of Social Services Community Care Licensing Division, the following definitions of adult and/or senior residential care facilities apply:

- **Adult Residential Facilities (ARF):** Facilities of any capacity that provide 24-hour non-medical care for adults ages 18 through 59 who are unable to provide for their own daily needs. Adults may be physically handicapped, developmentally disabled, and/or mentally disabled.
- **Continuing Care Retirement Community (CCRC):** Long-term continuing care for adults over 60 years old that provides housing, residential services, and nursing care, usually in one location.
- **Residential Care Facilities for the Elderly (RCFE):** Facilities that provide care, supervision and assistance with activities of daily living, such as bathing and grooming. They may also provide incidental medical services under special care plans.

According to public data provided by the California Department of Social Services Community Care Licensing Division, there are 147 state-licensed residential care facilities for adult and senior populations in Stanislaus County, including 86 residential care facilities for the elderly and 61 adult residential facilities. These facilities provide a total of 3,388 beds. Tables 6 and 7 present the number of facilities and beds (facility capacity) by jurisdiction and reveals that, while residential care facilities are located within most areas of Stanislaus County, the majority of beds are located in Modesto and, to a lesser degree, Turlock. Additional beds are concentrated in Hughson, Patterson, and Riverbank.

All jurisdictions allow Residential Care Facilities (with 6 or fewer persons) in at least some residential zones by right. For facilities serving more than six people, all communities accommodate these units in some form in their zoning ordinance. Specifically, all localities allow for larger facilities subject to either a conditional use or development permit in residential and/or commercial zones.

Table 6. Number of Licensed Community Care Residential Facilities by Jurisdiction

	Adult Residential (ARF)	Continuing Care Retirement Community (CCRF)	Residential Care Elderly (RCFE)	Total Facilities
Ceres	2	0	1	**3**
Empire	2	0	2	**4**
Hughson	0	0	1	**1**
Modesto	42	0	56	**98**
Newman	0	0	1	**1**
Oakdale	0	0	7	**7**
Patterson	2	0	1	**3**
Riverbank	7	0	4	**11**
Salida	2	0	3	**5**
Turlock	3	1	9	**15**
Total	**60**	**1**	**85**	**146**

Source: California Department of Social Services Community Care Licensing Division

Table 7. Licensed Community Care Facility Capacity (Beds) by Jurisdiction

	Adult Residential Facility (ARF)	Continuing Care Retirement Community (CCRC)	Residential Care Elderly (RCFE)	Total Number of Beds
Ceres	21	0	8	**29**
Empire	45	0	47	**92**
Hughson	0	0	277	**277**
Modesto	502	0	1,299	**1,801**
Newman	0	0	6	**6**
Oakdale	0	0	90	**90**
Patterson	12	0	6	**18**
Riverbank	98	0	22	**120**
Salida	10	0	92	**102**
Turlock	17	377	453	**847**
Total Capacity	**705**	**377**	**2,300**	**3,382**

Source: California Department of Social Services Community Care Licensing Division

Table 8. Housing Types Permitted within Residential Zones by Jurisdiction

Housing Type	Ceres	Modesto	Hughson	Newman	Oakdale	Patterson	Riverbank	Turlock	Waterford	Stanislaus County
Single-Family	P	P	P	P	P	P/C	P	P	P	P
Multi-family	P	P	P	P/C	P/C	P/C	P/C	P	P	P
Residential Care Facilities (6 or fewer persons)	P	P	P/C	P	P	P/C	P	P	P	P
Residential Care Facilities (more than 6 persons)	P	C	C		C	C	C	C	C	C

Source: Zoning Ordinance for each jurisdiction

Key:
P = Permitted
C = Conditional/Special Use Permit
X = Prohibited
(blank) = No mention in Zoning Ordinance

Note that the Lanterman Act only applies to state-licensed residential care facilities. Other facilities, such as transitional and supportive housing, are not covered. California law does require local jurisdictions to include information about these types of non-licensed facilities in their Housing Element in the context of discussing housing for low-income individuals and those with disabilities.

Emergency Shelters

HUD defines an emergency shelter as a facility whose primary purpose is to provide temporary shelter – usually up to six months – and accommodations for individuals experiencing homelessness. These facilities can be operated by government or private nonprofit entities and may serve general homeless populations or specialize assisting a targeted group such as individuals leaving a domestic violence situation, homeless youth, or families with children. In addition to shelter and meals, emergency shelters may offer additional services such as case management, counseling, employment assistance, job training, or transportation.

Under California's Housing Element laws, jurisdictions must identify and accommodate at least one year-round emergency shelter by right in their zoning ordinance as well as allow shelters in additional zones with a conditional use permit. Furthermore, jurisdictions can only subject emergency shelters to the same development and management standards applicable to residential or commercial developments in the same zone.

In Stanislaus County, all jurisdictions permit emergency shelters in at least one zone. In most cases, cities allow emergency shelters by right in commercial or industrial zones. Most do not permit shelters in residential zones, but those that do often allow emergency shelters in areas zoned for higher density or mixed use. Table 9 depicts permitted types of housing in residential, commercial, and industrial zones by jurisdiction.

Table 9. Specialized Housing and Emergency Shelter Permitted within Residential, Commercial, and Industrial Zones by Jurisdiction.

RESIDENTIAL ZONES: Includes Single-Family Zones, Multi-Family Zones, Mobile Home Park Development Zones, residential zones of different densities										
Housing Type	**Ceres**	**Modesto**	**Hughson**	**Newman**	**Oakdale**	**Patterson**	**Riverbank**	**Turlock**	**Waterford**	**Stanislaus County**
Emergency Shelters		X	P		X		P	C	P	
Transitional Housing	P	P	P		P	C	P		P	
Supportive Housing	P	P/C	P		P		P		P	
Single-Room Occupancy	P	P/C	C	C	C		P	P/C	C	
Farmworker Housing	P				P	C	P		P	

COMMERCIAL ZONES: Includes Commercial Planned Development Zones, Recreation Commercial Zones, Mixed-Use Zones, Commercial-Neighborhood Zones

Housing Type	Ceres	Modesto	Hughson	Newman	Oakdale	Patterson	Riverbank	Turlock	Waterford	Stanislaus County
Emergency Shelters	X	C	X		P		C	C		P
Transitional Housing		X	X		X		C			
Supportive Housing		X			X		C			
Single-Room Occupancy	C		C		X			P/C		
Farmworker Housing					X					

INDUSTRIAL ZONES: Includes Manufacturing Zones of different levels										
Housing Type	**Ceres**	**Modesto**	**Hughson**	**Newman**	**Oakdale**	**Patterson**	**Riverbank**	**Turlock**	**Waterford**	**Stanislaus County**
Emergency Shelters	P	C	C	P	P	P				P
Transitional Housing	X	X	X							
Supportive Housing	X	X	X							
Single-Room Occupancy	X		X							
Farmworker Housing	X		X							

Source: Zoning Ordinance for each jurisdiction. Does not include Agricultural/Open Space or Public Space/Institutional Zones

Key:
P = Permitted
C = Conditional/Special Use Permit
X = Prohibited
(blank) = No mention in Zoning Ordinance

Transitional and Supportive Housing

Transitional housing programs are another form of housing assistance for individuals experiencing homelessness. Oftentimes, transitional housing couples housing accommodations with supportive services such as case management, employment assistance, and health services to help individuals live independently. Program duration varies, although entities that receive funding from HUD typically assist individuals for no more than 24 months. In California, the Housing Element law states that transitional housing includes "buildings configured as rental housing developments, but operated under program requirements that require the termination of assistance and recirculating of the assisted unit to another

eligible recipient at a predetermined future point in time that shall be no less than six months from the start of assistance."[1]

Another form of assisted housing, supportive housing, are facilities that offer accommodations and supportive services usually for a specific low-income population such as those with chronic health conditions, mental or physical disabilities, or substance use disorder. Supportive services can be provided either at the same location as the housing unit (on-site) or at a different location (off-site). In general, supportive services aim to assist residents in living independently in their community and can include programs to help achieve better health outcomes, complete daily living activities, and connect to other resources in the area. Supportive housing typically does not impose limits on the duration of assistance, and in California, the state's Housing Element law defines supportive housing as having no such limitation on a resident's length of stay.[2]

The State of California extends legal protection to specific groups protected under the Lanterman Developmental Disabilities Act. These include emancipated minors, families with children, seniors, young adults aging out of the foster care system, individuals exiting an institutional setting, veterans, and the homeless.[3] Furthermore, state law considers both transitional and supportive housing as 'residential uses' which means that a local jurisdiction cannot subject this type of housing to additional requirements that would not be applicable to other similar residential uses in the same zone. For example, a local government cannot impose supplemental permitting requirements on transitional or supportive housing units when it does not require the same of other, similar housing types in the same zone. Across Stanislaus County, all jurisdictions comply with state law.

Single-Room Occupancy (SRO)

Single-room occupancy (SRO) units, sometimes called lodging, rooming, or boarding units, are one-room units meant for one individual. Unlike an efficiency unit or a studio apartment, SROs are not required to have an independent kitchen or bathroom, however many do. California's Housing Element law requires that jurisdictions accommodate housing for extremely low-income households, including single-room occupancy units. Across Stanislaus County, most jurisdictions comply with the law by allowing SROs with a conditional use permit in higher-density residential zones.

Farmworker Housing

Farmworker housing refers to housing accommodations provided for farmworkers, day laborers, and other agricultural employees covered by state law. Under California's Employee Housing Act, jurisdictions must consider housing for six or fewer employees as a residential use and allow this type of housing anywhere single-family units are permitted. (California Health and Safety Code Division 13, Part 1, Section 17000)

For farmworker housing as a specific subset of employee housing, the Act considers housing with 36 beds or 12 units as an agricultural use and to be permitted in zones where other agricultural uses are permitted. Across Stanislaus County, most jurisdictions comply with state law by allowing farmworker housing in areas zoned for agricultural use. Two jurisdictions, Hughson and Modesto, do not explicitly reference farmworker housing in their zoning ordinances but each accommodates this type of housing. Modesto elaborates on its policy in the City's 2015-2023 Housing Element which explains that farmworker housing

[1] California Code, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65582
[2] Housing Element law, section (g): https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65582
[3] Ibid

"may be developed in any zone where residential uses are permitted."[4] Likewise, in its 2019-2023 Housing Element, Hughson explains that farmworker housing can be developed by right in areas zoned for multifamily use and that the City's zoning ordinance currently needs to be updated to fully comply with state law by permitting farmworker housing in all areas where single-family units are allowed. The City also points out, however, that agricultural uses are not permitted anywhere within city limits, and therefore, the zoning ordinance does not need to permit housing with 36 beds or 12 units as an agricultural use because this state regulation does not apply.[5]

Ceres, Waterford, and Riverbank all additionally permit farmworker housing by right, and Patterson with a conditional use permit, in at least some residential zones.

Affordable Housing Development Policies and Programs

Minority and special needs households are disproportionately affected by a lack of adequate and affordable housing in the region. While affordability issues are not directly fair housing issues, expanding access to housing choice for these groups cannot ignore that affordability is a significant issue for many households. When rent-restricted or non-restricted low-cost housing is concentrated in certain geographic locations, access to housing by lower-income and minority groups in other areas can be limited and therefore an indirect impediment to fair housing choice. Furthermore, various permit processing and development impact fees charged by local government can result in increased housing costs and therefore be a barrier to the development of affordable housing. Other policies and programs, such as inclusionary housing and growth management programs, can either facilitate or inhibit the production of affordable housing.

Because land-use policies influence the development and spectrum of available housing in a community, the intensity and scope of different policies can be a useful indicator for impediments to fair housing choice.

[4] Page 3-11, https://www.modestogov.com/DocumentCenter/View/7025/Chapter-3-Constraints-PDF.
[5] Page 56, http://hughson.org/wp-content/uploads/2019/03/HughHE_Adopted_2015-12-21.pdf

Table 10. Growth Management and Inclusionary Zoning Policies

Jurisdiction	Growth Management Plan	Inclusionary Zoning Policy
Ceres	Ceres has policies that guide growth but it doesn't have any policies that impose limits on development each year	Does not appear to have an inclusionary program
Hughson	General Plan mentions wanting direct and focus growth towards development of the Primary SOI to "ensure an appropriate rate of growth" and "preserve Hughson's existing small-town character"; part of this plan involves focuses on infill development	2015-2023 Housing Element states that Hughson is continuing to "evaluate developing an inclusionary zoning program"
Modesto	Modesto has a Community Growth Strategy that outlines different policies for specific geographic areas	Modesto has considered implementing inclusionary programs in the past and has deemed such program infeasible
Newman	City states that it promotes development of housing at a balanced mix of housing types while "protecting the single-family character of neighborhoods" Newman also has maximum allowable densities for the number of units per acre	City does not appear to have an inclusionary program
Oakdale	City identifies growth and revitalization areas to direct development and protects rural areas from growth; explicitly links job growth to housing growth; follows the "San Joaquin Valley Blueprint Smart Growth Principles"	City does not appear to have an inclusionary program
Patterson		Inclusionary Housing Program: Chapter 18.86 of City Code
Riverbank	City has an 'unrestricted growth policy'	Does not appear to have an inclusionary program
Turlock	City has a "New Growth Areas and Infrastructure Element that guides its growth management strategy; part of the strategy involves creating master plans for designated areas	Does not appear to have an inclusionary program
Waterford	City does not appear to have growth policies that limit development	Does not appear to have an inclusionary program
Stanislaus County	Voters approved Measure E in 2008 which requires majority approval to rezone/re-designate land; County is committed to preserving agricultural lands	County doesn't appear to have an inclusionary program

Sources: Zoning Ordinance for each jurisdiction

Growth Management Policies

Growth management policies aim to control the progression and speed of development, balancing the needs of a community's existing residents while preparing for the community's future. Growth management policies can become impediments to housing choice, however, when the policy hinders the jurisdiction meeting local affordable housing needs. Growth management policies are not usually condensed within a single policy or program but exist within a collection of codes, plans, or ordinances that direct the rate and intensity of new development.

Urban growth boundaries (the outermost extent of anticipated urban development), limits on the total number of dwelling units that may be permitted, or special conditions on new development can all be considered growth management policies. State housing law mandates a jurisdiction facilitate the development of a variety of housing to meet the jurisdiction's fair share of regional housing needs. Any growth management measure that compromise a jurisdiction's ability to meet its regional housing needs may have an exclusionary effect of limiting housing choices.

Local jurisdictions within Stanislaus County have various local policies and voter initiatives that may impact housing development directly and indirectly including those that aim to support the conservation of agricultural land. Agriculture is the area's number one industry for economic output and employment, creating a multiplier effect for job creation. The conservation of agricultural land is important to the overall economic health of the community but must be balanced with the needs for housing to support the local workforce in all economic sectors of the community. Over time, as available land not impacted by growth measures begins to decline, there may be a direct impact on the development of affordable housing. However, changes in state laws regarding vehicle miles traveled and greenhouse gas reduction requirements, and the increasing costs of extending infrastructure outward, have led to many jurisdictions looking for increased infill development opportunities. Grant funding available for infrastructure, such as sewer and water line extensions and improvements, allows jurisdictions to increase their density within exiting urbanized areas.

Inclusionary Housing Programs

Inclusionary housing or inclusionary housing policies increase the supply of affordable housing by requiring developers to set aside a certain number of new housing units for low- and moderate-income households. These policies ensure that at least a share of new housing in a community is affordable for lower-income populations. The policy tends to be most effective in areas experiencing rapid and a strong demand for housing.

A typical inclusionary housing program will require developers to set aside anywhere from 10 to 30 percent of new housing units for low- and moderate-income households. These policies and programs can be either voluntary or mandatory. Voluntary programs often require developers to negotiate with public officials, but do not specifically mandate the provision of affordable units. Mandatory programs are usually codified in the zoning ordinance and require a contract with the jurisdiction for the creation of the housing units prior to obtaining a building permit.

In 2017, Assembly Bill 1505 was passed by the state legislature to allow cities and counties to adopt inclusionary housing ordinances after a period of legal uncertainty since 2009. The bill was signed into law January 1, 2018. (§ 65850.01) Patterson is the first city in Stanislaus County have an inclusionary housing ordinance. (Chapter 18.86 City Code) Hughson notes in their 2015-2013 that the City is continuing to "evaluate developing an inclusionary zoning program". In the 2009-2014 City of Modesto Housing Element, an inclusionary housing element was deemed infeasible.

The rental housing market conditions may create the incentive for these types of policies in the future if housing costs continue to increase.

Affordable Housing Development

HUD Funding and Tax Credits

Housing with HUD funding to create income-restricted units are found throughout Stanislaus County. About half of these units are in Modesto with many units in both Ceres and Turlock. Modesto's HUD-funded affordable housing stock makes up more than 70 percent of the affordable housing in the County.

While HUD subsidized units are one source of funding for affordable housing units, affordable housing units developed without HUD funding also help the jurisdiction meet lower income housing requirements of the Housing Element. Low-Income Housing Tax Credits (LIHTC), general funds, and state housing funds are also used to develop affordable units. Stanislaus County's recent housing production using LIHTC, however, is low compared to the rest of the state. In 2016-2018, only 55 low-income housing units were created in the County compared to 18,803 in the rest of the State. Table 11 presents the number of affordable housing units with HUD funding by jurisdiction. In this table, 'affordable housing' includes all HUD-subsidized units including public housing and various types of tenant-based and project-based rental assistance. Table 12 includes affordable housing units subsidized by LIHTC.

Table 11. Affordable Housing Units with HUD Funding by Jurisdiction

Jurisdiction	Affordable Units (2018)	Total Occupied Rental Housing Units (2018)	Total Housing Units (2018)	Percent of Housing Stock Affordable	Percent of All Affordable Units in County
Ceres	748	589	13,636	5.5%	11.9%
Hughson	47	45	2,461	1.9%	0.7%
Modesto	4,470	3,712	75,155	5.9%	70.9%
Newman	126	113	3,289	3.8%	2.0%
Oakdale	151	148	8,249	1.8%	2.4%
Patterson	79	75	6,100	1.3%	1.3%
Riverbank	154	146	7,449	2.1%	2.4%
Turlock	1,202	1,146	25,974	4.6%	19.1%
Waterford	63	62	2,579	2.4%	1.0%
Stanislaus County Total	**6,302**	**6,050**	**180,755**	**3.5%**	**100.0%**

Sources: 2018 HUD Picture of Subsidized Housing data; DP04, Selected Housing Characteristics, ACS 5-year estimates (2013-2017)

*Affordable units in this table include all HUD-subsidized units including public housing, Housing Choice Vouchers, Mod Rehab, project-based Section 8 units, Rent Sup/RAP, and Section 202, 236, and 211 properties.

Table 12. Affordable Housing Units with Low-Income Housing Tax Credit (LIHTC) Funding by Jurisdiction 2002-2017

	Total Number of LIHTC Units:	Total Low-Income LIHTC Units:
Ceres	235	231
Modesto	76	75
Newman	120	118
Oakdale	174	171
Patterson	40	39
Riverbank	152	148
Turlock	228	204
Waterford	950	50
Total	**1,075**	**1,036**

Source: HUD Low-Income Housing Tax Credit Database 2002-2017

Regional Housing Needs

As part of California's housing element law, the Stanislaus Council of Governments (StanCOG) creates a Regional Housing Needs Assessment (RHNA) to determine future housing needs for the area for residents in different income categories (very low, low, moderate, and above moderate). This assessment quantifies the housing needs for each jurisdiction in the County which guides local government land-use planning and resource prioritization during the General Plan Housing Element update every eight years. ~~Modesto additionally completes an update four years into the planning cycle.~~

Overall, the California Department of Housing and Community Development (HCD) determined a final RHNA of 21,330 housing units needed in Stanislaus County for the planning period of January 1, 2014 to September 30, 2023 (the 5th RHNA Cycle). StanCOG, with consultation from the Valley Vision Stanislaus Steering Committee, then created the RHNA allocation per jurisdiction for each income group. Table 13 includes the RHNA allocation by income category for jurisdictions in Stanislaus County and Table 14 presents the progress of each jurisdiction in meeting their respective allocation. Table 15 summarizes the RHNA allocation by jurisdiction and income level.

Table 13. RHNA Allocation of Affordable Housing Units

Jurisdiction	Income Category				
	Very Low	Low	Mod	Above Mod	TOTAL
Ceres	622	399	446	1104	2,571
Hughson	53	34	38	93	218
Modesto	1,462*	1,461	1,100	2,724	6,747
Newman	186	119	136	337	778
Oakdale	315	202	210	520	1,247
Patterson	636	408	416	1031	2,491
Riverbank	321	206	217	536	1,280
Turlock	877	562	627	1552	3,618
Waterford	131	84	89	221	525
Unincorporated County	538	345	391	967	2,241
Total County	**5,141**	**3,820**	**3,670**	**9,085**	**21,716**

* Per Housing Element (includes Extremely Low & Very Low)
Source: California Housing and Community Development (HCD)

Table 14. RHNA Progress Report 2014-2017

JURISDICTION	Fees for Very Low-Income Housing	Total Number of Very Low-Income Housing Units Permitted	Percentage of Very Low Income RHNA complete.	RHNA for Low Income Housing	Total Number of Low Income Housing Units Permitted	Percentage of Low Income RHNA complete.
	VLI RHNA	VLI PERMITS	VLI % COMPLETE	LI RHNA	LI PERMITS	LI % COMPLETE
Ceres	622	0	0.0%	399	0	0.0%
Hughson	53	0	0.0%	34	0	0.0%
Modesto	1,546	0	0.0%	991	56	5.7%
Newman	186	0	0.0%	119	0	0.0%
Oakdale	315	0	0.0%	202	1	0.5%
Patterson	636	0	0.0%	408	0	0.0%
Riverbank	321	33	10.3%	206	38	18.4%
Turlock	877	2	0.2%	562	123	21.9%
Unincorporated County	538	0	0.0%	345	16	4.6%
Waterford	131	0	0.0%	84	0	0.0%

Jurisdiction	RHNA for Moderate Income Housing	Total Number of Moderate-Income Housing Units Permitted	Percentage of Moderate Income RHNA complete.	RHNA for Above Moderate-Income Housing	Total Number of Above Moderate-Income Housing Units Permitted	Percentage of Above Moderate Income RHNA complete.
	MOD RHNA	MOD PERMITS	MOD % COMPLETE	ABOVE MOD RHNA	ABOVE MOD PERMITS	ABOVE MOD % COMPLETE
Ceres	446	5	1.1%	1,104	0	0.0%
Hughson	38	0	0.0%	93	71	76.3%
Modesto	1,100	146	13.3%	2,724	425	15.6%
Newman	136	0	0.0%	337	0	0.0%
Oakdale	210	84	40.0%	520	254	48.8%
Patterson	416	0	0.0%	1,031	0	0.0%
Riverbank	217	0	0.0%	536	103	19.2%
Turlock	627	591	94.3%	1,552	46	3.0%
Unincorporated County	391	44	11.3%	967	425	44.0%
Waterford	89	0	0.0%	221	8	3.6%

Source: California Housing and Community Development (HCD)

Table 14 suggests that progress in meeting these housing goals has been slow, particularly for very low-income housing units. For the first three years of the eight-year 5th plan, only Riverbank has issued building permits for more than one percent of their housing goal. For low-income units, Modesto, Riverbank, Turlock, and the Unincorporated County made progress creating units.

Turlock made significant progress in meeting its moderate-income housing goals. In three years, the City has permitted 94.3 percent of its eight-year housing goal of 627 units in this income category. Oakdale is also on track to meet its housing goal, permitting 84 of 210 units (40 percent) in three years. Ceres, Modesto, and the Unincorporated County also saw progress toward meeting their moderate-income housing goals. In total 870 moderate-income housing units were permitted countywide in the first three years of the 5th RHNA Cycle.

Most housing units created have been in the above moderate-income category, with 1,332 permits issued for housing in this income category. Hughson permitted 71 above moderate-income housing units, more than three-quarters of its housing goal. Oakdale and the Unincorporated County were also making significant progress in this category at 48.8 and 44.0 percent, respectively. Modesto only permitted 15.6 percent of its above moderate-income housing unit goals, but this amounts to 425 units. Riverbank, Turlock, and Waterford all permitted housing in this income category as well.

Table 15. RHNA Totals

JURISDICTION	Combined total RHNA for all income categories	Total permits from all income categories.	Sum of total remaining from each income category.
	RHNA TOTAL	TOTAL PERMITS	TOTAL RHNA REMAIN
Ceres	2,571	5	2566
Hughson	218	71	147
Modesto	6,361	627	5734
Newman	778	0	778
Oakdale	1,247	339	908
Patterson	2,491	0	2491
Riverbank	1,280	174	1106
Turlock	3,618	762	2856
Unincorporated County	2,241	485	1756
Waterford	525	8	517
Total	21,330	2,471	18,859

Source: California Housing and Community Development (HDC) Housing Element Implementation Tracker, Updated 06/25/2019

Other Policies and Programs Impacting Housing Choice

Building Codes

Building codes, such as the California Building Standards Code and the Uniform Housing Code, protect the health, safety, and welfare of the public. Additional building restrictions within local building codes may not be warranted, however, and deter housing construction or neighborhood improvement.

The California Building Standards Code is published every three years by order of the California legislature and applies to all jurisdictions in the State of California unless otherwise annotated. Adoption of the compilation of codes by local government is both a legal mandate and a best practice because it ensures a high level of safety for citizens regarding construction and maintenance of structures. The most recent edition of the California Building Standards Code was updated in 2019 and became effective January 1, 2020.

Other codes commonly adopted across California include the California Mechanical Code, California Plumbing Code, California or National Electric Code, Uniform Housing Code, and California Fire Code.

California Environmental Quality Act (CEQA)

While not directly intended to impact housing choice, the California Environmental Quality Act (CEQA), signed into law in 1970, is a statewide law that applies to all discretionary projects proposed to be conducted or approved by a public agency. The primary purpose of CEQA is to disclose significant environmental effects of a proposed project to the public and to limit these impacts when possible. CEQA also requires that public agencies publicly disclose the decision-making process behind project approval for the purpose of public participation in the environmental review process.

CEQA has been updated several times between 2011 and 2019 to streamline infill development and update exemptions to transit-oriented and mixed-use development, among other updates. Affordable Housing in urban areas is also exempt under certain circumstances. (14 CCR § 15194)

Public Housing Authorities

In Stanislaus County, public housing needs, housing choice vouchers, and other specific HUD funds and services are addressed by two housing authorities:

- The Stanislaus Regional Housing Authority, serving Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Stanislaus, and Tuolumne Counties. (SRHA)
- The Riverbank Housing Authority administered by SRHA.

Public housing sites can range from large apartment buildings to single-family houses. Housing Choice Vouchers (HCV, also often called the "Section 8" program) are a portable rent subsidy that can be used to pay for a portion of rent in private rental housing units. Project-Based Section 8 vouchers are private rental units in which the current occupant receives subsidized rent through the housing authority.

Housing Authorities are subject to the same state and federal fair housing laws as other housing providers and cannot discriminate on the basis of state or federally protected classes. Housing Authorities must also follow any local fair housing ordinances and may have additional tenant protections added by HUD.

Public Housing Authority Planning

Collectively, the housing authorities in Stanislaus County provide access to 6,335 subsidized housing units including 736 public housing units, 1,060 project-based Section 8 units, and 4,460 housing choice vouchers, though these totals vary at any given time. Though there are technically two housing authorities, the SRHA administers the programs of both the SRHA and Riverbank housing authorities.

The SRHA has been designated as a "high performing" public housing authority by HUD since 2008. This designation is given to public housing authorities (PHAs) that score above a 90 out of 100 points. PHA projects are assessed based on a physical inspection (40 points), financial condition (25 points), management system (25 points), and timely use of capital funds (10 points). The total PHA score is then created out of the average score for all projects weighted by the number of units.

Like many public housing authorities across the country, the housing authorities in Stanislaus County lack an adequate supply of funding for units and/or vouchers to meet the affordable housing needs within their service areas. This is reflected by long or closed waiting lists for potential units. In Stanislaus County, the average waiting time for a public housing unit is 10 years. Waiting lists for housing choice vouchers are only open occasionally and, even then, sometimes only for select applicants.

PHAs complete both an annual plan and a 5-year plan to help prioritize projects, development, funding, and programs. For 2019-2023, the SRHA listed the following goals and objectives (among others) that help affirmatively further fair housing and increase housing choice:

1. Depending on the availability of federal and state funding, increase the inventory of affordable rental housing within the jurisdiction of the Stanislaus Regional Housing Authority for extremely low to moderate income households

Objectives:

- Housing Choice Voucher Program – Continue to expand upon existing marketing and outreach efforts to attract new landlord participants to the Housing Choice Voucher Program.

- Development – Leverage private or other public funds to create additional housing opportunities. • Development – Subject to the availability of funding, develop or acquire 500 affordable housing units over the next five years.

2. Conserve and upgrade the Affordable Housing Inventory in Stanislaus County.

Objectives:

- Public Housing – Implement Asset-Based Community Development (ABCD) initiatives to engage and unite residents, associations, and institutions from within each community for more sustainable communities and economic development.
- Administration – Partner with County and/or City in efforts to improve housing stock and create stable, viable neighborhoods.

3. Increase assisted housing choices.

Objectives:

- Housing Choice Voucher Program – Provide voucher mobility counseling at initial family briefings and during annual reexaminations.
- Housing Choice Voucher Program – Continue to maintain the 2-tiered Benefit Payment Standard (BPS) to ensure families have the ability to locate affordable housing in less poverty concentrated neighborhoods.
- Housing Choice Voucher Program - Continue to seek funding for the Individual Development & Empowerment Accounts (IDEA) and Workforce Initiative Subsidy for Homeownership (WISH) programs for graduating Family Self-Sufficiency (FSS) Program Participants.

(Housing Authority of the County of Stanislaus, DBA Stanislaus Regional Housing Authority Streamlined Annual PHA Plan Fiscal Years 2019-2020)

Public Housing Authority Resident Demographics

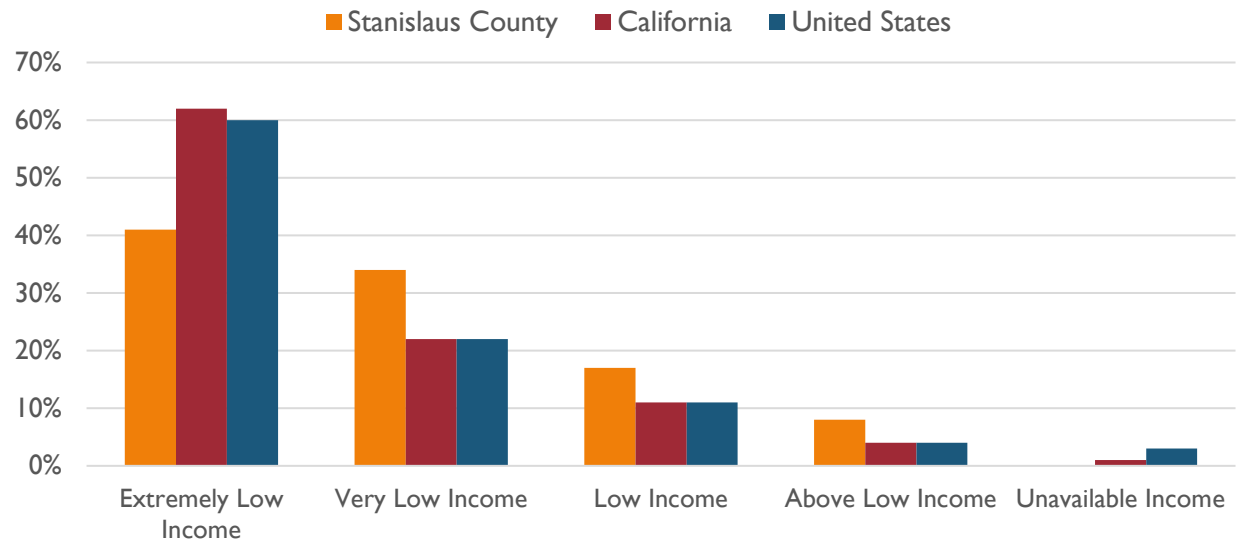
Between October 1st, 2018 and January 31st, 2020, 702 households in Stanislaus County were assisted through public housing, representing 3.9 percent of all public housing households in California.

Chart 35 depicts the share of public housing households by income level in Stanislaus County, California, and the United States. About 40 percent of all public housing residents assisted by the PHAs are considered "extremely low-income", with a County annual household income average of $23,825. Chart 36 indicates that Stanislaus County public housing residents have a slightly higher average income than the rest of the state. In California, 62 percent are extremely low income and the annual household average income is $20,664. The higher income within Stanislaus County is at least partially offset by higher tenant rent contributions than the California average. Chart 37 depicts the average monthly tenant payment for public housing residents in Stanislaus County, California, and the United States. More public housing households pay more than $501 per month than any other payment category. The average monthly tenant contribution toward rent in Stanislaus County is $573, versus $495 in California.

Chart 38 presents the share of public housing household types in Stanislaus County, California, and the United States. The most common household type within public housing is female-headed households with children, with even more households within this category in both California and Stanislaus County than the rest of the United States. Stanislaus County also has a slightly higher percentage of disabled elderly

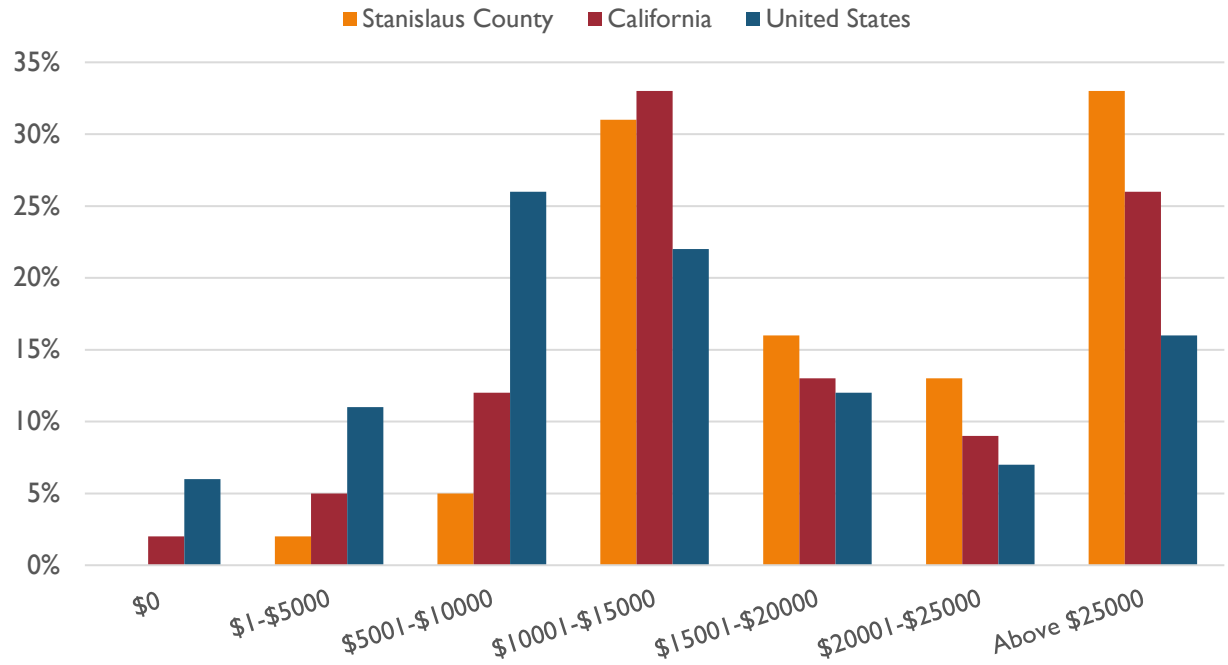
residents (with or without children) than the rest of the state and country. Households in Stanislaus County public housing tend to be larger than those in the rest of California and the United States.

Chart 35. Public Housing Households by Income Level



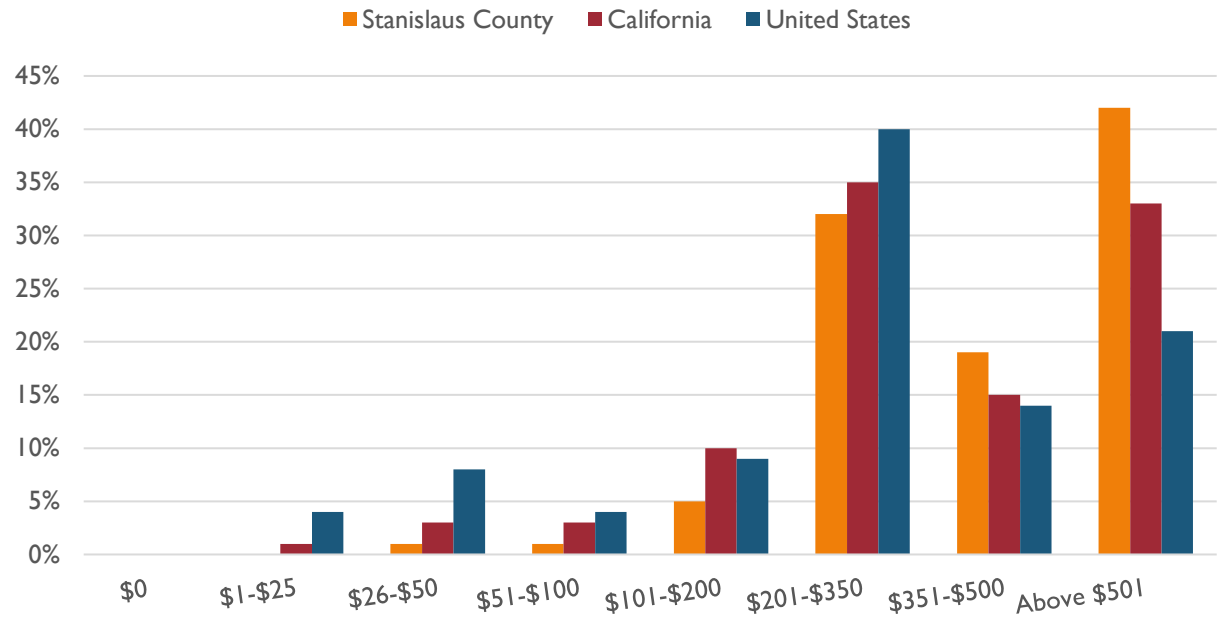
Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Chart 36. Distribution Annual Household Income



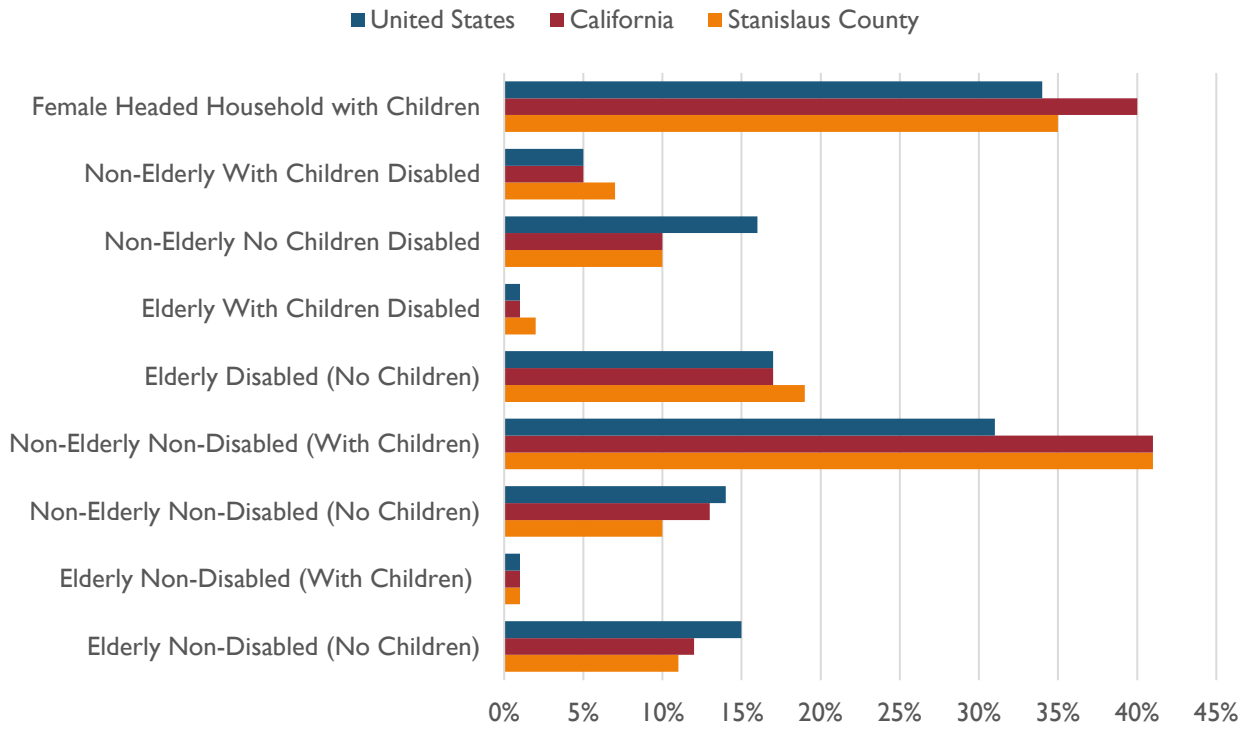
Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Chart 37. Distribution of Monthly Total Tenant Payment



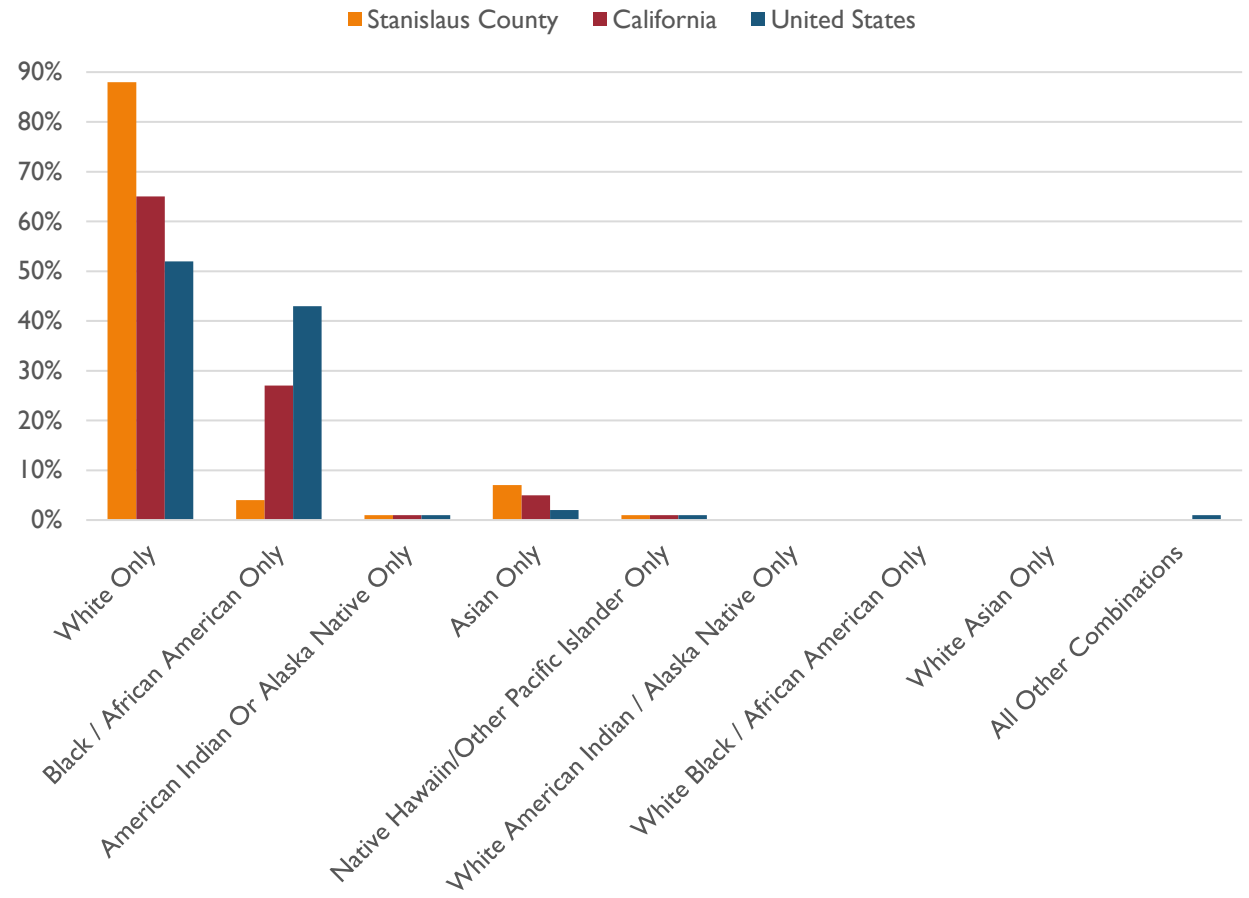
Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Chart 38. Distribution of Public Housing Household Type in Unit



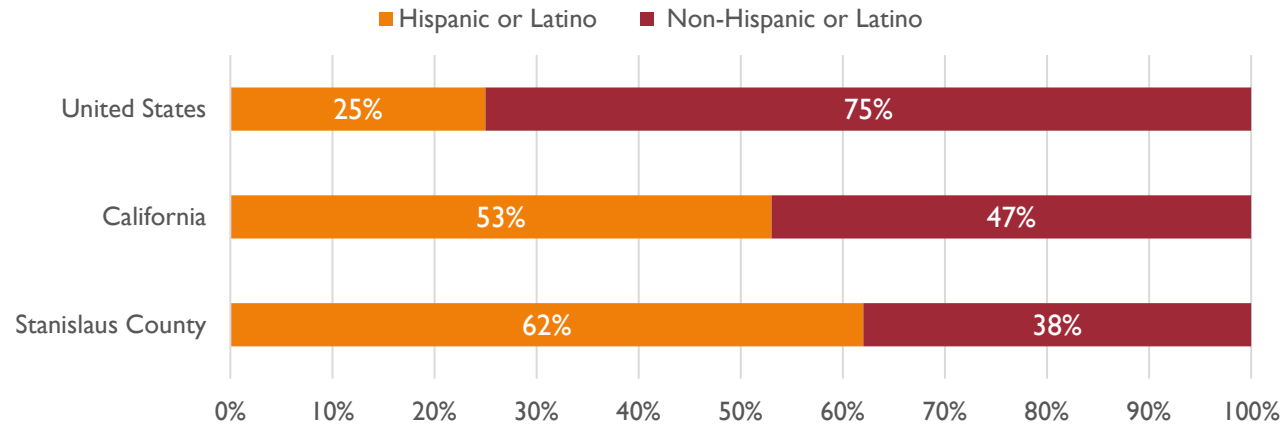
Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Chart 39. Distribution of Race of Head of Household – Public Housing



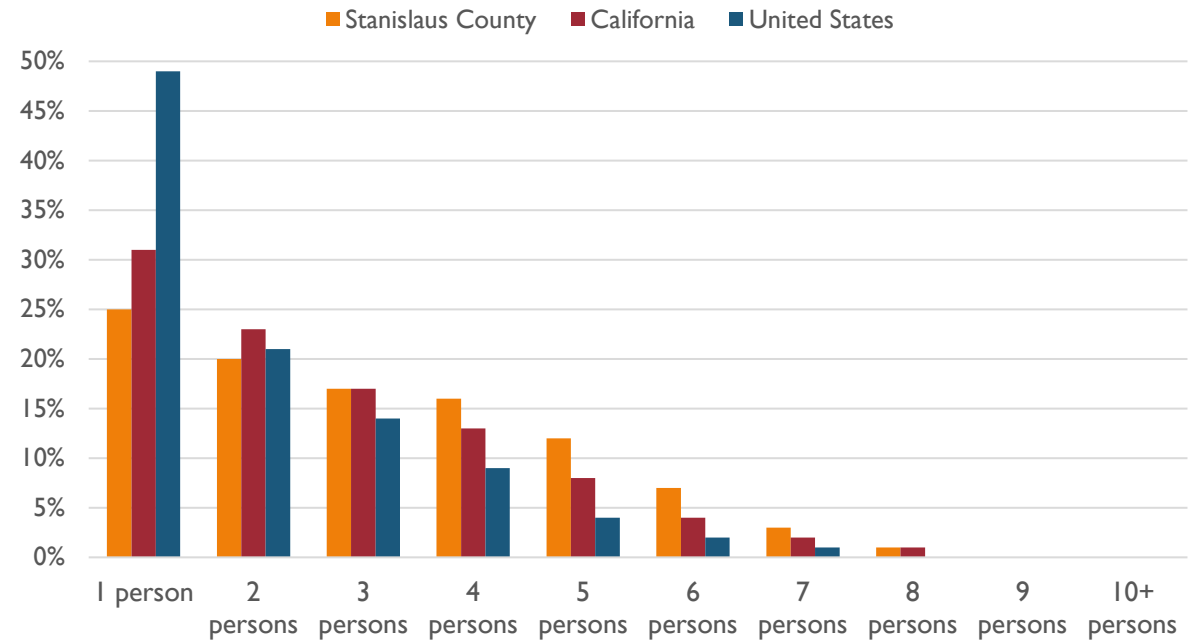
Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Chart 40. Distribution of Ethnicity of Head of Household – Public Housing



Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Chart 41. Distribution by Household Size in Public Housing



Source: HUD Public and Indian Housing, Resident Characteristics Report as of January 31, 2020

Appointed Boards/ Commissions

Department of Fair Employment and Housing

California's Department of Fair Employment and Housing (DFEH) enforces California's civil rights laws including fair housing laws found in the Fair Employment and Housing Act (FEHA), Unruh Civil Rights Act, Disabled Persons Act, and Ralph Civil Rights Act. The DFEH is tasked with the following:

- Engage in public outreach and provide training and technical assistance to employers, business establishments, and housing providers regarding their responsibilities under the law.
- Investigate discrimination complaints and cases of systemic discrimination.
- Facilitate mediation and resolution of disputes involving civil rights.
- Enforce the laws by prosecuting violations in civil court.

Within DFEH, the Fair Employment and Housing Council (FEHC) implements California's employment and housing anti-discrimination regulations, conducts inquiries, and holds hearings on civil rights issues. Council members on the FEHC are appointed by the governor.

Local Boards/Committees

Modesto, Turlock, and Stanislaus County all have committees, commissions, or local boards that discuss issues related to Fair Housing and Affirmatively Furthering Fair Housing. Table 16 outlines which jurisdictions in the County have committees that directly address low-income housing, issues of concern for specific racial or ethnic groups, or disability. Hughson, Newman, Patterson, Riverbank, and Waterford do not appear to have any such committees or commissions.

Table 16. Stanislaus County Local & County Boards and Committees

Jurisdiction	Committees/ Commissions	Duration/Frequency	Committee Purpose
Ceres	Housing Loan Committee	Meets as needed	Makes recommendations on down payment assistance loans.
Modesto	Equal Opportunity/Disability Commission - Human Relations Commission (meet jointly)	Meets as needed	Tasked with advising and assisting the City Manager in matters related to equal opportunity and individuals with disabilities; primary responsibility is making recommendations for furthering human relations in the community and make referrals concerning fair housing.
Modesto	Disability Access Appeals Board	Meets as needed	The Disabled Access Appeals Board hears and rules on appeals of Chief Building Official orders based on disabled access laws; and interprets and advises staff on disabled access laws.
Modesto	Citizens Housing & Community Development Committee	Second Thursday of every month	Review City's HUD funds and makes recommendations to City Council on CDBG, HOME, and ESG grants.
Modesto	Housing Rehabilitation Loan Committee	First Thursday of every month	Make recommendations to the Citizens Housing & Community Development Committee on how procedures and policies for housing rehabilitation loan funds and down payment assistance.
Oakdale	Housing Loan Committee	Meets as needed	Make recommendations to the Committee on down payment assistance and housing rehabilitation loan funds
Turlock	Joint Taskforce on Diversity and Inclusion (CTSS-JTDI) (City of Turlock and California State University - Stanislaus)	One a month on a Wednesday	Goal of building relationships between the City, Stanislaus State University, and the community to coordinate, encourage, and implement initiatives to promote an inclusive community.
Turlock	Housing Loan Committee	As needed	Make recommendations to the Committee on procedures and policies for housing rehabilitation loan funds and down payment assistance.
Stanislaus County	Stanislaus County Equal Rights Commission	Every other month on the third Wednesday	Primarily work on promoting equal rights in employment opportunities.

Stanislaus County	Cultural Competency, Equity, and Social Justice Committee (CCESJC) of the Stanislaus County Department of Behavioral Health and Recovery Services	Second Monday of each month	Aim to provide culturally competent services to clients' works with several partners and offer mental health training to public.
County-wide	Stanislaus Community System of Care (CSOC aka CoC)	Third Thursday of each month	Works to address potential issues and gaps in the service delivery system and create a transparent and collaborative service delivery system for the entire County related to housing and homelessness.
County-wide	Stanislaus Homeless Alliance	Second Wednesday of each month	A collaborative entity formed to align homelessness services, planning, and funding among stakeholders in Stanislaus County.

Language Accommodations

National origin discrimination does not directly include the use of language from a foreign country, but, because of the connection between language and foreign geographic areas, HUD has issued guidance clarifying that discrimination against people who do not speak, read, or write English proficiently (with "Limited English Proficiency" or "LEP") is prohibited under the Fair Housing Act.

HUD notes that in the United States, 34 percent of people who are Asian and 32 percent of people who are Hispanic or Latino are LEP compared to only 2 percent of non-Hispanic Whites. For those born outside the United States, 61 percent born in Latin America and 46 percent born in Asia are LEP. Because language and national origin correlate so closely, a housing applicant or resident's lack of English proficiency is often used as justification for housing discrimination as a stand-in for discrimination based on race, ethnicity, and/or national origin. (Office of General Counsel Guidance on Fair Housing Act Protections for Persons with Limited English Proficiency, September 15, 2016)

This connection between LEP and national origin was made by the U.S. Supreme Court in 1974 in *Lau v. Nichols* who determined that language was an aspect of national origin and therefore protected by Title VI of the Civil Rights Act which prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. (414 U.S. 563 1974) In addition, LEP Executive Order (Executive Order 13166) signed into law in 2000 gives LEP residents access to federally conducted and federally funded programs and activities. The LEP Executive Order applies to both federal agencies, including HUD, and those who receive federal funds such as local governments and nonprofits. If an organization or their activities are at least partially funded by federal dollars, all the funding recipient's operations are covered by the law, even if only one part of the recipient's programs or activities and funded by federal assistance. (Limited English Proficiency Federal Interagency Website, LEP.gov)

California law additionally protect those with LEP statewide through protections based on "ethnic group identification" which includes the definition of this protected class as including "linguistic characteristics". This law applies to any program that is "conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state." (§ 11135) The Dymally-Alatorre Bilingual Services Act also protects LEP residents of California by requiring that state and local government agencies serving an area with a "substantial number of non-English-speaking people" be able to effectively communicate with those LEP persons though bilingual staff and translated materials. For local and state government agencies, this applies to agencies where the population served is at least 5 percent LEP. The communication covered under the Act includes forms, applications, questionnaires, advertisements, and official notices. (§§7290-7299.8)

A "LEP household" is defined by the U.S. Census Bureau's American Community Survey as those in which no one 14 and over either 1) speaks English at home or 2) speaks a language other than English at home and speaks English 'very well'. In Stanislaus County, 8.9 percent of all households are LEP, and 6.4 percent in Modesto.

Where Dymally-Alatorre applies in Stanislaus County based on LEP demographic percentages, jurisdictions should be able to effectively communicate with the public in English and Spanish in all housing, fair housing, and all other community services and programs to ensure equal access for LEP persons.

Evidence of Housing Discrimination

Fair Housing Complaints

In California, the Department of Fair Employment and Housing (DFEH) is responsible for enforcing fair housing laws along with the HUD Office of Fair Housing and Equal Opportunity (HUD FHEO). Residents of Stanislaus County who feel they have a been a victim of housing discrimination can submit their complaint to either agency. If a complaint is filed with the national FHEO, it will automatically be filed with DFEH at the state level for investigation. If a complaint is filed with DFEH and may also violate the federal Fair Housing Act, DFEH will automatically file the complaint with HUD FHEO as well, although DFEH will be the agency that investigates the allegation.

HUD FHEO and DFEH also partner with state and local agencies in HUD's Fair Housing Assistance Program to report fair housing complaints on behalf of individuals. Member agencies assist individuals in filing fair housing violation complaints with state and national agencies. Fair Housing Assistance Program agencies also conduct housing enforcement activities including compliant investigation, conciliation between parties, and fair housing education and outreach. In Stanislaus County, Project Sentinel is the primary organization that performs these roles in the community in addition to also working with broad tenant and landlord issues.

Project Sentinel investigates complaints on behalf of residents who feel they may be victims of housing discrimination, provides outreach and education to housing providers, and assists residents file complaints with state and federal enforcement agencies such as DFEH and HUD FHEO.

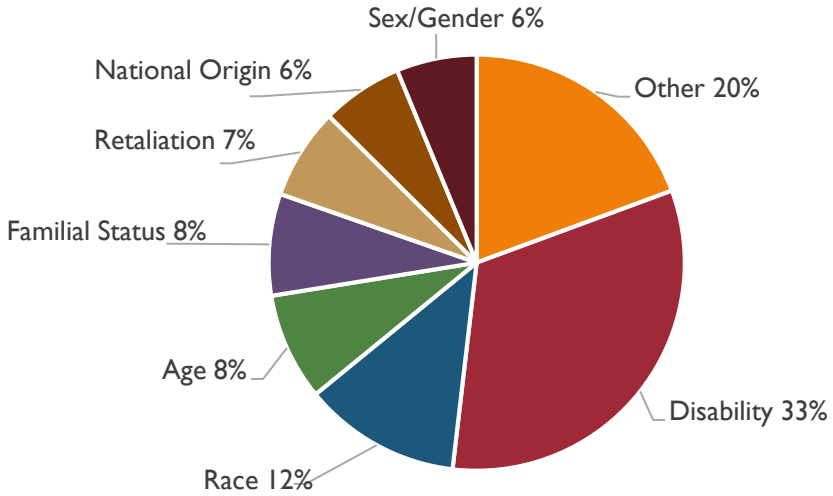
Housing Discrimination Complaints

Information about housing discrimination complaints to DFEH and HUD is tracked annually by each agency. The agency tracks where the alleged fair housing violation occurred geographically, on what protected-class basis, and the date of the complaint.

The true number of fair housing violations that occur within an area is difficult to determine, especially for those who fear retaliation and/or the loss of immediate housing if the violation is reported. This is often, unfortunately, the same group most likely to experience fair housing violations: low-income residents, those with families, racial and ethnic minorities, and those without housing references or good credit. The National Fair Housing Alliance estimates that, on a national level, less than 1 percent of all fair housing violations are reported.

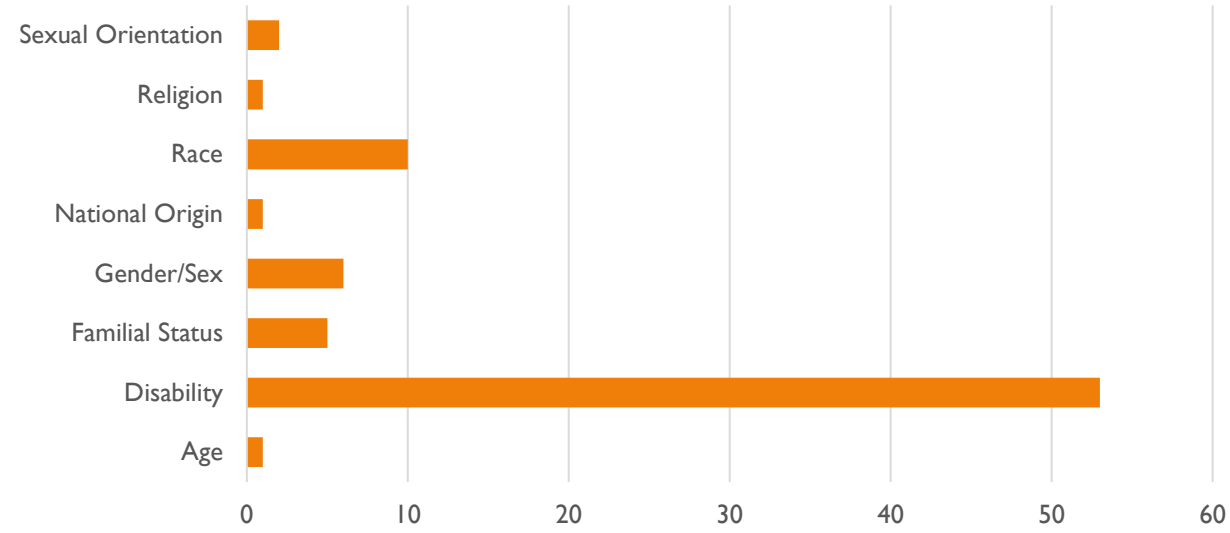
Chart 42 depicts the share of housing discrimination complaints by basis of the complaint. In California, disability was the most common basis for housing discrimination complaints to DFEH in 2018, accounting for 33 percent of all complaints. Race, age, and familial status were the next most frequent bases for housing discrimination complaints to DFEH. Retaliation, national origin, and sex/gender were also common. Complaints can be made on more than one basis.

Chart 42. Bases for Housing Complaints to DEFH 2018



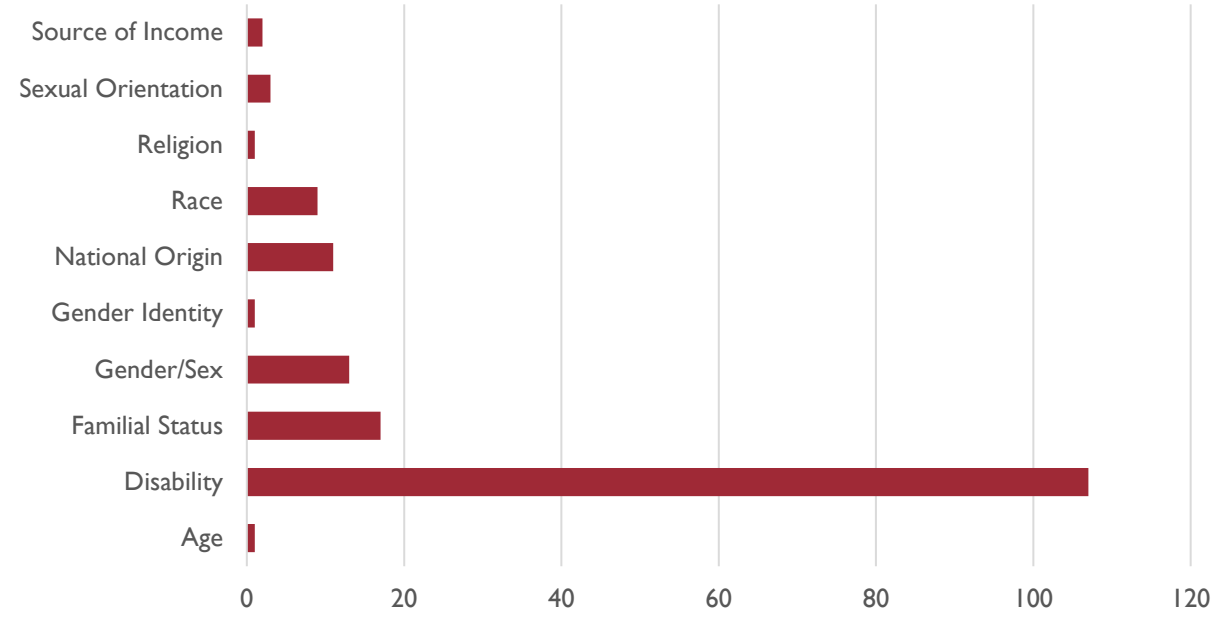
Source: 2018 Annual Report, California Department of Fair Employment and Housing

Chart 43. Stanislaus County Fair Housing Complaints, 2014-2019



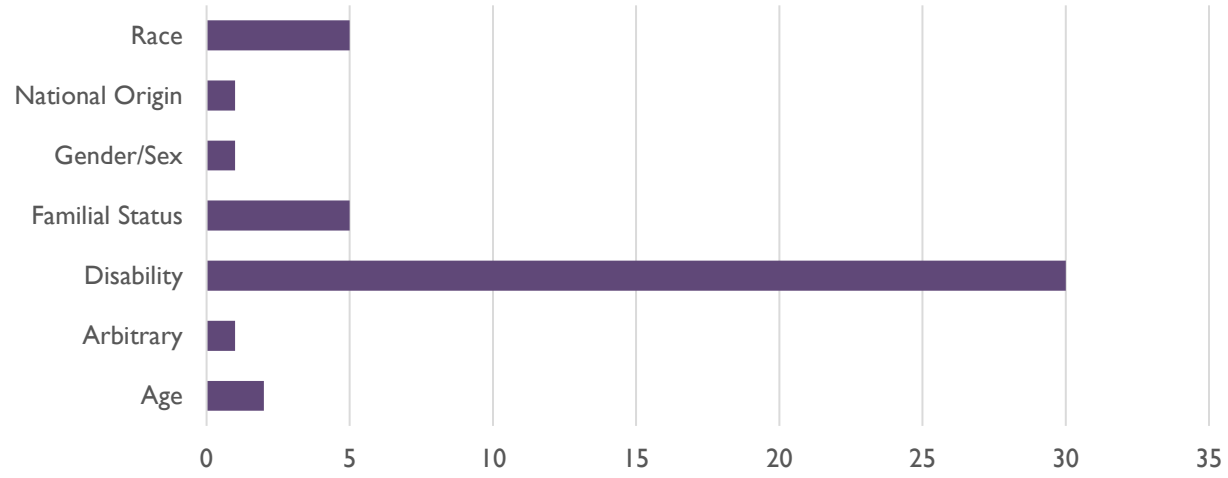
Source: 2019 Annual Report, California Department of Fair Employment and Housing

Chart 44. Modesto Fair Housing Complaints, 2014-2019



Source: 2019 Annual Report, California Department of Fair Employment and Housing

Chart 45. Turlock Fair Housing Complaints, 2014-2019



Source: 2019 Annual Report, California Department of Fair Employment and Housing

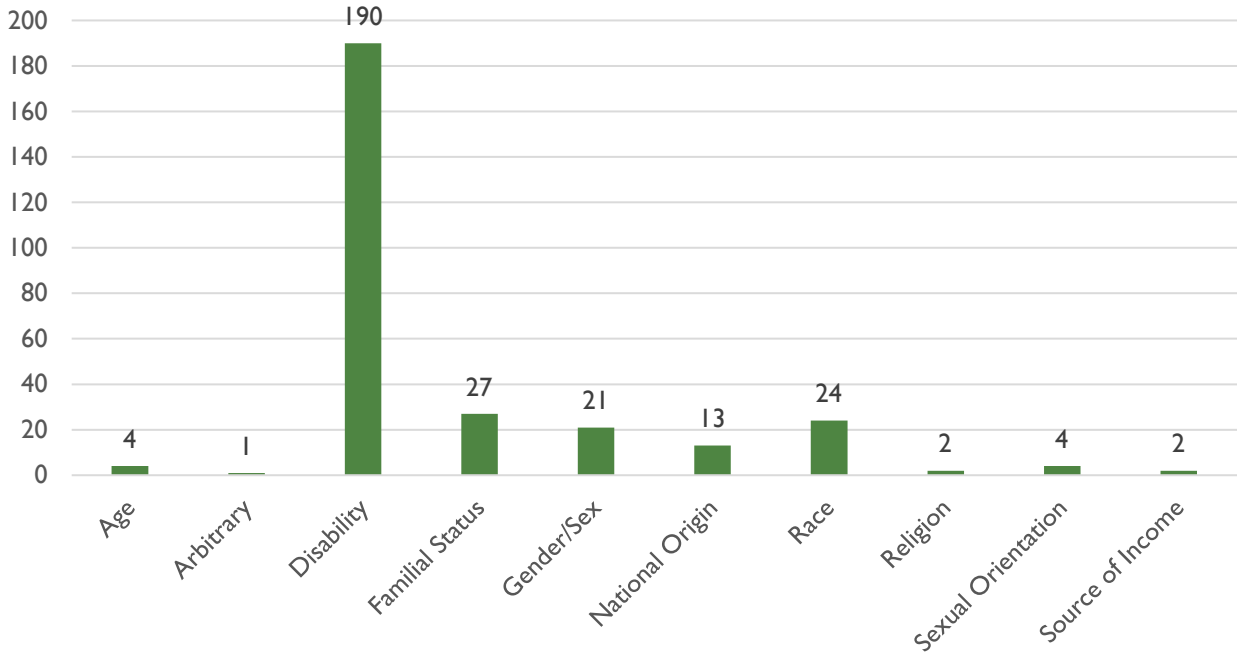
Charts 43, 44, and 45 present the count of housing discrimination complaints by basis in Stanislaus County, Modesto, and Turlock. These figures mirror statewide patterns with disability as the most cited basis for housing discrimination in complaints made between 2014 and 2019 for each jurisdiction. Familial status and gender status were the next most common at the County level and in Modesto while familial status and race were the next most common in Turlock. Table 17 indicates that Modesto had a significant number of complaints (165) compared to other jurisdictions in the County. This may be because Project Sentinel has a physical office in Modesto but could also be due to the amount of outreach or advertising to the public in Modesto, partnerships with other organizations, or the number of fair housing violations occurring. The larger number may therefore reflect successful community outreach as opposed to a greater prevalence of housing discrimination.

Table 17: Fair Housing Complaints by City/Community 2014-2019

Location	Complaints
Ceres	30
Empire	8
Hickman	1
Hughson	3
Modesto	165
Newman	7
Oakdale	21
Patterson	6
Riverbank	1
Waterford	6
Valley Home	1

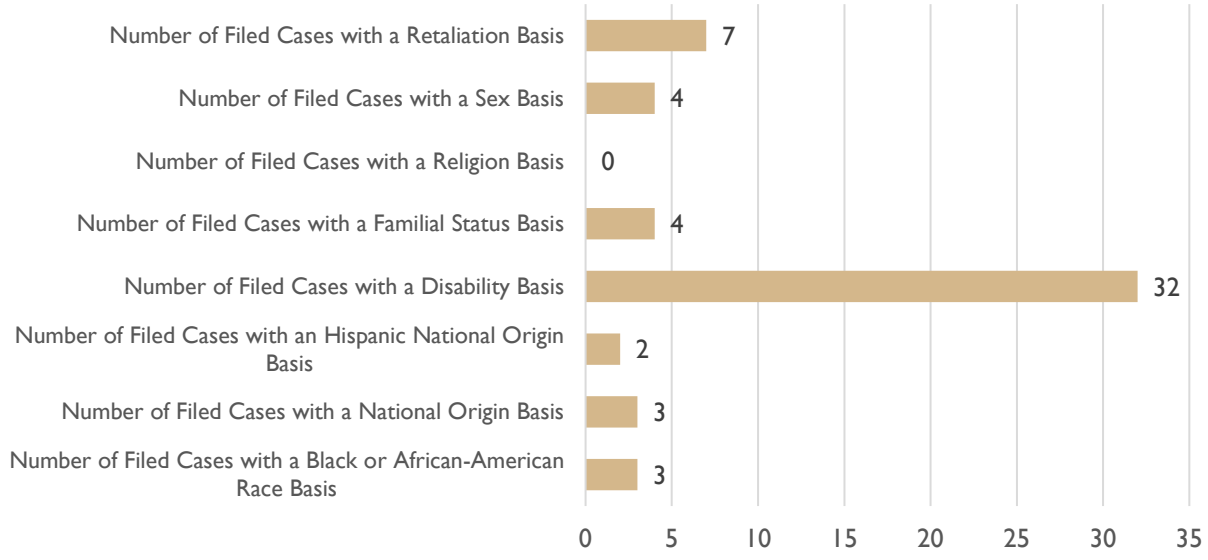
Source: Project Sentinel

Chart 46. All Stanislaus County Fair Housing Complaints, 2014-2019



Source: 2019 Annual Report, California Department of Fair Employment and Housing

Chart 47. HUD FHEO Filed Cases, 2014-2016



Source: HUD FHEO

PRIVATE SECTOR POLICY REVIEW

Mortgage Lending

This analysis primarily relies on lending data made publicly available through the Home Mortgage Disclosure Act (HMDA). The act requires that financial institutions, including banks, savings associations, credit unions, and other lenders, annually disclose mortgage data to the public. This data serves a variety of purposes including determining whether lenders are meeting community housing needs, supporting public officials in investments to encourage development, and identifying potential patterns of discriminatory lending.[6] It is important to note that HMDA data by itself is insufficient to conclusively identify instances of discrimination in lending. Rather, analysis of HMDA data is useful for exploring discrepancies in lending outcomes and identifying areas of concern.

The most recent HMDA data available to the public is for 2018. Appendix X of this report includes detailed tables with data on the disposition of loan applications, types, and outcomes for Stanislaus County (all jurisdictions), Modesto, Turlock, and the Unincorporated County, which in 2018, included data for the following areas: Denair, Empire, Grayson, Hickman, Keyes, Knight Ferry, La Grange, Monterey Park, Riverdale Park, Salida, Valley Home, Vernalis, and Westley. Several tables compare data for these jurisdictions in 2018 to figures from 2008 and 2013 to analyze changes over time. Other tables explore differences in lending outcomes by applicant characteristics, including income level and race/ethnicity. Some tables are only applicable to Stanislaus County due to insufficient sample sizes for the other three jurisdictions.

General Overview

Data from 2018 indicates that about 16,000 loans originated in Stanislaus County, with 8,034 (50.2 percent) originating in Modesto, 2,327 (14.5 percent) in Turlock, and 1,739 (10.9 percent) in the Unincorporated County. Compared to previous years, the number of loan originations at the County-level has decreased, however, loan applications for individual jurisdictions have fluctuated over time. For example, in 2008, Stanislaus County had 26,824 originations and by 2013, this figure decreased to 24,588 applications. In comparison, in 2008, Modesto had 12,151 applications while Turlock had 2,162 and the Unincorporated County had 2,442. Five years later, these figures were 12,090 in Modesto, 3,984 in Turlock, and 2,893 in the Unincorporated County.

Regarding loan outcomes, a little over half of all applications (9,056 loans or 56.6 percent) were approved and almost a fifth (2,839 loans or 17.7 percent) were denied. The remaining applications were either marked incomplete (3.9 percent), withdrawn by the applicant (12.3 percent), or marked as having another outcome (9.5 percent). Of the jurisdictions analyzed, loans originating in Turlock experienced the highest approval rate of 59.5 percent while applications in the Unincorporated County cumulatively witnessed the lowest approval rate of 54.4 percent. When it came to loan denial rates, loan applications in Modesto had the lowest rate at 16.9 percent while loans in the Unincorporated County had the highest rate at 20.0 percent. Notably, approval rates across Modesto, Turlock, Stanislaus County, and the Unincorporated County are slightly higher than the national approval rate of about 53.4 percent.

[6] "Background and Purpose," Home Mortgage Disclosure Act, FFIEC, accessed 11/19/2019, https://www.ffiec.gov/hmda/history.htm.

Characteristics of Loan Applicants.

Most individuals who initiated loan applications in Stanislaus County were White with 63.7 percent of applicants identifying as such in 2018. Hispanic individuals (of any race) comprised the second largest share that year, representing 26.8 percent of applicants. Black/ African American applicants made up 2.1 percent of applicants while Asian applicants comprised 5.6 percent. Over time, the demographic composition of loan applicants fluctuated little. In 2008, White applicants represented 68.2 percent of individuals applying for a loan while 26.9 percent of applicants were Hispanic, 1.6 percent were Black/ African American, and 4.5 percent were Asian. Five years later, these figures barely changed. More recently in 2018, the shares of White and Asian applicants have decreased slightly while the percentages of Black/ African American and Hispanic applicants have increased.

In comparison to the demographics of the total population for Stanislaus County, the data suggests that people of color are underrepresented among individuals applying for mortgage loans. Notably, Black/ African American applicants across all three years appear to be disproportionately less likely to apply for a loan relative to the number of Black/ African American individuals in the community. Unequal representation of applicants by race and ethnicity could suggest inequitable access to lending opportunities.

Loan Outcomes by Type and Purpose

HMDA data classifies loans by type and purpose. Loan types include conventional purchase loans and government-backed loans that are guaranteed by the federal government including the Federal Housing Administration (FHA), Veterans Affairs (VA), and USDA Rural Housing Service or Farm Service Agency (RHS/FSA). Loan purposes include classifications such as home purchase, home improvement, and refinancing. It is important to note that following changes to data reporting requirements in 2018, HMDA data now reflects different classifications for loan purpose. Whereas in the past, financial institutions were required to report the purpose of a loan as either home purchase, home improvement, or refinancing, these are no longer the only options. For refinancing loans, lenders now must disaggregate this data as either home refinancing or cash-out refinancing. In addition, loan purpose data now captures loans that fall outside any of these classifications (i.e., loans that are neither for home improvement, home purchase, home refinancing, nor cash-out refinancing). This has implications for the comparison of 2018 data to that from prior years. Specifically, some loan purpose data which was previously captured is no longer reportable, while other data is now captured. It is important to keep this in mind when comparing older data to data released in 2018 and beyond.

In Stanislaus County, almost three-quarters of all loan applications were conventional purchase loans (72.6 percent) while the remaining (27.4 percent) were government-backed loans. The distribution of loan type is generally consistent across jurisdiction and the three years analyzed. When considering loan purpose, most loans in Stanislaus County were home purchase loans in 2018. A review of the distribution of loan purpose in 2008, 2013, and 2018 reveals that each jurisdiction witnessed significant decreases in the share of home purchase loans from 2008 to 2013 and then a rebound from 2013 to 2018. For instance, in 2008, 53.6 percent of loans in Stanislaus County were home purchase loans, 5.9 percent were for home improvement, and 40.6 percent were for refinancing. Five years later, the share of home purchase loans dropped to 32.4 percent, home improvement loans decreased to 2.5 percent, and refinancing loans jumped to 65.1 percent. By 2018, home purchase loans comprised 43.0 percent of loans in Stanislaus County, home improvement loans represented 7.8 percent, 14.7 percent were for home refinancing, and 27.1 percent for cash-out refinancing. This trend was apparent in Modesto, Turlock, the Unincorporated County, and Stanislaus County and most likely reflects conditions in the housing market following the financial crisis in 2008.

Loan Outcomes by Race and Ethnicity

Applicant Race and Ethnicity

One method to explore whether barriers to lending opportunities exist in a community is to analyze discrepancies in outcomes by an applicant's demographic characteristics. Disaggregating lending outcomes by applicant race and ethnicity is one way to search for such differences. Table 28 depicts lending outcomes by applicant race and ethnicity for Modesto, Turlock, Stanislaus County, and the Unincorporated County. The table indicates that although the overall approval rate in Stanislaus County in 2018 was 56.6 percent, this figure varied considerably based on an applicant's race or ethnicity. White applicants experienced the highest approval rate at 63.8 percent, whereas Asian applicants witnessed the lowest approval rate at 55.4 percent. Furthermore, Hispanic applicants had an approval rate of 59.7 percent and Black/ African American applicants had an approval rate of 57.1 percent. A similar pattern is apparent in Modesto, Turlock, and the Unincorporated County. For most years, approval rates for White applicants were the highest within each jurisdiction. There are a few exceptions, though. For example, in 2013, Asian applicants experienced the highest approval rate of 65.4 percent in Modesto while Hispanic applicants had the highest rate at 59.5 percent across the Unincorporated County.

When considering changes in approval rates over time, Table 28 suggests that County-level rates have increased. For instance, in 2008, Stanislaus County had an approval rate of 43.7 percent. Five years later, this figure was 56.4 percent, and by 2018, it was 56.6 percent. While Modesto and the Unincorporated County experienced peak approval rates in 2013, the differences between the rates for 2013 and 2018 are minimal at 0.4 and 0.5 percent, respectively.

It is also notable that approval rates for all groups have grown significantly since 2008. For example, from 2008 to 2018, Black/ African American applicants in Modesto witnessed a 24.9 percentage point increase in their approval rate. Similarly, Hispanic applicants in Turlock witnessed an increase in approval rates of 21.7 percentage points over the same period. Other large increases include a 23.8 percentage point increase for Black/ African American applicants in the Unincorporated County, however, the sample size of Black/ African American applicants was quite small at 27 in 2008 and 31 in 2018.

Table 28. Loan Outcomes by Applicant Race & Ethnicity

Jurisdiction	% of Total Applicants			% Approved			% Denied		
	2008	2013	2018	2008	2013	2018	2008	2013	2018
Modesto									
White	66.3%	66.4%	61.9%	50.6%	64.8%	64.3%	22.4%	13.8%	16.2%
Black	1.9%	1.8%	2.2%	33.5%	59.6%	58.4%	36.9%	17.4%	17.9%
Hispanic	22.9%	19.9%	25.8%	45.0%	60.3%	59.6%	28.4%	16.5%	20.9%
Asian	5.2%	6.8%	5.8%	49.2%	65.4%	56.8%	22.5%	15.3%	20.9%
Average				43.6%	57.1%	56.7%	22.0%	13.5%	16.9%
Turlock									
White	74.3%	68.5%	68.7%	48.8%	67.6%	65.5%	26.6%	13.7%	17.1%
Black	0.3%	0.6%	0.9%	42.9%	41.7%	55.0%	14.3%	33.3%	35.0%
Hispanic	22.8%	16.2%	21.1%	36.9%	64.9%	58.7%	37.7%	13.9%	22.4%
Asian	3.0%	5.8%	5.5%	37.5%	58.4%	53.1%	39.1%	19.5%	22.7%
Average				42.6%	59.1%	59.5%	25.7%	13.4%	17.2%
Unincorporated Areas									

White	71.5%	99.6%	65.2%	47.7%	54.9%	61.5%	26.2%	16.6%	18.9%
Black	1.1%	0.0%	1.8%	40.7%	0.0%	64.5%	25.9%	100.0%	25.8%
Hispanic	23.6%	18.5%	25.5%	40.7%	59.5%	57.6%	31.2%	17.5%	24.2%
Asian	3.2%	0.1%	4.3%	48.1%	50.0%	49.3%	23.4%	50.0%	29.3%
Average				43.8%	54.9%	54.4%	24.5%	16.7%	20.0%
Stanislaus County									
White	68.2%	67.1%	63.7%	50.0%	64.2%	63.8%	23.7%	14.5%	17.3%
Black	1.6%	1.6%	2.1%	35.6%	54.2%	57.1%	33.3%	20.3%	19.8%
Hispanic	26.9%	21.7%	26.8%	45.0%	60.2%	59.7%	28.7%	16.4%	21.6%
Asian	4.5%	6.1%	5.6%	47.5%	62.7%	55.4%	25.1%	17.6%	23.6%
Average				43.7%	56.4%	56.6%	22.9%	14.2%	17.7%
Jurisdiction	**% Incomplete**			**% Other**			**% Withdrawn**		
	2008	**2013**	**2018**	**2008**	**2013**	**2018**	**2008**	**2013**	**2018**
Modesto									
White	3.7%	3.4%	3.6%	13.4%	9.9%	2.8%	9.8%	8.1%	13.1%
Black	5.9%	3.8%	6.4%	13.1%	15.5%	2.3%	10.6%	3.8%	15.0%
Hispanic	5.0%	4.0%	3.6%	11.5%	9.9%	3.1%	10.0%	9.2%	12.9%
Asian	3.4%	3.9%	4.9%	13.3%	6.0%	1.9%	11.7%	9.4%	15.4%
Total	3.7%	3.8%	3.8%	20.9%	17.8%	9.7%	9.9%	7.9%	12.9%
Turlock									
White	3.2%	3.0%	3.5%	10.5%	7.7%	1.8%	11.0%	8.0%	12.1%
Black	0.0%	12.5%	5.0%	28.6%	4.2%	0.0%	14.3%	8.3%	5.0%
Hispanic	3.2%	4.6%	3.9%	10.1%	9.0%	1.8%	12.0%	7.6%	13.2%
Asian	4.7%	3.9%	5.5%	9.4%	4.8%	2.3%	9.4%	13.4%	16.4%
Total	3.5%	3.5%	3.5%	17.5%	16.1%	7.9%	10.6%	8.0%	11.9%
Unincorporated Areas									
White	4.1%	3.6%	3.9%	11.2%	16.5%	2.7%	10.8%	8.4%	13.0%
Black	3.7%	0.0%	0.0%	18.5%	0.0%	0.0%	11.1%	0.0%	9.7%
Hispanic	5.2%	3.4%	3.8%	9.9%	9.9%	2.5%	13.0%	9.7%	12.0%
Asian	3.9%	0.0%	6.7%	16.9%	0.0%	5.3%	7.8%	0.0%	9.3%
Total	4.0%	3.7%	4.0%	17.6%	16.4%	8.7%	10.0%	8.4%	12.8%
Stanislaus County									
White	3.5%	3.3%	3.7%	12.8%	9.5%	2.6%	10.0%	8.6%	12.6%
Black	5.7%	4.4%	6.2%	14.9%	14.4%	2.1%	10.6%	6.7%	14.8%
Hispanic	4.5%	4.2%	3.8%	11.5%	9.7%	2.5%	10.3%	9.4%	12.3%
Asian	4.0%	4.3%	5.5%	12.5%	5.5%	2.2%	10.9%	9.9%	13.2%
TOTAL	3.6%	3.8%	3.9%	20.1%	17.2%	9.5%	9.8%	8.4%	12.3%

Source: 2008, 2013, 2018 HMDA data

Census Tract Minority Share

In addition to exploring lending outcomes by applicant race and ethnicity, this analysis considered how outcomes differed by the percentage of minority residents located in the same census tract. Due to historical patterns of discrimination such as redlining, an analysis that considers the influence of an area's demographic composition can see if such locational characteristics correlate with disparities in loan outcomes. One way to do this is to disaggregate the data by census tract minority share, or in other words, the percentage of minority residents in a census tract. For this analysis, "minority" refers to individuals who identify as Hispanic (of any race) or belonging to a race other than white. Table 19 presents loan outcomes for Stanislaus County by the proportion of minority residents in each tract. Since HMDA data for each application includes demographic and income data derived from the American Community Survey on a loan's corresponding census tract, the analysis used this data to classify each tract into a minority share bracket. Each of the five minority share brackets represents a range of 20 percentage points in order of increasing concentration.

Table 19. Outcomes by Census Tract Minority Share in Stanislaus County

Tract Minority Share	Total Applicants		Approved		Declined		Other	
	#	%	#	%	#	%	#	%
2008								
0-19% Minority	1,776	6.6%	815	45.9%	387	21.8%	574	32.3%
20-39% Minority	12,842	47.9%	5,772	44.9%	2,766	21.5%	4,304	33.5%
40-59% Minority	8,361	31.2%	3,613	43.2%	1,969	23.5%	2,779	33.2%
60-79% Minority	3,595	13.4%	1,420	39.5%	941	26.2%	1,234	34.3%
80-100% Minority	250	0.9%	101	40.4%	68	27.2%	81	32.4%
Total	**26,824**	**100.0%**	**11,721**	**43.7%**	**6,131**	**22.9%**	**8,972**	**33.4%**
2013								
0-19% Minority	0	0.0%	0	-	0	-	0	-
20-39% Minority	7,101	28.9%	4,109	57.9%	940	13.2%	2,052	28.9%
40-59% Minority	10,430	42.4%	5,992	57.4%	1,413	13.5%	3,025	29.0%
60-79% Minority	5,981	24.3%	3,221	53.9%	939	15.7%	1,821	30.4%
80-100% Minority	1,076	4.4%	552	51.3%	196	18.2%	328	30.5%
Total	**24,588**	**100.0%**	**13,874**	**56.4%**	**3,488**	**14.2%**	**7,226**	**29.4%**
2018								
0-19% Minority	16	0.1%	0	0.0%	10	62.5%	6	37.5%
20-39% Minority	3,691	23.1%	2,214	60.0%	579	15.7%	898	24.3%
40-59% Minority	6,278	39.2%	3,638	57.9%	1,054	16.8%	1,586	25.3%
60-79% Minority	4,798	30.0%	2,575	53.7%	945	19.7%	1,278	26.6%
80-100% Minority	1,217	7.6%	629	51.7%	251	20.6%	337	27.7%
Total	**16,000**	**100.0%**	**9,056**	**56.6%**	**2,839**	**17.7%**	**4,105**	**25.7%**

Source: 2008, 2013, 2018 HMDA data

Notably, Table 19 indicates that the number of applications originating from census tracts in the lowest bracket, 0-19 percent, reached zero by 2013 and represented only 0.1 percent of total applications in 2018. There could be a few reasons for this. For one, individuals from tracts with low proportions of minority residents could have stopped applying for loans after 2008. Another possibility is that census tracts which were previously classified in the 0-19 percent minority share bracket have since diversified

and now fall within a different bracket. It is also possible that the large number of applications with redacted information (labeled as "NA" in the table) has distorted the distribution, creating the impression that virtually no applications originated in low minority share tracts after 2008. The explanation could even be a combination of all three possibilities. This uncertainty is important to keep in mind when analyzing the data.

When considering approval rates by minority share bracket, it appears that rates gradually decreased as the proportion of minority residents in a census tract increased. Table 19 indicates that tracts in the 60-79 percent and 80-100 percent minority share brackets witnessed lower approval rates than tracts with lower proportions of minority residents. The only exception is in 2018, where there were 16 applications from tracts classified in the lowest bracket and none were approved. Although inconclusive, this information suggests that the demographic composition of an application's corresponding census tract could influence the likelihood of a loan being approved.

Loan Outcomes by Income Level

Applicant Income Level

Another method to search for discrepancies in lending outcomes is to explore differences by applicant income. This analysis assigned applicants in Stanislaus County to a corresponding income level relative to the county's area median income (AMI) for family households.[7] The parameters to define the lower and upper bounds for each level follow the same thresholds used in HMDA data. Table 20 presents the AMI for Stanislaus County for 2008, 2013, and 2018 and defines the following income levels:

Table 20. Area Median Income for Family Households in Stanislaus County

Area Median Income (in thousands)	2008		2013		2018	
	$58		$57		$61	
	Lower	Upper	Lower	Upper	Lower	Upper
Low (0-49% AMI)	$0	$29	$0	$28	$0	$30
Moderate (50-79% AMI)	$29	$46	$28	$45	$30	$48
Middle (80-119% AMI)	$47	$69	$45	$67	$49	$72
Upper (>= 120% AMI)	$70	∞	$68	∞	$73	∞

Area median income for family households, rounded to the nearest thousandth.
Source: ACS 5-year estimates (2005-2009, 2009-2013, 2013-2017)

Using these income levels, Table 21 presents the loan outcomes for applicants in Stanislaus County for 2008, 2013, and 2018. For each of the three years analyzed, most individuals applying for a loan fell into the upper income bracket. For example, upper income individuals represented 45.3 percent of applicants in 2008, 43.6 percent of applicants in 2013, and 49.2 percent of applicants in 2018. Furthermore, the shares for applicants among the remaining income levels decreased as the income bracket decreased. In other words, there were fewer applicants in the lower income brackets.

Regarding approval rates, upper-income applicants generally experienced the highest rates. For instance, in 2018, upper income individuals had an approval rate of 64.7 percent whereas low income applicants had an approval rate of 38.8 percent. The only exception occurred in 2008, where moderate income

[7] The area median income for family households is typically greater than area median income for all households in a jurisdiction. This analysis uses family household AMI to better reflect the earnings of prospective homeowners.

applicants, or individuals earning between 50-79 percent AMI, experienced the highest approval rate at 49.3 percent while upper income applicants had an approval rate of 48.3 percent.

In addition, Table 4 suggests that while overall approval rates increased over time, the gap between the highest and lowest income brackets lessened in 2013 and has since increased. For example, in 2008, the approval rate for low-income applicants was 37.0 percent. By 2013, this figure was 53.7 percent, and by 2018, it was 38.8 percent. Conversely, in 2008, 48.3 percent of loan applications for upper-income applicants were approved, while in 2013, this figure was 62.9 percent. By 2018, the approval rate for upper-income applicants was 64.1 percent. In other words, there was an 11.3 percentage point gap in approval rates between the highest and lowest income bracket applicants in 2008. In 2013, this gap represented 9.2 percentage points, and in 2018, it was 25.9 percentage points.

Table 21. Loan Outcomes by Applicant Income Level in Stanislaus County

Applicant Income Level	Total Applicants		Approved		Declined		Other	
	#	%	#	%	#	%	#	%
2008								
Low (0-49% AMI)	1,228	4.6%	454	37.0%	463	37.7%	311	25.3%
Moderate (50-79% AMI)	4,287	16.0%	2,113	49.3%	1,041	24.3%	1,133	26.4%
Middle (80-119% AMI)	6,529	24.3%	3,110	47.6%	1,558	23.9%	1,861	28.5%
Upper (>= 120% AMI)	12,154	45.3%	5,867	48.3%	2,991	24.6%	3,296	27.1%
NA	2,626	9.8%	177	6.7%	78	3.0%	2,371	90.3%
Total	**26,824**	**100.0%**	**11,721**	**43.7%**	**6,131**	**22.9%**	**8,972**	**33.4%**
2013								
Low (0-49% AMI)	1,452	5.9%	780	53.7%	362	24.9%	310	21.3%
Moderate (50-79% AMI)	3,591	14.6%	2,006	55.9%	596	16.6%	989	27.5%
Middle (80-119% AMI)	5,155	21.0%	3,071	59.6%	760	14.7%	1,324	25.7%
Upper (>= 120% AMI)	10,727	43.6%	6,751	62.9%	1,460	13.6%	2,516	23.5%
NA	3,663	14.9%	1,266	34.6%	310	8.5%	2,087	57.0%
Total	**24,588**	**100.0%**	**13,874**	**56.4%**	**3,488**	**14.2%**	**7,226**	**29.4%**
2018								
Low (0-49% AMI)	889	5.6%	345	38.8%	305	34.3%	239	26.9%
Moderate (50-79% AMI)	2,006	12.5%	1,054	52.5%	529	26.4%	423	21.1%
Middle (80-119% AMI)	3,834	24.0%	2,380	62.1%	708	18.5%	746	19.5%
Upper (>= 120% AMI)	7,873	49.2%	5,094	64.7%	1,240	15.8%	1,539	19.5%
NA	1,398	8.7%	183	13.1%	57	4.1%	1,158	82.8%
Total	**16,000**	**100.0%**	**9,056**	**56.6%**	**2,839**	**17.7%**	**4,105**	**25.7%**

Source: 2008, 2013, 2018 HMDA data

Census Tract Income Level

Similarly to exploring the influence of a community's demographic composition on loan outcomes, this analysis also considered the effect of census tract income. Using the same income brackets described in Table 20, this analysis ranked each applicant's corresponding census tract into an income bracket based on the tract's median income relative to area median income for Stanislaus County. Table 22 depicts lending outcomes for applicants based on the income level of their respective census tract.

Table 22 indicates that not only has the share of low-income census tracts been quite small for each of the three years analyzed, but it has been decreasing over time. This could signify that fewer applicants from low income tracts are applying for loans, fewer tracts are classified as low income, or a combination of both factors. Moreover, Table 22 indicates that approval rates tended to increase as income levels increased. For example, in 2008, loans from low income census tracts were approved 37.9 percent of the time while this figure was 40.5 percent for moderate income tracts, 43.5 percent for middle income tracts, and 45.9 percent for upper income tracts. This pattern repeated in 2013. In 2018, loan applicants from moderate income tracts had the lowest approval rate at 51.8 percent, followed by middle income tracts at 56.3 percent, low income tracts at 56.4 percent, and upper income tracts at 56.6 percent.

Table 22. Census Tract Income Level in Stanislaus County

Census Tract Income Level	Total Applicants		Approved		Denied		Other	
	#	%	#	%	#	%	#	%
2008								
Low (0-49% AMI)	512	1.9%	194	37.9%	139	27.1%	179	35.0%
Moderate (50-79% AMI)	4,997	18.6%	2,025	40.5%	1,271	25.4%	1,701	34.0%
Middle (80-119% AMI)	12,049	44.9%	5,246	43.5%	2,824	23.4%	3,979	33.0%
Upper (>= 120% AMI)	9,236	34.4%	4,239	45.9%	1,892	20.5%	3,105	33.6%
TOTAL	26,824	100.0%	11,721	43.7%	6,131	22.9%	8,972	33.4%
2013								
Low (0-49% AMI)	227	0.9%	112	49.3%	40	17.6%	75	33.0%
Moderate (50-79% AMI)	4,308	17.5%	2,336	54.2%	668	15.5%	1,304	30.3%
Middle (80-119% AMI)	10,814	44.0%	6,013	55.6%	1,577	14.6%	3,224	29.8%
Upper (>= 120% AMI)	9,239	37.6%	5,413	58.6%	1,203	13.0%	2,623	28.4%
TOTAL	24,588	100.0%	13,874	56.4%	3,488	14.2%	7,226	29.4%
2018								
Low (0-49% AMI)	101	0.6%	57	56.4%	21	20.8%	23	22.8%
Moderate (50-79% AMI)	2,891	18.1%	1,497	51.8%	570	19.7%	823	28.5%
Middle (80-119% AMI)	7,256	45.4%	4,084	56.3%	1,297	17.9%	1,873	25.8%
Upper (>= 120% AMI)	5,736	35.9%	3,418	59.6%	941	16.4%	1,376	24.0%
TOTAL	16,000	100.0%	9,056	56.6%	2,839	17.7%	4,105	25.7%

Source: 2008, 2013, 2018 HMDA data

Loan Outcomes by Race/Ethnicity and Income Level

Tables 23 and 24 consider the combined effects of applicant race/ethnicity and income level. Table 23 depicts loan outcomes by applicant income level and race/ethnicity while Table 24 explores lending outcomes by applicant race/ethnicity and census tract income. Although disaggregating outcomes by tract minority share and median income would be a useful method to uncover discrepancies by locational characteristics, the HMDA data for Stanislaus County do not contain a sufficient sample of census tracts across each of the minority share brackets to allow for this type of analysis. Instead, Table 24 explores the intersection of applicant race and ethnicity by census tract income level. In addition, this analysis did not disaggregate lending outcomes by race/ethnicity and income level for each jurisdiction due to an insufficient sample size.

A comparison of Table 23 and 24 suggests that when considering the combined effects of race and income, there appears to be a clearer pattern based on applicant income as opposed to census tract income. For example, in Table 23, within each race or ethnicity, approval rates seem to increase as applicant income increases. In Table 24, however, the combined effects of applicant race/ethnicity and census tract income do not appear to produce any distinct patterns regarding approval rates. This could suggest that census tract income does not influence discrepancies in lending outcomes as much as other factors. It could also be explained by limitations in the data, which for some races and ethnicities, provided a small sample size. For instance, black applicants applying for loans in low-income census tracts had an approval rate of 100.0 percent in 2013 because there were two such applicants, both of whom had their loans approved. Although further information and analysis is required to determine the degree of correlation between race, ethnicity, and income on lending outcomes, Tables 23 and 24 indicate that discrepancies exist in Stanislaus County.

Table 23: Loan Outcomes by Applicant Income Level and Race/Ethnicity in Stanislaus County

Applicant Income by Race	Approved			Denied			Withdrawn/Other		
	2008	2013	2018	2008	2013	2018	2008	2013	2018
WHITE									
Low (0-49% AMI)	40.2%	59.6%	43.2%	36.8%	24.8%	32.4%	23.0%	15.6%	24.4%
Moderate (50-79% AMI)	52.5%	60.4%	57.1%	24.2%	16.2%	24.2%	23.3%	23.4%	18.8%
Middle (80-119% AMI)	51.4%	63.0%	65.3%	23.1%	13.8%	16.5%	25.5%	23.3%	18.3%
Upper (>= 120% AMI)	52.4%	67.0%	67.6%	24.1%	13.3%	14.2%	23.5%	19.7%	18.1%
BLACK									
Low (0-49% AMI)	23.8%	35.7%	52.4%	47.6%	50.0%	19.0%	28.6%	14.3%	28.6%
Moderate (50-79% AMI)	26.1%	52.1%	60.0%	37.0%	16.7%	25.7%	37.0%	31.3%	14.3%
Middle (80-119% AMI)	36.3%	57.6%	52.0%	29.8%	25.0%	19.4%	33.9%	17.4%	28.6%
Upper (>= 120% AMI)	42.2%	63.5%	67.6%	35.5%	16.7%	18.0%	22.3%	19.9%	20.3%
HISPANIC									
Low (0-49% AMI)	39.1%	56.1%	41.1%	36.3%	25.4%	36.8%	24.6%	18.6%	22.1%

Moderate (50-79% AMI)	49.3%	57.8%	56.1%	29.1%	17.4%	27.2%	21.6%	24.9%	16.8%
Middle (80-119% AMI)	46.9%	60.7%	61.9%	27.3%	15.5%	21.2%	25.9%	23.8%	16.8%
Upper (>= 120% AMI)	45.8%	63.0%	62.6%	30.9%	14.3%	17.4%	23.3%	22.7%	20.0%
ASIAN									
Low (0-49% AMI)	17.9%	53.8%	26.2%	57.1%	30.8%	50.0%	25.0%	15.4%	23.8%
Moderate (50-79% AMI)	51.8%	53.5%	39.8%	29.8%	18.9%	38.8%	18.5%	27.6%	21.4%
Middle (80-119% AMI)	54.3%	62.1%	62.4%	22.4%	18.0%	20.7%	23.3%	19.9%	16.9%
Upper (>= 120% AMI)	49.7%	66.3%	57.9%	25.6%	15.8%	19.8%	24.7%	17.8%	22.3%
Source: 2008, 2013, 2018 HMDA data									

Table 24. Loan Outcomes by Census Tract Income and Applicant Race/Ethnicity

Tract Income by Race	Approved			Denied			Withdrawn/Other		
	2008	2013	2018	2008	2013	2018	2008	2013	2018
WHITE									
Low (0-49% AMI)	45.7%	55.3%	69.7%	28.3%	19.5%	18.2%	26.0%	25.2%	12.1%
Moderate (50-79% AMI)	46.9%	62.6%	60.3%	26.7%	15.9%	20.2%	26.4%	21.5%	19.5%
Middle (80-119% AMI)	49.3%	63.1%	63.6%	24.5%	14.9%	17.3%	26.2%	22.0%	19.1%
Upper (>= 120% AMI)	52.8%	66.4%	65.9%	20.7%	13.3%	15.9%	26.5%	20.3%	18.2%
BLACK									
Low (0-49% AMI)	33.3%	100%	50.0%	26.7%	0.0%	50.0%	40.0%	0.0%	0.0%
Moderate (50-79% AMI)	21.3%	50.0%	56.1%	48.3%	27.1%	16.7%	30.3%	22.9%	27.3%
Middle (80-119% AMI)	35.0%	52.4%	58.9%	32.8%	19.9%	23.3%	32.1%	27.7%	17.8%
Upper (>= 120% AMI)	43.2%	57.9%	65.9%	26.8%	18.8%	17.1%	30.1%	23.3%	26.4%
HISPANIC									
Low (0-49% AMI)	46.6%	58.9%	69.8%	27.9%	15.9%	20.6%	25.5%	25.2%	9.5%
Moderate (50-79% AMI)	44.4%	60.2%	57.8%	29.7%	17.1%	24.7%	25.9%	22.7%	17.5%
Middle (80-119% AMI)	44.1%	58.8%	59.6%	29.5%	17.1%	21.2%	26.4%	24.2%	19.3%
Upper (>= 120% AMI)	47.3%	63.2%	61.5%	26.1%	14.3%	19.1%	26.6%	22.5%	19.3%
ASIAN									
Low (0-49% AMI)	41.2%	46.2%	66.7%	35.3%	38.5%	33.3%	23.5%	15.4%	0.0%

Moderate (50-79% AMI)	46.4%	58.1%	52.8%	26.5%	17.2%	21.6%	27.0%	24.6%	25.6%
Middle (80-119% AMI)	50.5%	62.9%	52.1%	24.1%	18.9%	26.1%	25.4%	18.2%	21.8%
Upper (>= 120% AMI)	46.3%	64.1%	59.4%	24.9%	16.2%	21.7%	28.8%	19.7%	18.9%
Source: 2008, 2013, 2018 HMDA data									

Loan Outcomes by Financial Institution

Lastly, this analysis considered how lending outcomes differed in Stanislaus County depending on which financial institution processed the loan application. Tables 25 and 26 present the top ten lenders for Stanislaus County in 2018 in order of market share. Table 26 indicates that Quicken Loans captured 15.0 percent of the market in 2018, followed by Bank of America at 11.8 percent, and JP Morgan Chase Bank at 11.5 percent. Table 25 distinguishes which of the county's top lenders were also among the top ten lenders for Modesto, Turlock, and the unincorporated areas. The table indicates that the most popular financial institutions at the county-level were also among the most popular in the other three jurisdictions.

Table 25. Top Ten Lenders in Stanislaus County by Jurisdiction

Top Lenders Stanislaus County	Modesto	Turlock	Unincorp. Areas	Stanislaus County
Quicken Loans, Inc.	X	X	X	X
Bank of America	X	X	X	X
JP Morgan Chase Bank	X	X	X	X
Stearns Lending, LLC.	X	X	X	X
Scenic Oaks Funding, Inc.	X	X	X	X
American Pacific Mortgage Corporation	X	X	X	X
Loandepot.com, LLC.	X	X	X	X
U.S. Bank	X	X	X	X
Flagstar Bank	X	X	X	X
United Shore Financial Services, LLC.	X		X	X

An "X" indicates that the lender is one of the top ten lenders for the jurisdiction
Source: 2018 HMDA data

Table 26. Lending Outcomes of Stanislaus County's Top Ten Lenders

Top Lenders Stanislaus County (2018)	Overall County Market Share			Approved		
	2008	2013	2018	2008	2013	2018
Quicken Loans, Inc.	2.2%	14.4%	15.0%	50.0%	85.1%	71.4%
Bank of America	28.1%	23.2%	11.8%	62.3%	65.9%	42.3%
JP Morgan Chase Bank	43.6%	19.5%	11.5%	15.9%	52.8%	44.6%
Stearns Lending, LLC.	11.5%	8.4%	10.5%	80.0%	78.3%	74.9%
Scenic Oaks Funding, Inc.	0.0%	8.5%	10.4%	-	76.6%	80.0%
American Pacific Mortgage Corporation	0.3%	4.7%	10.3%	0.0%	88.1%	85.4%

Loandepot.com, LLC.	0.0%	6.1%	8.5%	-	35.0%	61.2%
U.S. Bank	5.3%	6.4%	8.5%	35.5%	45.9%	33.1%
Flagstar Bank	9.0%	7.3%	7.0%	71.8%	48.3%	54.3%
United Shore Financial Services, LLC.	0.0%	1.4%	6.4%	-	60.6%	78.6%
Top Lender Total	**18.3%**	**28.5%**	**46.7%**	**18.0%**	**32.6%**	**51.8%**
Top Lenders Stanislaus County (2018)	**Denied**			**Withdrawn/Closed**		
	2008	**2013**	**2018**	**2008**	**2013**	**2018**
Quicken Loans, Inc.	50.0%	14.9%	20.8%	0.0%	0.0%	7.7%
Bank of America	27.8%	13.4%	42.8%	9.9%	20.7%	14.9%
JP Morgan Chase Bank	13.8%	16.2%	28.3%	70.3%	30.9%	27.1%
Stearns Lending, LLC.	14.3%	5.8%	15.6%	5.7%	16.0%	9.5%
Scenic Oaks Funding, Inc.	-	5.4%	2.0%	-	18.1%	17.9%
American Pacific Mortgage Corporation	38.5%	5.2%	5.4%	61.5%	6.7%	9.2%
Loandepot.com, LLC.	-	40.8%	17.4%	-	24.2%	21.4%
U.S. Bank	9.5%	26.8%	35.2%	55.0%	27.3%	31.7%
Flagstar Bank	21.4%	7.2%	9.1%	6.8%	44.4%	36.6%
United Shore Financial Services, LLC.	-	21.2%	7.9%	-	18.2%	13.5%
Top Lender Total	**15.3%**	**29.4%**	**51.3%**	**20.7%**	**20.1%**	**32.4%**
Source: 2008, 2013, 2018 HMDA data						

Table 26 presents the loan outcomes for Stanislaus County applicants in 2008, 2013, and 2018. Firstly, it is interesting to note the change over time for each institution's market share in the county. For example, in 2008, Quicken Loans had a small presence in Stanislaus County with a market share of 2.2 percent whereas Bank of America captured 28.1 percent of the market. Ten years later, Quicken Loans had the largest market share of any financial institution in the county at 15.0 percent while Bank of America's share had fallen by over sixteen percentage points. These shifts most likely reflect the significant changes in the mortgage industry following the 2008 financial crisis.

When considering differences in approval rates by institution, there is clearly a wide gap between the lowest and highest rates. Specifically, U.S. Bank had the lowest approval rate in 2018 at 33.1 percent whereas American Pacific Mortgage Corporation had the highest at 85.4 percent. Combined, the county's top ten lenders represented 51.8 percent of all approved loans and 51.3 percent of all denied loans across Stanislaus County in 2018. Table 9 also indicates that approval rates fluctuated within the same institution over time. For instance, in 2008, Flagstar had an approval rate of 71.8 percent in Stanislaus County, yet five years later this figure was 48.3 percent, and by 2018 it was 54.3 percent. It is unclear why these rates changed so dramatically within individual institutions.

An analysis of the rates for withdrawn and closed applications for the county's top 10 lenders shows great variation by financial institution and year. In mortgage lending, fallout refers to a loan application that is withdrawn by the borrower before the loan is finalized. Typically, for-profit lenders should have little fallout, and none that varies by race or ethnicity. A significant disparity in fallout could suggest screening, differential processing, HMDA action misclassification, and/or the potential of discouragement of minority applications. Closed applications refer to applications that are closed by the lender due to incompleteness. A high rate of incomplete loans can indicate a lack of financial literacy on the part of the borrower. Insufficient lender assistance during the application process can also lead to high levels of incomplete

applications. The lack of lender assistance may be discriminatory in motive or outcome; however, HMDA data cannot be used to prove motive.

In Stanislaus County, there was a wide range for rates of withdrawn and closed applications. For example, in 2018, rates ranged from a low of 9.2 percent at American Pacific Mortgage Corporation to a high of 36.6 percent for Flagstar. Some individual institutions also experienced considerable fluctuation in their rates for withdrawn and closed applications. Bank of America, for instance, reported 9.9 percent of loan applications as withdrawn or closed in 2008. In 2013, this figure was 20.7 percent, and in 2018 it was 14.9 percent.

REAL ESTATE ASSOCIATION POLICIES

There are two predominant real estate groups active in Stanislaus County. The first group is associated with the National Association of Realtors (NAR) and includes a state and local chapter. The second group is associated with the National Association of Real Estate Brokers (NAREB) and also includes a state and local chapter. The term "realtor" is a registered collective membership mark of the NAR with its use signifying an individual's affiliation with the organization.[8] As such, the NAREB uses the term "realtist" to distinguish its affiliates from the NAR.

Both organizations outline specific professional standards and codes of ethics for their members to follow. The following section provides a broad overview of each organization's standards as they apply to fair housing.

National Association of Realtors

As one of nation's predominant trade association for real estate professionals, the NAR aims to shape policies impacting the industry. On its website, the organization includes a statement on its commitment to diversity and inclusion which reads:

NAR fully embraces perspectives from all walks of life—regardless of race, ethnicity, gender, religion, age, sexual orientation, gender identity, disability, national origin, socioeconomic status, political affiliation or any other qualities by which we may define ourselves.[9]

Furthermore, the NAR publishes a code of ethics for members which details standards for real estate professionals. As with the organization's diversity and inclusion statement, in some cases the code surpasses requirements outlined by federal law. For example, Article 10 of the code states that realtors shall not deny equal services on the basis of sexual orientation and gender identity in addition to other groups protected by federal law. Each year, NAR publishes its Professionalism in Real Estate Practice handbook, which provides guidance for professionals in applying the Code of Ethics.

State and Local Branches of NAR

The NAR has state and local branches across the country, and in California, these include the California Association of Realtors (CAR) and the Central Valley Association of Realtors (CVAR). In addition to adopting the ethics standards set by the NAR, the state branch promotes its own diversity and inclusion programs, such as the Latino Initiative Voices in Action program, which provides educational materials for members on homeownership opportunities and fraud prevention.

[8] National Association of Realtors, "About NAR," accessed 2/25/2020, https://www.nar.realtor/about-nar.
[9] Ibid.

National Association of Real Estate Brokers

The National Association of Real Estate Brokers (NAREB) was established in 1947 as national trade association for African American real estate professionals with the goal of promoting economic improvement, equal opportunity, and civil rights for minority communities. Although historically the NAREB was founded by and for African American real estate professionals, today the organization promotes "democracy in housing," or fair housing opportunities for all; however, the organization continues to advocate predominantly for African American homeownership.[10]

Similar to the NAR, the NAREB follows a strict code of ethics stating that "any Realtist shall not discriminate against any person because of race, color, religion, sex, national origin, disability, familial status, or sexual orientation in the sale or rental of real property, in advertising the sale or rental of real property, in the financing of real property, or in the provision of professional services."[11] The NAREB Code of Ethics furthermore states that "a Realtist shall not be instrumental in establishing, reinforcing, or extending any agreement or provision that restricts or limits the use or occupancy of real property to any person or group of persons on the basis of race, color, religion, sex, national origin, disability, familial status, or sexual orientation."[12]

State and Local Branches of NAREB

As with the NAR, NAREB has state and local affiliates across the country including the California Association of Real Estate Brokers (CAREB) and the Central Valley Realists Association. Both branches uphold the national organization's code of ethics.

IMPEDIMENTS TO FAIR HOUSING CHOICE

Communities identify specific barriers ("impediments") to fair housing choice and create action steps to remove or reduce these barriers.

Modesto

The *City of Modesto Analysis of Impediments to Fair Housing Choice for Fiscal Years 2015-2020* did not directly identify any fair housing impediments for the City of Modesto. The 2018-2019 CAPER for Modesto identifies the following fair housing concerns:

1. *Access to information about housing availability and choices among recent immigrants who are disproportionately lower income.*
2. *Lack of access to adequate housing due to poor credit history, insufficient funds for moving expenses, and other factors among financially vulnerable groups, such as female-headed households with children and the homeless.*
3. *Barriers faced by large, low-income and moderate-income families due to occupancy restrictions imposed by rental property owners.*
4. *The need to assist homeowners who have experienced foreclosure, who are disproportionately minority households, to find alternative living arrangements.*

[10] National Association of Real Estate Brokers, "NAREB History," accessed 2/25/2020, http://www.nareb.com/our-history/.
[11] California Department of Real Estate, "3. Trade and Professional Organizations," in *A Real Estate Guide*, accessed 2/25/2020, pages 39-40, https://dre.ca.gov/files/pdf/refbook/ref03.pdf.
[12] Ibid, 40.

Within the last Analysis of Impediments document, the City listed following goals to improve housing access:

- *Supporting organizations that provide fair housing education, homebuyer education, and landlord tenant mediation;*
- *Offering housing rehabilitation and homebuyer assistance;*
- *Working with nonprofit organizations to reduce barriers to housing and to increase the supply of affordable housing;*
- *Promoting economic development to increase job opportunities; and*
- *Participating in partnerships with public and private organizations to improve job skills among Modesto's lower-income households.*

Stanislaus Urban County and Turlock

Stanislaus Urban County and City of Turlock Regional Analysis of Impediments to Fair Housing Choice Fiscal Years 2015–2020 identified the following impediments and corresponding actions:

Affordable Housing

1. Impediment: Insufficient supply of affordable housing.

1.1 Action: Continue to provide assistance to preserve existing affordable housing and to create new affordable housing.
1.2 Action: Continue to offer regulatory relief and incentives for the development of affordable housing.
1.3 Action: Continue to ensure the availability of adequate sites for the development of affordable housing.

2. Impediment: Shortage of subsidies and strategies to promote affordable, accessible housing for low-, very low-, and extremely low-income households, including protected classes.

2.1. Action: Continue to pursue available and appropriate State and Federal funding sources to support efforts to construct housing meeting the needs of lower-income households.

2.2. Action: Continue to support the Stanislaus Housing Authority Section 8 Housing Choice Voucher (HCV) Rental Assistance Program, including distribution of program information at the public counters for the Stanislaus County Department of Planning and Community Development, City of Turlock Housing Services, and all Stanislaus Urban County member jurisdictions. Stanislaus County and the City of Turlock will hold periodic meetings with representatives of the Housing Authority of the County of Stanislaus to discuss actions Stanislaus County, the City of Turlock, and Stanislaus Urban County member jurisdictions can take to coordinate housing program implementation.

2.3 Action: Follow through on the Housing Element policies and programs.

Private Practices and Mortgage Lending

3. Impediment: Differential origination rates based on race, ethnicity, and location.

3.1. Action: When selecting lending institutions for contracts and participation in local programs, Stanislaus County, the City of Turlock, and Stanislaus Urban County member jurisdictions may prefer those with a Community Reinvestment Act (CRA) rating of "Outstanding" and may exclude those with a rating of "Needs to Improve" or "Substantial Noncompliance" according to the most recent examination

period published by the Federal Financial Institutions Examination Council (FFIEC). In addition, the Stanislaus Urban County and the City of Turlock may review an individual institution's most recent HMDA reporting as most recently published by the FFIEC.

3.2 Action: Strengthen partnerships with lenders to discuss lenders' community reinvestment goals, including home mortgages, home improvement loans, and community development investments to be made in low- and moderate-income neighborhoods in the Stanislaus Urban County and in the City of Turlock.

4. Impediment: Limited coordination with real estate industry.

4.1 Action: Work cooperatively with the real estate industry to develop ways for local agents to become more familiar with Stanislaus Urban County and City of Turlock housing and rental assistance programs. 4.2 Action: Encourage Realtors to seek fair housing training.

Fair Housing Education and Enforcement

5. Impediment: Limited knowledge of fair housing rights.

5.1 Action: Conduct more outreach to educate tenants, and owners and agents of rental properties, regarding their fair housing rights and responsibilities.

5.2 Action: Provide educational literature in English, Spanish, and other appropriate languages

.

6. Impediment: Discrimination in rental housing.

6.1 Action: Support efforts to enforce fair housing rights and provide redress to persons who have been discriminated against.

6.2 Action: Support efforts to increase the awareness of discrimination against all Federal and State protected classes.

Government Barriers

7. Impediment: Local development standards and their implementation, e.g., zoning, building, or design standards, may constrain development of housing opportunities for minority and low-income households.

7.1 Action: Review zoning and related regulations to determine the degree of adequate opportunity in the community for affordable housing to exist and to develop new affordable housing options.

8. Impediment: Inadequate access to employment opportunities, transportation, and public and social services, and infrastructure to support increased housing opportunities for lower-income households.

8.1 Action: Examine possible gaps in public infrastructure and services, especially for the needs of persons with disabilities, seniors, and low-income residents via a Disadvantaged Unincorporated Communities assessment. If significant gaps are found, explore methods to address the gaps and incorporate public improvements and services into local infrastructure and service plans.

Impediment Actions Taken 2015-2019

Over the past five years, Modesto and Stanislaus Urban County & Turlock have taken actions towards removing or reducing impediments to fair housing choice identified in the 2015-2019 AI documents and as best practices to Affirmatively Further Fair Housing.

Affordable Housing Actions

Modesto established its Relocation Assistance Program in June 2009 to reimburse tenants for relocation expenses when forced to move from a property found to have severe code violations threatening the life, health, and safety of residents.

Stanislaus County continues to send out an annual Notice of Funding Availability (NOFA) to inform nonprofits of CDBG and ESG funding resources. The County also provides Grant Technical Workshops to explain grant requirements and provide educational materials to organizations.

The County continues to operate its Focus on Prevention Initiative to encourage new partnerships between private and nonprofit organizations for affordable housing development and homelessness services.

The Housing Authority of the County of Stanislaus (HACS) operates seasonal migrant housing units and continues to work with local government agencies and family resource centers to promote migrant housing opportunities. Staff meet with migrant service providers to educate staff about affordable housing resources.

In 2018, Stanislaus County and the Cities of Modesto, Turlock, Oakdale, Newman and Patterson declared a shelter crisis allowing the governments to adopt local procedures for the development of homeless shelters. During this period, ordinary zoning provisions for homeless facilities are suspended. Modesto has used the declaration to help the local Salvation Army shelter add an additional 182 beds.

In 2016, the County Community Development staff met with organizations such as World Relief Modesto to determine whether local affordable housing alignment efforts could be considered a part of the Focus on Prevention effort to help address the influx of refugees into Stanislaus County from countries such as Syria.

Modesto partnered with local affordable housing providers to increase the supply of affordable housing units by adding 157 affordable housing units and rehabilitating 155 rental housing units. Modesto also provided owner-occupied housing rehabilitation assistance to 73 households and first-time homebuyer assistance to three low/moderate income households.

In 2019, the City of Modesto approved a Rental Hosing Safety Inspection program. The program is intended to maintain the supply of safe, decent, and sound affordable housing through the conservation and rehabilitation of the City's existing housing stock. Up to ten percent of all rental units in the Self-Certification program shall be selected (based on statistical information) for inspections. This program has been approved but awaiting implementation.

Stanislaus County extended sewer services to the Parklawn and Airport Neighborhoods allowing for expanded infill development housing opportunities and is underway with the planning for sewer extension in the West Modesto area.

In partnership with the City of Oakdale, Stanislaus County has partnered with the Housing Authority on the development of a 56-unit affordable housing development in the City of Oakdale on property acquired by the Stanislaus Urban County utilizing Neighborhood Stabilization Program funding and has contributed approximately $3 Million to construction of the development.

In partnership with the Housing Authority, Stanislaus County has partners to develop six affordable housing units on NSP acquired properties, utilizing both NSP funding and funding from the Successor Housing Agency to the former Stanislaus County Redevelopment Agency.

Stanislaus County has hosted convenings of both for profit and non-profit housing developers to identify opportunities and constraints in the development of affordable housing throughout the community.

Stanislaus County has waived and deferred its Public Facilities Fees to aid in the development of numerous affordable housing development projects within the incorporated areas.

Stanislaus County has partnered with the Housing Authority to utilize the Empire Migrant Housing for a cold-weather family shelter.

Private Practices and Mortgage Lending Actions Taken 2015-2020

Stanislaus Urban County previously identified the need to support homeowners who had experienced foreclosure with finding alternative living arrangements. Though the mortgage crisis has subsided, staff continue to monitor local foreclosure rates for developments in foreclosure trends that could have a harmful effect on the community.

In 2016, the City of Modesto partnered with affordable housing programs to assist first time buyers purchase a home and provides referrals for alternative living arrangements for homeowners who experienced a foreclosure.

Fair Housing Education and Enforcement Actions

The County and Turlock continue to partner with Project Sentinel to provide fair housing services and conduct fair housing testing. In program year 2015-2016, the organization conducted four fair housing tests in Newman, Ceres, Oakdale, and Valley Home in response to allegations or claims of practices that may have violated fair housing law. In Newman, the fair housing test found partial compliance with the law regarding reasonable accommodation for service/assistance animals for an individual with a disability. In Ceres, the fair housing test did not find evidence of discrimination regarding familial status. In Oakdale, the fair housing test found evidence of a violation of fair housing law regarding reasonable accommodation for service/assistance animals for an individual with a disability. In Valley Home, the fair housing test did not find evidence of discrimination on the basis of national origin. When applicable, Project Sentinel sent property owners educational letters to elaborate on applicable sections of fair housing law. The organization also continues to monitor and follow up with properties that were required to take corrective action.

Modesto continues to work with Project Sentinel to provide fair housing services. During the past five years, Project Sentinel opened a total of 122 fair housing discrimination cases for investigation and provided fair housing education and tenant/landlord mediation to over 5,500 individuals.

Other Actions

Over the last five years, Modesto has provided economic development assistance to two microenterprise businesses in Modesto.

Modesto promoted economic development by financially supporting Opportunity Stanislaus to provide job training opportunities to low- and moderate-income persons in the industrial maintenance mechanics field via the VOLT Institute.

Stanislaus County has approved Crows Landing Industrial Business Park, a 1,528 acre site that will bring jobs to the County, development opportunities, and preserve agricultural land by reusing the former Crows Landing airfield. The development has the potential to provide for approximately 15,000 new locally based jobs for an existing workforce that currently commutes outside of the County to obtain jobs with sustainable wages.

Impediments to Fair Housing Choice 2020-2025

Summary of impediments and corresponding action items

1. Turlock's zoning definitions do not match as there is an age discrepancy (between 55-60) in the definition of "senior housing" and difference in the allowable household relationships of senior housing residents with a non-spouse domestic partner, primary physical/economic support person, and/or disabled child, grandchild, or partner under the age of 60.

   Action: Consider revision of zoning ordinance definition of "senior housing" in Turlock to align with Section 43-53.7 of the Civil Code of the State of California.

2. In Stanislaus County, 44 percent of households earning $20,000 or less annually do not have Internet access, while only 6 percent of households making at least $75,000 do not have access. In the state, about half of households without Internet access cite the cost of broadband service or a computer/device for their lack of access. A statewide survey indicates three in four of these households do not know they may qualify for discounted, income-based Internet service in California.

   Action: Pursue conducting, funding, and/or facilitating Internet service financial assistance education and outreach activities that target low-income residents of Stanislaus County.

3. There is a limited knowledge of fair housing rights among the general population.

   Action: Support outreach activities that educate tenants, the owners and agents of rental properties, and all others who interact with housing transactions regarding their fair housing rights and responsibilities.

   Action: Provide educational literature in English, Spanish, and other appropriate languages.

   Action: Provide education and fair housing referral information to organizations who interact with and serve low-income or protected class populations in order to identify potential fair housing violations.

4. Discrimination in rental housing often occurs without legal complaint and opportunity for redress/ resolution to fair housing violations.

   Action: Support enforcement of fair housing rights through advocacy and legal support for those persons who allege incidents of fair housing discrimination.

5. There is support and assistance need for homeowners who have experienced foreclosure, homeowners and renters who are members of a protected class, and others who must find affordable living arrangements.

   Action: Finance, facilitate, and otherwise support affordable housing programs within all Stanislaus County jurisdictions, including those that support the creation or preservation of affordable housing, rehabilitation of substandard housing, and/or assistance to homeowners and renters in need of disability modifications.

   Action: Continue to support the Stanislaus Housing Authority Housing Choice Voucher (HCV) Rental Assistance Program, including distribution of program information at government buildings.

   Action: Promote economic development and job training activities to increase job opportunities and wages of low-income residents in order to increase overall household income and reduce housing cost burden.

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-225

RESOLUTION APPROVING THE ALLOCATION OF FUNDS OUTLINED IN THE PROGRAM YEAR 2020-2021 ANNUAL ACTION PLAN BUDGET PROPOSAL SUBMITTED TO THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO TAKE THE NECESSARY STEPS TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, each year the City of Modesto receives Community Development Block Grant (CDBG), HOME Investment Partnership Grant (HOME) and Emergency Solutions Grant (ESG) funds from the U.S. Department of Housing and Urban Development (HUD), and

WHEREAS, the CDBG and HOME grant programs also generate program income and revolving loan fund income which further fund the grant programs and are to be used under similar rules and regulations as grant funding, and

WHEREAS, HUD requires these amounts to be presented to the City Council each year in an Annual Action Plan (AAP), and

WHEREAS, the Program Year 2020-2021 Annual Action Plan proposed budget submitted to the U.S. Department of Housing and Urban Development which is **attached** hereto as **Exhibit A**, and incorporated herein by reference, and

WHEREAS, funding availability and specific project and activity budgets consistent with the AAP are managed in HUD's online Integrated Disbursement and Information Management (IDIS) system and the City's financial system simultaneously, and

WHEREAS, according to HUD rules and regulations, substantial amendments to an AAP must be presented to the City Council for approval, while unsubstantial amendments, remaining consistent with the AAP, can be made in IDIS by City staff, and

WHEREAS, funding availability and specific project and activity budgets consistent with the AAP are managed in HUD's online Integrated Disbursement and Information Management (IDIS) system and the City's financial system simultaneously, and

WHEREAS, synchronization of the City's financial system and IDIS necessitates budget adjustments within the City's financial system, and

WHEREAS, budget adjustments are necessary to revise CDBG, HOME and ESG budgets included in the City of Modesto 2020-2021 Annual Operating, Multi-Year and Capital Improvement Budgets, and

WHEREAS, budget amendments performed under the authority of this resolution will be presented to the Finance Committee and the Council as part of the existing Monthly Budget Adjustment Report process, and

WHEREAS, the authority of this resolution will not be used to satisfy any HUD rules or regulations requiring information to be presented to the City Council or the public.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the allocation of funds outlined in the Program Year 2020-2021 Annual Action Plan proposed budget which is **attached** hereto as **Exhibit A**, and incorporated herein by reference.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

EXHIBIT A

CITY OF MODESTO

FISCAL YEAR 2020-2021 CDBG, ESG, HOME PROJECT SUMMARY

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

Project/Activity Name	Total Previous Year Funds	FY 2020* Amount	RLF	PROGRAM INCOME	2020 NSP P.I. Convert to CDBG	CARES Act COVID-19 CDBG	Total Project Budget - 2020
2020-2021 ACTIVITIES	1,069,441.70	1,900,954.00	501,749.38	500,000.00	300,000.00	1,118,269.00	$ 5,390,414.08
PUBLIC FACILITIES	-	$ (1,600,000.00)					$ (1,600,000.00)
ECONOMIC DEVELOPMENT - AAP AMENDMENT #2						$ (800,000.00)	$ (800,000.00)
AFFORDABLE HOUSING- ACQUISITION	-				$ (250,000.00)		$ (250,000.00)
FY 2020-2021 PUBLIC SERVICES	-	(510,764.00)				$ (94,616.00)	$ (605,380.00)
REVOLVING LOAN ACTIVITES	-						$ -
BALANCE	-	-	-	-	-	-	$ -

EMERGENCY SOLUTIONS GRANT (HESG)

Project/Activity Name	FY 2020* Amount	Total Project Budget - 2020	CARES Act COVID-19 ESG
ESG ENTITLEMENT ACTIVITIES	$ 164,549.00	$ 164,549.00	567,410.00
BALANCE	$ -	$ -	$ -

HOME INVESTMENT PARTNERSHIPS PROGRAM (HOME)

Project/Activity Name	FY 2019	2020	Program Income	Total Budget
ALLOCATION	$ 871,210.00	$ 934,812.00	$ 400,000.00	$ 4,998,670.95
ENTITLEMENT ALLOCATION	$ 740,528.00	$ 794,590.00	$ 400,000.00	$ 4,578,827.95
BALANCE	$ -	$ -	$ -	$ -

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-226

RESOLUTION AUTHORIZING THE CITY MANAGER TO APPROVE THE SUBMITTAL OF GRANT APPLICATIONS THAT EXCEED $100,000 AND/OR HAVE A LOCAL MATCH REQUIREMENT FOR FINANCIAL RELIEF RELATED TO THE IMPACT OF COVID-19

WHEREAS, the COVID-19, better known as the Coronavirus, has created a global pandemic by devastating communities and the world economy, and

WHEREAS, the impact to the city of Modesto and the Stanislaus County region has been consistent and, to date, in Stanislaus County there is 411 individuals with the virus, and 14 deaths, and

WHEREAS, based on information from the County Public Health Office and reports made available by the US Center for Disease Control these numbers are expected to rise and the impact to our local economy is projected to get worse, and

WHEREAS, as a response to this virus, President Trump and Governor Newsom have urged people to stay home and have ordered all non-essential businesses to close, and

WHEREAS, while vitally important for maintaining public health, the order for non-essential businesses to close and the stay at home orders have dramatically reduced the amount of sales tax that businesses are collecting and the financial impact to the City is estimated to amount to $4.5 million, and

WHEREAS, to support small businesses, Governor Newsom released an Executive Order that defers payment of up to $50,000 in sales tax for businesses with less than $5 million in taxable sales, and

WHEREAS, in Modesto, there is about 210 businesses that are eligible to defer their sales tax and if each of these decide to defer, the total estimated financial impact to the City would amount to an additional $6.8 million, and

WHEREAS, the following funding opportunities have deadlines are quickly approaching and the following list includes examples of such funding opportunities that the City is eligible to apply for:

- US Department of Justice: Coronavirus Emergency Supplemental Funding Program
- Federal Aviation Administration: General Aviation Airport Grant
- Federal Transit Administration: Public Transportation Agency Safety Plan and Emergency Relief
- Federal Highway Administration; Infrastructure Grant

WHEREAS, currently, Administrative Directive 7.2 (Grant Management) requires the City Council to approve of any grant application that exceeds $100,000 and any grants that require a local match, and

WHEREAS, grant applications related to COVID-19 have approaching deadlines that require staff to act quickly in order to apply and submit all necessary requirements, and

WHEREAS, to meet the approaching deadlines, staff requests the authority from City Council to apply for the grants that are listed above and future grants with an award value that exceed $100,000 and have a local match requirement, with the approval of the Director of Finance and the City Manager, and

WHEREAS, with this approval, staff will prepare and apply for grants made available to help alleviate the impact of COVID-19 based on eligibility and as approved by the Director of Finance and the City Manager, and

WHEREAS, as award notifications are made available, staff intends to provide reports on a bi-monthly basis to the Finance Committee that include detail on grants that have been applied for under this authority, and

WHEREAS, as staff becomes aware that the City has been awarded a grant, staff will be returning to the City Council for acceptance of the award.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the City Manager to approve the submittal of grant applications that exceed $100,000 and/or have a local match requirement for financial relief related to the impact of COVID-19.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-227

RESOLUTION APPROVING THE SUBMITTAL OF THE STAFFING FOR ADEQUATE FIRE AND EMERGENCY RESPONSE (SAFER) GRANT TO FUND 9 RELIEF FIREFIGHTERS

WHEREAS, the COVID-19, better known as the Coronavirus, has created a global pandemic by devastating communities and the world economy, and

WHEREAS, the impact to the city of Modesto and the Stanislaus County region has been consistent and, to date, in Stanislaus County there is 411 individuals with the virus, and 14 deaths, and

WHEREAS, based on information from the County Public Health Office and reports made available by the US Center for Disease Control these numbers are expected to rise and the impact to our local economy is projected to get worse, and

WHEREAS, to help alleviate the impact of COVID-19, the state and federal governments have passed legislation that makes funding available to local governments, and

WHEREAS, one of these opportunities includes the Staffing for Adequate Fire and Emergency Response (SAFER) grant which is one of three grant programs that comprise the Department of Homeland Security Federal Emergency Management Agency's focus on enhancing the safety of the public and firefighters with respect to fire and fire-related hazards, and

WHEREAS, the Modesto Fire Department is seeking to apply for this grant to fund 9 relief firefighters, and

WHEREAS, if awarded, the SAFER grant would provide financial support for a 3-year period and provide the following contributions: Year 1: 75%, Year 2: 75%, Year 3: 35%, and

WHEREAS, the City's contribution for the retention of these firefighters for the duration of the grant is estimated to amount to $197,093, and

WHEREAS, the total net overtime savings to the fire department is estimated to amount to $926,168, and

WHEREAS, following the performance period, there is no obligation to retain the SAFER funded positions, and

WHEREAS, as staff becomes aware that the City has been awarded this grant, staff will be returning to the City Council for acceptance of the award, and

WHEREAS, staff recommends the submittal of the SAFER grant to fund 9 relief firefighters to help achieve savings in the fire department.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby authorizes the City Manager to approve the submittal of the SAFER grant to fund 9 relief firefighters to help achieve savings in the fire department.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 12th day of May, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-228

RESOLUTION APPROVING THE MEASURE L MASTER FUNDING AGREEMENT WITH THE STANISLAUS COUNCIL OF GOVERNMENTS (STANCOG) FOR FISCAL YEARS 2020 – 2025 AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, in November of 2016, Stanislaus County voters approved a county-wide, 25-year, half-cent sales tax increase known as Measure L, and

WHEREAS, the Stanislaus Council of Governments (StanCOG), as the Local Transportation Authority, administers the proceeds from the one-half cent sales tax, and

WHEREAS, the Measure L Master Funding Agreement (Original Agreement) was approved by Council per Resolution 2017-505 on December 12, 2017, and

WHEREAS, the Original Agreement delineates the requirements of the Measure L funds that are allocated to the jurisdictions within Stanislaus County for local streets and roads, traffic management and bike and pedestrian improvements, and Transit Provider funds for Transit Services, as authorized by the Measure L Expenditure Plan, and

WHEREAS, each of the member agencies of StanCOG were required to enter into the Original Agreement prior to receiving Measure L fund disbursements, and

WHEREAS, the Original Agreement expires on June 30, 2020, and

WHEREAS, in order to continue receiving Measure L funds after June 30, 2020, it is necessary for the City to enter into a Measure L Master Funding Agreement with StanCOG for Fiscal Years 2020-2025 (Agreement), and

WHEREAS the Agreement will have an expiration date of June 30, 2025, and

WHEREAS, the only significant change between the Original Agreement and the Agreement, is that the Agreement reflects changes made to Transit Services and Transit Providers operations, primarily changes to the operation of Ceres Area Transit, and

WHEREAS, the change in Transit Services consolidates Ceres Transit with Modesto Transit as approved by City Council per Resolution 2020-186 on April 14, 2020, increasing the amount of Measure L funding that Modesto receives for Transit Services from 52% to 59%.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Measure L Master Funding Agreement with Stanislaus Council of Governments (StanCOG) for Fiscal Years 2020-2025.

BE IT FURTHER RESOLVED, that the City Manager or his designee is authorized to execute the Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSÉ M. SANCHEZ, Acting City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-229

RESOLUTION APPROVING THE 2020-2025 PERMITTING EFFICIENCY ACTION PLAN AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PROVISIONS OF THE ACTION PLAN

WHEREAS, the City of Modesto Development Services Team is dedicated to an efficient, understandable, and timely plan review process; and

WHEREAS, the City of Modesto commissioned studies of its plan review processes in 2001, 2006, and 2018; and

WHEREAS, the purpose of the most recent Moss Adams study was to assess the economy, efficiency, and effectiveness of the City of Modesto's permitting processes; and

WHEREAS, the study identified ten findings and ten recommendations which were grouped into three tiers: Enterprise Solutions, Strategic Solutions, and Tactical Solutions; and

WHEREAS, the Permitting Efficiency Task Force made up of key staff from Building Safety, Planning, Land Development Engineering, Parks Planning, Utilities, and Fire Prevention, was created to develop an Action Plan based on the recommendations set forth in the Moss Adams study; and

WHEREAS, the Building Safety Division will be the lead in coordinating significant projects and the responsibility of ensuring that significant projects are coordinated is assigned to the Chief Building Official; and

WHEREAS, the Permitting Efficiency Action Plan provides timelines for various project types; and

WHEREAS, the implementation of the Permitting Efficiency Action Plan includes other various action steps to enhance the development plan review process; and

WHEREAS, the Permitting Efficiency Task Force will provide quarterly updates on key performance indicators to the Economic Development Committee.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it herby adopts the 2020-2025 Permitting Efficiency Action Plan.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of the 2020-2025 Permitting Efficiency Action Plan.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-230

RESOLUTION ACCEPTING THE PUBLIC IMPROVEMENTS FOR VINTAGE UNIT ONE SUBDIVISION, LOCATED NORTH OF THE VINTAGE FAIR MALL, AUTHORIZING THE CITY CLERK TO FILE A NOTICE OF COMPLETION WITH THE STANISLAUS COUNTY RECORDER'S OFFICE, AND TO RELEASE SECURITIES UPON EXPIRATION OF STATUTORY PERIODS

WHEREAS, NRB Investments, LLC, a California limited liability company ("OWNER") and the developer, Modesto Roselle, LLC, a California limited liability company ("SUBDIVIDER"), is the subdivider of a tract of land consisting of 15.2 acres being subdivided into 43 residential lots and 2 Landscaping lots situated in the City of Modesto, known as the VINTAGE UNIT ONE SUBDIVISION ("SUBDIVISION"), and

WHEREAS, modifications are still needed to two roundabouts on Vintage Drive (at Bluebird Drive and Landmark Circle), and

WHEREAS, in correspondence dated January 7, 2020, Florsheim Homes has requested that outstanding modifications to two roundabouts on Vintage Drive be deferred and accepted with Vintage Phase Two, and

WHEREAS, the deferral will allow the modifications to be completed with the next phase of construction, and

WHEREAS, the City Engineer has verified that all required PUBLIC IMPROVEMENTS for this project have been satisfactorily completed and all inspection fees have been paid, and

WHEREAS, City crews will assume maintenance responsibilities upon acceptance of the PUBLIC IMPROVEMENTS, which includes the water main, sanitary sewer main, storm drainage facilities, landscape and irrigation, street trees, sidewalk and

ADA ramps, streets (with the exception of two roundabouts on Vintage Drive), curbs and gutters, and street lights, and

WHEREAS, pursuant to the Subdivision Agreement, SUBDIVIDER has filed a Faithful Performance Bond in the amount of $3,551,416 for VINTAGE UNIT ONE SUBDIVISION, and

WHEREAS, pursuant to the Subdivision Agreement, SUBDIVIDER has filed a Payment Bond in the amount of $1,775,708 for VINTAGE UNIT ONE SUBDIVISION, and

WHEREAS, pursuant to the Subdivision Agreement, SUBDIVIDER has filed a Warranty Bond in the amount of $355,141.60 for VINTAGE UNIT ONE SUBDIVISION, and

WHEREAS, the developer has requested that the improvements be accepted and the securities be released, and

WHEREAS, the City Engineer has indicated that it would be in order for the City Council to accept said PUBLIC IMPROVEMENTS as complete and has certified that the work covered has been satisfactorily completed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto as follows:

1. The said PUBLIC IMPROVEMENTS constructed by the SUBDIVIDER are hereby accepted, and the City Clerk is hereby authorized to file a Notice of Completion.

2. The City Clerk is hereby authorized to release the Subdivision Faithful Performance Bond in the amount of $3,551,416 for VINTAGE UNIT ONE SUBDIVISION, upon recordation of the Notice of Completion.
3. The City Clerk is hereby authorized to release the Payment Bond in the amount of $1,775,708 for VINTAGE UNIT ONE SUBDIVISION, sixty (60) days after recordation of the Notice of Completion, provided no claim is made thereon.
4. The City Clerk is hereby authorized to release the Warranty Bond in the amount of $355,141.60 for VINTAGE UNIT ONE SUBDIVISION one year and one day after the effective date of this resolution, provided no claim is made thereon.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-231

RESOLUTION APPROVING A DEVELOPMENT PLAN FOR PLANNED DEVELOPMENT ZONE, P-D(608) AND RESCINDING RESOLUTION NO. 2019-536

WHEREAS, in 1974 the property located at 722 Kansas Avenue was developed with a 103-room motel with 95 off-street parking spaces, prior to annexation of the site into the City of Modesto on July 24, 1978 as part of the Kansas Avenue Annexation to the City of Modesto, and

WHEREAS, the site and surrounding area was zoned as General Commercial (C-2) Zone as part of the annexation, and

WHEREAS, the amount of parking spaces at the site is considered legal but non-conforming as the City's parking standards for hotels and motels is one space per each guest room, and the site provides 95 spaces, a shortage of eight parking spaces for motel and hotel uses, and

WHEREAS, the General Plan Land Use designation of the site was amended from Redevelopment Planning District (RPD) to Industrial (I) in the General Plan update adopted on March 5, 2019, and

WHEREAS, Policy III.A.2 of the General Plan provides that rezonings involving less than five acres in size may occur even if not consistent with the land use designation of the site if the rezoning can be found consistent with the Land Use goals and policies of the General Plan, and

WHEREAS, a verified application for an amendment to Section 30-3-9 of the Zoning Map was filed by the Housing Authority of Stanislaus County on October 7, 2019, to reclassify 2.66 acres from the General Commercial Zone, C-2, to Planned

Development Zone, P-D(608) to facilitate the conversion of the existing motel at the site comprised of 103 guest rooms into 103 permanent supportive housing units, comprised of studio efficiency units for a target population with an immediate need for housing, with parking at 35 spaces fewer than required by the City's Zoning Code for multi-family residential uses, property located at 722 Kansas Avenue, described as follows:

C-2 to P-D(608)

All that portion of the Southeast Quarter of Section 30, Township 3 South, Range 9 East, Mount Diablo Base and Meridian, described as follows:

Parcel One:

All that portion of Lots 4 and 5 of Maze Ranch Subdivision, in the County of Stanislaus, State of California, according to the Official Map thereof filed in the Office of the Recorder of Stanislaus County, California, on March 19, 1909, Volume 4 of Maps, Page 18, described as follows:

Commencing at the Northeast corner of said Lot 5, thence West along the North line thereof, 66.2473 feet, more or less, to the Northwest corner of the property conveyed to Vesta B. Smith, a Single Man, by Deed recorded March 30, 1948 as Instrument No. 7022; thence South along the West line of said Smith Property, 10.86 feet to a point on the South line of Parcel No. 1 of the property conveyed to Vesta B. Smith, Et Ux, to the State of California by Deed dated September 22, 1958 and recorded October 2, 1958, Volume 1506 of Official Records, Page 62, Instrument No. 24671; thence continuing South along the said West line of the Smith Property, 125 feet to the True Point of Beginning of this Description; thence East parallel with the South line of Parcel No. 1 of the State of California property above referred to, 150 feet; thence North parallel with the said West line of the Smith parcel 125 feet to a point on the South line of Parcel No. 1 of the said State of California property; thence East along the last said South line 115 feet, more or less, to a point on the East line of the West 2-1/4 acres of North Half of Lot 4 above referred to; thence South along the last said East line, 232 feet, more or less, to a point on the North line of the parcel of land described as Parcel No. 2 in the Deed from Vesta B. Smith, Et Ux, to the State of California, above referred to; thence along the last said North line, the following two Courses and Distances: South 83 Degrees 55' 51" West 194.03 feet and North 89 Degrees 47' 00" West 116.63 feet to a point on the West line of the property conveyed to Vesta B. Smith first above mentioned; thence North along the last said West line 123 feet, more or less, to the True Point of Beginning.

Parcel Two:

A portion of the North Half of Lot 4 of Maze Ranch Subdivision, in the County of Stanislaus, State of California, according to the Official Map thereof, filed in the Office of the Recorder of Stanislaus County, California, on March 19, 1909, Volume 4 of Maps, Page 18, described as follows: Commencing at the Northeast corner of said Lot 4; thence along the North line of said Lot, North 89 Degrees 47' 00" West 242.93 feet; thence South 0° 35' 00" East 10.84 feet to the True Point of Beginning; thence

(1) South 89° 47' 15" East, 92.01 feet; thence
(2) South 34° 50' 54" East, 212.03 feet; thence
(3) South 39° 17' 14" West, 50.47 feet; thence
(4) South 83° 55' 51" West, 179.85 feet; thence
(5) North 0° 35' West 232.45 feet to the True Point of Beginning.

Excepting any and all rights of ingress to or egress from the above described Parcel over and across Courses No. (2), (3) and (4) herein above described, as excepted and reserved in the Deed from the State of California recorded October 14, 1965, Volume 2062 of Official Records, Page 101, Instrument No. 40303.

Also including the southerly one-half of Kansas Avenue and the westerly one-half of the right-of-way of California State Highway 99, all being immediately adjacent to the above-described property.

Containing 2.66 acres, more or less.

APN 029-015-021

WHEREAS, after a public hearing held on November 4, 2019, in the Tenth Street Place Chambers located at 1010 Tenth Street, Modesto, California, it was found and determined by the Planning Commission, by its Resolution No. 2019-31, that rezoning of the property as requested will not be detrimental to the public health, safety or welfare because the rezone to Planned Development will provide for the development of permanent supportive housing units, and the conversion of motel rooms into studio

efficiency units will be done in accordance to all applicable City Standards and adopted Building Codes, the requested zone change will result in an orderly planned use of land because the conversion of the motel into permanent supportive housing units will be compatible with the surrounding commercial uses including nearby grocery stores and restaurants, and the requested zone change is in accordance with the community objectives as set forth in the Modesto Urban Area General Plan and any applicable specific plans(s) because a)While the site is within the Industrial (I) land use designation of the General Plan, Policy III.A.2 of the General Plan provides that rezonings involving less than five acres in size may occur even if not consistent with the land use designation of the site if the rezoning can be found consistent with the Land Use goals and policies of the General Plan and b) The General Plan Land Use goal of Great, Safe Neighborhoods encourages a mix of housing types affordable to all income levels. The rezone to facilitate the conversion of the motel into permanent supportive housing for local population with an immediate need for housing meets this goal; therefore the rezoning is in accordance with community objectives as set forth in the General Plan, and

WHEREAS, it was also found and determined by the Planning Commission that the requested reduction in parking of 35 parking spaces will not adversely affect surrounding uses because the site provides 95 existing parking spaces would adequately serve the project because the tenants will be a target population with low to very-low income levels, many of whom will not have vehicles, and the site is within one quarter-mile of the nearest transit stop, Modesto Area Express (MAX) Line 26, and

WHEREAS, said matter was set for a public hearing of the City Council to be held on December 3, 2019, in the Tenth Street Place Chambers located at 1010 Tenth

Street, Modesto, California, at which date and time said duly noticed public hearing was held, and

WHEREAS, after said public hearing the Council found and determined that the application of the Housing Authority of Stanislaus County for a Planned Development Zone will not be detrimental to the public health, safety or welfare, will result in an orderly planned use of land, and is in accordance with the community objectives as set forth in the Modesto Urban Area General Plan and any applicable specific plans(s) for the reasons set forth in Planning Commission Resolution No. 2019-31 and quoted above, and

WHEREAS, the Council has introduced Ordinance No. 3717-C.S. on the 26th day of May 2020, reclassifying the above-described property from General Commercial (C-2) Zone, to Planned Development Zone, P-D(608).

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto as follows:

1. DEVELOPMENT PLAN. The development plan for Planned Development Zone, P-D(608), is hereby approved subject to the following conditions:

    1. Prior to the issuance of a building permit, all development shall conform to the Development Plan titled "Building Improvements, SRHA Rehab 2019, 722 Kansas Avenue, Modesto CA 95351", as stamped approved by the City Council on December 3, 2019.

    2. Prior to the issuance of a building permit, any variation from the approved site plan or building elevations on file with the City must be reviewed and approved by the Director of Community and Economic Development or designee.

    3. Any public improvements that are missing damaged or not to current City standards shall be designed per City standards in accordance with City Code (Article 7-1.701), standards and specifications. Such improvements may include, but not be limited to curb & gutter, drive

approach, sidewalk, ADA access ramps, fire hydrants and street lights. All public improvement plans shall be designed by a Registered Engineer, reviewed and approved by the City Engineer prior to issuance of an Encroachment or Building permit.

4. The improvement plans shall include all landscaping, parking and common areas, and any and all easements required for the establishment of new utilities and the preservation of existing utilities.

5. All existing underground and aboveground utilities, irrigation, and electrical lines shall be protected, relocated, or removed as required by the utility companies and City Engineer or designee. Easements for utilities, irrigation and electrical lines to remain shall be reserved as required.

6. Prior to the issuance of a building permit, plans for the residential units shall incorporate construction techniques to achieve an interior noise limit of 45 decibels or less, to the satisfaction of the Chief Building Official.

7. Prior to issuance of a building permit, plans for any new trash enclosures shall demonstrate the use of building materials, colors and finishes which are consistent or compatible with those used in the major buildings of the development, as approved by the Community and Economic Development Director.

8. Climbing vines shall be included in the landscape surrounding any new trash enclosures and CMU block walls to prevent tagging.

9. All signs shall comply with the sign requirements of the R-3 Zone.

10. Prior to the issuance of a Grading, Demolition, or Building Permit, Developer shall submit a plan for trash enclosures to be sufficiently elevated to prevent stormwater run-on from parking lot and floor of enclosures shall be graded to drain into adjacent landscape areas.

11. All aspects of this project to comply with current City of Modesto Standards and also current California Building, Fire, Electrical, Mechanical, Plumbing, Energy codes adopted by the City of Modesto.

12. Improvement plans shall demonstrate the provision of onsite fire hydrants as required.

13. Developer shall provide bicycle parking as required by the California Green Building Standards Code.

14. All department Conditions of Approval for the project shall be included with building plans and shall be continuously maintained on-site during project construction to the satisfaction of the Chief Building Official.

15. All landscaping, fences, and walls shall be maintained and the premises shall be kept free of weeds, trash, and other debris.

16. At the time of issuance of a building permit, the developer shall pay development impact fees at the established rate. Such fees may include but are not limited to, sewer and water connection fees, community facility fees, building permit and plan check fees.

17. Prior to Certificate of Occupancy, the applicant shall enroll and participate in the City's Crime-Free Multi-Family Housing Program as administered by the Modesto Police Department.

18. The property owner and developer shall, at their sole expense, defend, indemnify and hold harmless the City of Modesto, its agents, officers, directors and employees, from and against all claims, actions, damages, losses, or expenses of every type and description, including but not limited to payment of attorneys' fees and costs, by reason of, or arising out of, this development approval. The obligation to defend, indemnify and hold harmless shall include but is not limited to any action to arbitrate, attack, review, set aside, void or annul this development approval on any grounds whatsoever. The City of Modesto shall promptly notify the developer of any such claim, action, or proceeding and shall cooperate fully in the defense.

In addition, the following recommended Conditions of Approval are mitigation measures from the Modesto Urban Area General Plan Master Environmental Impact Report that are applicable to the project:

19. Implement noise-reducing construction practices as conditions of approval where substantial construction-related noise impacts would be likely to occur, such as with extended periods of pile driving, or where construction is expected to continue or where sensitive receptors would be affected by construction noise. Conditions of approval may include, but are not limited to:

    - Require construction equipment, including air compressors and pneumatic equipment to have properly maintained mufflers;

- Require impact tools to be equipped with shrouds or shields;
- Require that the quietest equipment available be used; and,
- Require selection of haul routes that affect the fewest number of people. (Policy VII-G.3.b)

20. Construction activities shall comply with the requirements of the City's Stormwater Management Plan under its municipal NPDES stormwater permit, and the State Water Resources Control Board's General Permit for Discharges of Storm Water Associated with Construction Activity. (Policy VI.G.3)

2. DEVELOPMENT SCHEDULE. The following development schedule is hereby approved for said Planned Development Zone, P-D(608):

The entire construction program be accomplished in one phase, construction to begin on or before November 4, 2021, and completion to be not later than November 4, 2023.

3. CHANGES IN DEVELOPMENT PLAN. Any changes in the above approved development plan shall be made in accordance with the provisions of Section 10-7.108 of the Modesto Municipal Code.

4. COMPLIANCE WITH CODE PROVISIONS, ETC. In all other respects said planned development shall be accomplished in accordance with and in strict adherence to the provisions of Article 1 of Chapter 7 of Title 10 of the Modesto Municipal Code relating to Planned Development Zones and other applicable City laws, rules, regulations and procedures.

5. EFFECTIVE DATE. This resolution shall not become effective unless and until the ordinance reclassifying the above-described property to Planned Development Zone, P-D(608), becomes effective.

BE IT FURTHER RESOLVED that the conditions of project approval set forth herein include certain fees, dedication requirements, reservations requirements, and other

exactions, and that pursuant to Government Code Section 66020(d)(1), these conditions constitute written notice of a statement of the amount of such fees, and a description of the dedications, reservations, and other exactions.

BE IT FURTHER RESOLVED that Council hereby rescinds Resolution No. 2019-536, adopted by the City Council on December 3, 2019, due to clerical error.

BE IT FURTHER RESOLVED that the applicant is hereby further notified that the ninety (90) days approval period in which a protest of these fees, dedications, reservations, and other exactions, pursuant to Government Code Section 66020(a) can be filed, begins on December 3, 2019, and that if a protest is not filed within this ninety (90)-day period complying with all of the requirements of Section 66020, the applicant will be legally barred from later challenging such exactions.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

APPROVED AS TO LEGAL DESCRIPTION

By Steve Mitchell
Community & Economic Development Department
Planning Division

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-232

RESOLUTION APPROVING THE SUBMITTAL OF A GRANT FUNDING APPLICATION FOR THE CITY OF MODESTO'S ACTIVE TRANSPORTATION PROGRAM IN THE AMOUNT OF $6,985,000 FOR THE ENCINA AVENUE AND LINCOLN AVENUE PEDESTRIAN/BICYCLE TRAIL CORRIDOR PROJECT AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO CONDUCT ALL NEGOTIATIONS, EXECUTE AND SUBMIT ALL DOCUMENTS

WHEREAS, the State Active Transportation Program was created by Senate Bill 99 (Chapter 359, Statutes of 2013) and Assembly Bill 101 (Chapter 354, Statutes of 2013) to encourage increased use of active modes of transportation, such as biking and walking, and

WHEREAS, Pursuant to the statutes, the goals of the Active Transportation Program are to:

- Increase the proportion of trips accomplished by biking and walking
- Increase the safety and mobility of non-motorized users
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals as established pursuant to Senate Bill 375 (Chapter 728, Statutes of 2008) and Senate Bill 391 (Chapter 585, Statutes of 2009)
- Enhance public health, including reduction of childhood obesity through the use of programs including, but not limited to, projects eligible for Safe Routes to School Program funding
- Ensure that disadvantaged communities fully share in the benefits of the program

WHEREAS, staff is seeking approval to submit a grant application for State Active Transportation Program Cycle 4 grant funding in the amount of $6,985,000 by proposing a 2.6 mile pedestrian/bicycle path East-West along Encina Avenue from N. Conejo Avenue to Lincoln Avenue and North-South along Lincoln Avenue from Dry Creek Trail to Yosemite Boulevard, and

WHEREAS, all improvements are planned to be within existing public right-of-way with no anticipated land acquisition, and

WHEREAS, as part of the application process staff will conduct community outreach meetings which are intended for citizens, stakeholders and school representatives from within the project area to identify and discuss pedestrian and traffic calming project improvements. Schools include Capistrano Elementary, El Vista Elementary and La Loma Junior High, and

WHEREAS, on March 5, 2020 staff presented to the Citizens Transportation Sale Tax Commission the Encina Avenue and Lincoln Avenue Pedestrian/Bicycle Trail Corridor Project and received positive feedback regarding the project and the use of local Measure L funds as a source of match money.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the filing of an application for the development of the Encina Avenue and Lincoln Avenue Pedestrian/Bike Trail Corridor Project; and

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-233

RESOLUTION APPROVING A LICENSE AGREEMENT WITH MODESTO ON ICE, INC., AN S CORPORATION, TO OPERATE A SEASONAL ICE-SKATING RINK, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE LICENSE AGREEMENT

WHEREAS, the City determined the downtown would benefit from increased activity with the installation of a seasonal ice-skating rink on a portion of the Modesto Centre Plaza parking lot located at the intersection of 11th and L Streets, and

WHEREAS, on October 29, 2015, the City entered into a four-year License Agreement with Modesto on Ice, a California Limited Liability Company, to operate a seasonal ice-skating rink, and

WHEREAS, on February 5, 2019, by Resolution No. 2019-43, Council approved another License Agreement for five more years, and

WHEREAS, Modesto on Ice, LLC, was sold in 2020 to David and Kathleen Halsey, doing business as Modesto on Ice, Inc., an S Corporation, and

WHEREAS, Modesto on Ice, Inc. desires to continue operation in downtown and enter into a new License Agreement for five seasons starting on November 2, 2020 through January 31, 2025, and

WHEREAS, each season will commence on the first Tuesday of November and end on January 31st, and

WHEREAS, Modesto on Ice will pay rental fees, including water and electricity fees, for use of the southeast corner of the Modesto Centre Plaza parking lot.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a License Agreement with Modesto on Ice, Inc., an S Corporation.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is authorized to execute the License Agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-234

RESOLUTION APPROVING THE FIRST AMENDMENT TO THE MASTER SERVICES AGREEMENT WITH FORENSIC LOGIC FOR A THREE-YEAR SOFTWARE LICENSE SERVICE RENEWAL FOR COPLINK AT A TOTAL NOT TO EXCEED $181,061; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE NECESSARY DOCUMENTS

WHEREAS, since 2011 the City of Modesto Police Department (MPD) personnel have used COPLINK to search for, and analyze, crime clues from multiple criminal data bases across the State of California; and

WHEREAS, COPLINK is used by participating law enforcement agencies in California, Oregon and Arizona to share, store and standardize criminal data; and

WHEREAS, MPD maintains and manages the Law Enforcement Networking System (LENS) node infrastructure and software necessary to store the local crime data, and network connectivity that allows access by other participatory COPLINK nodes; and

WHEREAS, Forensic Logic has a second application, Law Enforcement Agency Portal (LEAP) Search, which is a secure, cloud-based information portal deployed as a law enforcement search engine; and

WHEREAS, this LEAP Search portal will expand our users search nationwide by joining the largest network of law enforcement agencies in America; and

WHEREAS, MPD, Information Technology and COPLINK Node administrators have worked together determine the most cost-effective approach to maintain this vital crime data intelligence to the law enforcement community; and

WHEREAS, Forensic Logic is the only manufacturer that provide COPLINK data and application migration services for COPLINK; and

WHEREAS, this new proposal provides the Modesto Node numerous benefits which include 1) extending our existing master agreement, 2) the addition of the LEAP Search tool at a generous volume discount, 3) standardizes our costs for 3 years so there is no uplift charge or yearly increase, 4) additional services such as the ability for MPD to perform additional data integrations at no cost, migration of COPLINK to their current cloud platform, on-site training, and transition to COPLINKX when available; and

WHEREAS, once the application has been migrated to the COPLINK cloud platform, the Modesto Police Department's Information Technology staff will be able to reduce their maintenance of 4 physical servers; and

WHEREAS, the Modesto Police Department's Fiscal Year 2019/2020 Budget has $75,000 allocated for our COPLINK renewal and will apply that amount toward the $181,060.50 for this three-year agreement. The remaining $106,060.50 will be paid out of the department's Supplemental Law Enforcement Services Funds (SLESF).

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Modesto that it hereby approves the first amendment to the master service agreement with Forensic Logic for a three-year software license service renewal for COPLINK at a total not to exceed $181,061.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the necessary documents, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-235

RESOLUTION ACCEPTING THE 2018 EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT IN THE AMOUNT OF $147,207 AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE NECESSARY DOCUMENTS

WHEREAS, the Police Department was awarded a grant in partnership with the Stanislaus County Sheriff' department in the sum of $147,207 from the Department of Justice for the purchase of additional License Plate Readers and the associated software; and

WHEREAS, the Modesto Police Department has sought to reduce the number of crimes and vehicle thefts by implementing an effective License Plate Readers program with modern crime fighting technology; and

WHEREAS, acceptance of said $147,207 grant will assist the department in best utilizing License Plate Readers technology as part of its commitment to intelligence-led policing; and

WHEREAS, the term of this grant will be through September 30, 2021.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby accepts the 2018 Edward Byrne Justice Assistant Grant in the amount of $147,207 from the Department of Justice.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the necessary award documents.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-236

RESOLUTION AMENDING THE FISCAL YEAR 19-20 MULTI-YEAR PROJECT BUDGET TO APPROPRIATE REVENUE AND EXPENSES IN THE AMOUNT OF $147,207 RELATED TO THE 2018 EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, the Police Department acquired a grant award in the amount of $147,207 from the Department of Justice for the purchase of additional License Plate Readers and associated software, and

WHEREAS, there is no local match required for this grant, and

WHEREAS, certain budgetary adjustments are necessary to account for the programing of revenues and offsetting expenses.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Multi-Year Project Budget by $147,207 to the revenue and expense budget of the 2018 BJAG Project, 101260.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-237

RESOLUTION APPROVING AN AWARD AND AGREEMENT FOR A DIGITAL RADIO COMMUNICATION SYSTEM TO FISHER WIRELESS SERVICES INC. OF MODESTO, CA IN THE AMOUNT OF $180,480 FOR THE FIRST YEAR, AND YEARS TWO THROUGH FIVE $23,634 PER YEAR WITH A TOTAL AMOUNT NOT TO EXCEED $275,016 FOR A FIVE-YEAR TERM, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the Modesto Area Express (MAX) bus system operates 17 fixed routes around Modesto and two commuter routes, and

WHEREAS, the system currently uses an analog radio system for drivers to communicate with dispatchers and supervisors, and

WHEREAS, the current analog system does not provide the coverage required and the quality is poor with interference from other co-channel users, and

WHEREAS, a Request for Bids was issued by the City to select, through a competitive bid process, a Contractor to provide a hosted wide area digital radio communications system and new radios for the MAX transit buses and the paratransit vehicles, and

WHEREAS, Fisher Wireless Services Inc. is the largest provider of local and regional two-way networked radio service in the United States, and

WHEREAS, Fisher Wireless Services Inc. is providing a digital radio communication system that will include base consoles, portable radios, talk groups, call back features, wireless headsets, microphones, and radio audio interfaces, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow the formal bid procedures. An award of Request for Bids for Digital Radio

Communication System and agreement for a digital radio communications system for Public Works Transit Division use to Fisher Wireless Services Inc. of Modesto, California conforms to the Modesto Municipal Code because the City complied with the formal bid procedures and Fisher Wireless Services Inc. was the lowest responsive and responsible bidder.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approved an award and agreement for a digital radio communication system to Fisher Wireless Services Inc. of Modesto, CA in the amount of $180,480 for the first year, and years two through five $23,634 per year with a total amount not to exceed $275,016 for a five-year term.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-238

RESOLUTION APPROVING THE AWARD AND AGREEMENT FOR CUSTODIAL SERVICES TO KELLERMEYER BERGENSONS SERVICES, SALT LAKE CITY, UT, FOR A FIVE-YEAR AGREEMENT WITH ONE 1-YEAR EXTENSION OPTION, FOR AN ANNUAL ESTIMATED COST OF $215,820 AND A TOTAL AMOUNT NOT TO EXCEED $1,257,554 OVER SIX YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City is seeking a contractor to provide custodial services in the following City owned buildings: Amtrak Station, Bus Maintenance Facility and Downtown Transit Center, and

WHEREAS, the contractor will furnish all labor, cleaning chemicals, supplies, paper products, soap, tools, equipment and insurance necessary to perform the assigned duties, and

WHEREAS, the contractor will be responsible for cleanliness and sanitation of the building, exterior passenger waiting areas, all furniture, and other fixtures both inside and outside of the building including windows and building surfaces on the outside of the building above street level, and

WHEREAS, a Request for Proposals (RFP) was issued by the City to select, through a competitive process, a contractor to provide to provide custodial services to three City owned transit buildings, and

WHEREAS, the RFP complied with Federal Transit Administration (FTA) requirements, and

WHEREAS, Kellermeyer Bergensons Services was determined to be responsible and reasonable for the City of Modesto.

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow the formal bid procedures. An award of Request for Proposals for Custodial Services and agreement for Public Works Transit Division use to Kellermeyer Bergensons Services, Salt Lake City, UT conforms to the Modesto Municipal Code because the City complied with the formal bid procedures and Fisher Wireless Services Inc. was the lowest responsive and responsible bidder.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the award and agreement for custodial services to Kellermeyer Bergensons Services, Salt Lake City, UT, for a five-year agreement with a one 1-year extension option, for an annual estimated cost of $215,820 and a total amount not to exceed $1,257,554 over six years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-239

RESOLUTION ACCEPTING THE UPGRADE TRAFFIC SIGNALS 2015 PROJECT AS COMPLETE, AUTHORIZING ALL NECESSARY STEPS TO FILE WITH THE COUNTY RECORDER, RELEASING SECURITIES, AND RELEASING PAYMENTS TOTALING $568,802 TO TIM PAXIN'S PACIFIC EXCAVATION, INC., OF ELK GROVE, CALIFORNIA

WHEREAS, the City of Modesto's Highway Safety Improvement Program (HSIP) (212) Upgrade Traffic Signals 2015 project removed all the existing traffic signal standards at the intersections of Paradise Rd. and Martin Luther King Dr., Dale Rd. and Veneman Ave., and Kansas Ave. and North Emerald Ave., and replaced the old standards with new signal standards in accordance with the roadway geometry and Caltrans Standard Specifications, 2015, and

WHEREAS, this project upgraded pedestrian push buttons to Americans with Disabilities Act (ADA) compliant pedestrian push buttons, and

WHEREAS, new conduit and signal interconnect cable was installed and existing curb ramps were removed and replaced with new ADA compliant curb ramps where possible, and

WHEREAS, this project also installed Emergency Vehicle Pre-emption and new detection at intersections, and brought the street name signage into compliance with the new Manual on Uniform Traffic Control Devices (MUTCD), and

WHEREAS, bids were advertised on September 22, 2019, and were publicly opened on October 16, 2019, pursuant to Modesto Municipal Code section 8-3.403 and Charter Section 1307, and Tim Paxin's Pacific Excavation, Inc., of Elk Grove, California, was the apparent lowest responsible and responsive bidder, and

WHEREAS, on January 22, 2019, by Resolution No. 2019-14, Council awarded a contract to Tim Paxin's Pacific Excavation, Inc., of Elk Grove, California for the construction of the Upgrade Traffic Signals 2015 project in the amount of $518,561, and

WHEREAS, the contractor received the Notice to Proceed with a first working day of April 8, 2019, and all contract work was completed by October 9, 2019, and

WHEREAS, the total project costs were $673,956 which included all construction, design, and construction administration costs. The total project amount originally budgeted was $756,061 which included $570,561 for the construction contract and contingency with Tim Paxin's Pacific Excavation, Inc., and

WHEREAS, the City's "Change Order Approval Policy" enacted by Council Resolution No. 94-443 on July 19, 1994, and updated by Resolution No. 2019-326 on July 9, 2019, established a contract change order authority of up to and not to exceed 10% of the original contract price, and

WHEREAS, there were four change orders on this project with an overall increase of $50,241, and

WHEREAS, by accepting this project as complete, the City officially accepts the improvements made and authorizes the Notice of Completion to be filed.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Upgrade Traffic Signals 2015 project is hereby accepted as complete from contractor Tim Paxin's Pacific Excavation, Inc., of Elk Grove, California, and that the City Clerk is authorized to complete all necessary steps to file the appropriate notices and documents with the County Recorder, release securities, and authorize payments totaling $568,802.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-240

RESOLUTION APPROVING AN AGREEMENT WITH TRC ENGINEERS, INC., FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE COFFEE ROAD PAVEMENT REHABILITATION PROJECT IN AN AMOUNT NOT TO EXCEED $198,436, PLUS $19,844 FOR ADDITIONAL SERVICES (IF NEEDED) FOR A TOTAL AMOUNT NOT TO EXCEED $218,280, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT AND ADDITIONAL SERVICES UP TO A CUMULATIVE AMOUNT OF 10% OR $19,844

WHEREAS, plans and specifications have been prepared for the Coffee Road Pavement Rehabilitation Project and Community and Economic Development staff recommended approval by the City Council, and

WHEREAS, the bids received for the Coffee Road Pavement Rehabilitation Project were publicly opened at 11:00 a.m. on March 10, 2020, and later tabulated by the Director of Community and Economic Development for the consideration by the City Council, and

WHEREAS, the Director of Community and Economic Development recommended that the bid of $2,630,349 received from United Pavement Maintenance, Inc., of Hughson, California be accepted as the lowest responsible and responsive bid, and

WHEREAS, on April 14, 2020, by Resolution No. 2020-161, Council awarded the construction contract to United Pavement Maintenance, Inc., of Hughson, California, in the amount of $2,630,349, for the Coffee Road Pavement Rehabilitation Project, and

WHEREAS, due to current workload and staffing vacancies, coupled with the design-build nature of the access ramps, the City's Construction Administration Office sought to retain the services of a Construction Management and Inspection Firm, and

WHEREAS, on February 28, 2020, a Request for Proposals (RFP) was issued for Construction Management and Inspection Services to Construction Management firms the City has utilized, and

WHEREAS, in accordance with City's policy, Administrative Directive 3.1 Selection Procedures for Professional Consultants Who Provide Architectural and Engineering Services for Capital Projects, TRC Engineers, Inc., was selected as the most qualified firm.

NOW, THEREFORE BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves an Agreement with TRC Engineers, Inc., in an amount not to exceed $198,436, plus $19,844 for additional services (if needed), for a total amount not to exceed $218,280, for Construction Management and Inspection Services for the Coffee Road Pavement Rehabilitation Project.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement and additional services if needed in the amount of cumulative amount of 10% or $19,844, for a total amount not to exceed $218,280, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Madrigal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-241

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MODESTO RELATING TO WATER REFUNDING REVENUE CERTIFICATES OF PARTICIPATION, 2008 SERIES A; APPROVING THE FORMS OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF A SECOND AMENDMENT TO THE REIMBURSEMENT AGREEMENT AND A FEE LETTER AND APPROVING THE FORM OF AND AUTHORIZING THE DISTRIBUTION OF A SUPPLEMENT TO AN OFFICIAL STATEMENT IN CONNECTION THEREWITH; AND AUTHORIZING CERTAIN OTHER RELATED ACTIONS

WHEREAS, the City of Modesto is a charter city and municipal corporation duly organized and existing under and by virtue of the Constitution and laws of the State of California (the "City"); and

WHEREAS, the City has caused to be executed and delivered the $47,625,000 City of Modesto, California Water Refunding Revenue Certificates of Participation, 2008 Series A (the "2008 Certificates"); and

WHEREAS, in connection with the issuance of the 2008 Certificates, Bank of America, N.A., as liquidity facility provider, the City, and the Modesto Public Financing Authority (the "Authority") previously entered into a Standby Certificate Purchase Agreement, dated as of May 1, 2008 (the "2008 Liquidity Agreement"), relating to the performance of certain duties with respect to the remarketing of the 2008 Certificates; and

WHEREAS, the 2008 Liquidity Agreement was subsequently replaced with an irrevocable direct-pay letter of credit (as extended, the "Letter of Credit") issued by JPMorgan Chase Bank, N.A. ("JPMorgan") pursuant to the terms of a Reimbursement Agreement, dated as of July 1, 2011, as amended by a First Amendment to the Reimbursement Agreement, dated as of June 5, 2014, by and between the City and

JPMorgan, and a fee letter, dated July 14, 2011, as amended and restated as of June 5, 2014, between JPMorgan and the City; and

WHEREAS, the Stated Expiration Date of the Letter of Credit was previously extended from July 14, 2014 to July 14, 2017 and from July 14, 2017 to June 15, 2020; and

WHEREAS, the City has determined to be in its best interest to again extend the Stated Expiration Date of the Letter of Credit; and

WHEREAS, in connection with the extension of the Letter of Credit, the City and JPMorgan will enter into a Second Amendment to the Reimbursement Agreement ("Second Amendment") and a new Fee Letter (the "Fee Letter"); and

WHEREAS, the City proposes to execute and deliver Supplement No. 4 to the Official Statement (the "Supplement"), relating to the 2008 Certificates, and to authorize the distribution of the Supplement to prospective and actual purchasers of the 2008 Certificates; and

WHEREAS, all acts, conditions and things required by the laws of the State of California to exist, to have happened and to have been performed precedent to and in connection with the consummation of the transactions authorized hereby do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the City is now duly authorized and empowered, pursuant to each and every requirement of law, to consummate such transactions for the purpose, in the manner and upon the terms herein provided.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Modesto, as follows:

Section 1. Findings. The City Council hereby specifically finds and determines that the actions authorized hereby constitute and are with respect to the public affairs of the City and that the statements, findings and determinations of the City set forth above and in the preambles of the documents approved herein are true and correct and that the consummation of the transactions contemplated therein shall result in significant public benefits to the City.

Section 2. Approval of the Second Amendment and Fee Letter. The City Council hereby approves the extension of the Letter of Credit. The Second Amendment and the Fee Letter proposed to be executed and entered into by the City, in the forms presented at this meeting and on file with the City Clerk, are hereby approved, and each of the City Manager and the Finance Director, acting singly, is hereby authorized and directed, for and in the name and on behalf of the City, to execute and deliver the Second Amendment and the Fee Letter in substantially said forms, with such changes therein as such officer executing the Second Amendment and the Fee Letter may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.

Section 3. Approval of Supplement to Official Statement. The Supplement, in the form presented at this meeting and on file with the City Clerk, is hereby approved. Each of the City Manager and the Finance Director, acting singly, is hereby authorized and directed, for and in the name and on behalf of the City, to execute and deliver the Supplement in substantially said form, with such changes therein as such officer executing the Supplement may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof. Each of the City Manager and the Finance Director, acting singly, is hereby authorized and directed to cause the

Supplement, in substantially said form, with such changes therein as such officer may require or approve, to be distributed to potential and actual purchasers of the 2008 Certificates.

Section 4. Attestations. The City Clerk is hereby authorized and directed to attest the signature of the City Manager and the Finance Director and to affix and attest the seal of the City, as may be required or appropriate in connection with the documents approved by this Resolution.

Section 5. Other Actions. The City Manager and the Finance Director, or their designees, of the City are hereby authorized and directed, jointly and severally, to do any and all things and to execute and deliver any and all documents which they may deem necessary or desirable in order to consummate the transactions authorized hereby and to carry out, give effect to and comply with the terms and intent of this Resolution, the Second Amendment, the Fee Letter and the Supplement; and all such actions heretofore taken by such officers are hereby ratified, confirmed and approved.

Section 6. Effective Date. This Resolution shall take effect immediately upon its passage.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 26th day of May, 2020, by Councilmember Madrigal, who moved its adoption, which motion being duly seconded by Councilmember Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO PUBLIC FINANCING AUTHORITY
RESOLUTION NO. 01-2020

PRINT

RESOLUTION OF THE MODESTO PUBLIC FINANCING AUTHORITY RELATING TO WATER REFUNDING REVENUE CERTIFICATES OF PARTICIPATION, 2008 SERIES A; APPROVING THE FORM OF AND AUTHORIZING THE DISTRIBUTION OF A SUPPLEMENT TO AN OFFICIAL STATEMENT IN CONNECTION THEREWITH; AND AUTHORIZING CERTAIN OTHER RELATED ACTIONS

WHEREAS, the Modesto Public Financing Authority (the "Authority") is a joint exercise of powers authority duly organized and existing pursuant to the Modesto Public Financing Joint Exercise of Powers Agreement, dated as of December 5, 1989, by and between the City of Modesto (the "City"), a charter city and municipal corporation duly organized and existing under and by virtue of the Constitution and laws of the State of California, and the Industrial Development Authority of the City; and

WHEREAS, the City has caused to be executed and delivered the $47,625,000 City of Modesto, California Water Refunding Revenue Certificates of Participation, 2008 Series A (the "2008 Certificates"); and

WHEREAS, in connection with the issuance of the 2008 Certificates, Bank of America, N.A., as liquidity facility provider, the City, and the Authority previously entered into a Standby Certificate Purchase Agreement, dated as of May 1, 2008 (the "2008 Liquidity Agreement"), relating to the performance of certain duties with respect to the remarketing of the 2008 Certificates; and

WHEREAS, the 2008 Liquidity Agreement was subsequently replaced with an irrevocable direct-pay letter of credit (as extended, the "Letter of Credit") issued by JPMorgan Chase Bank, N.A. ("JPMorgan") pursuant to the terms of a Reimbursement Agreement, dated as of July 1, 2011, as amended by a First Amendment to the

Reimbursement Agreement, dated as of June 5, 2014 (the "Reimbursement Agreement"), by and between the City and JPMorgan, and a Fee Letter, dated July 14, 2011, as amended and restated as of June 5, 2014 (the "Original Fee Letter"), between JPMorgan and the City; and

WHEREAS, the Stated Expiration Date of the Letter of Credit was previously extended from July 14, 2014 to July 14, 2017 and from July 14, 2017 to June 15, 2020; and

WHEREAS, the City has determined to be in its best interest to again extend the Stated Expiration Date of the Letter of Credit; and

WHEREAS, in connection with the extension of the Letter of Credit, the City and JPMorgan will enter into a Second Amendment to the Reimbursement Agreement and a new Fee Letter; and

WHEREAS, the Authority proposes to execute and deliver Supplement No. 4 to the Official Statement (the "Supplement"), relating to the 2008 Certificates, and to authorize the distribution of the Supplement to prospective and actual purchasers of the 2008 Certificates; and

WHEREAS, all acts, conditions and things required by the laws of the State of California to exist, to have happened and to have been performed precedent to and in connection with the consummation of the transactions authorized hereby do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the Authority is now duly authorized and empowered, pursuant to each and every requirement of law, to consummate such transactions for the purpose, in the manner and upon the terms herein provided.

NOW, THEREFORE, BE IT RESOLVED by the Governing Board of the Authority, as follows:

Section 1. Findings. The Governing Board hereby specifically finds and determines that the statements, findings and determinations of the Authority set forth above and in the preambles of the documents approved herein are true and correct.

Section 2. Approval of Supplement to Official Statement. The Supplement, in the form presented at this meeting and on file with the Secretary of the Authority, is hereby approved. Each of the Chairperson, Vice Chairperson, Executive Director, and Auditor and Treasurer of the Authority (each, an "Authorized Officer"), acting singly, is hereby authorized and directed, for and in the name and on behalf of the Authority, to execute and deliver the Supplement in substantially said form, with such changes therein as such officer executing the Supplement may require or approve, such approval to be conclusively evidenced by the execution and delivery thereof. Each Authorized Officer, acting singly, is hereby authorized and directed to cause the Supplement, in substantially said form, with such changes therein as such officer may require or approve, to be distributed to potential and actual purchasers of the 2008 Certificates.

Section 3. Attestations. The Secretary of the Authority is hereby authorized and directed to attest the signature of each Authorized Officer in connection with the documents approved by this Resolution.

Section 4. Other Actions. Each Authorized Officer is hereby authorized and directed, jointly and severally, to do any and all things and to execute and deliver any and all documents which such Authorized Officer may deem necessary or desirable in order to consummate the transactions authorized hereby and to carry out, give effect to and

comply with the terms and intent of this Resolution and the Supplement; and all such actions heretofore taken by such Authorized Officers are hereby ratified, confirmed and approved.

Section 5. Effective Date. This Resolution shall take effect immediately upon its passage.

The foregoing resolution was introduced at a meeting of the Modesto Public Financing Authority held on the 26th day of May, 2020, by Authority Member Madrigal, who moved its adoption, which motion being duly seconded by Authority Member Ah You, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Authority Boardmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Authority Boardmembers:	None
ABSENT:	Authority Boardmembers:	None

ATTEST: _____
STEPHANIE LOPEZ,
Secretary

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ,
Acting Authority Counsel

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-242

RESOLUTION APPROVING A STATE OF CALIFORNIA LOCAL GOVERNMENT PLANNING SUPPORT GRANT PROGRAM APPLICATION IN THE AMOUNT OF $500,000 FOR THE PURPOSE OF FUNDING VARIOUS HOUSING-REALTED PROJECTS AND AUTHORIZING THE DIRECTOR OF COMMUNITY AND ECONOMIC DEVELOPMENT TO FILE THE GRANT APPLICATION

WHEREAS, pursuant to Health and Safety Code 50515 et. Seq, the State of California Department of Housing and Community Development (Department) is authorized to issue a Notice of Funding Availability (NOFA) as part of the Local Government Planning Support Grants Program (hereinafter referred to by the Department as the Local Early Action Planning Grants Program or LEAP), and

WHEREAS, the Modesto City Council desires to submit LEAP grant application package ("Application"), on the forms provided by the Department, for approval of grant funding for projects that assist in the preparation and adoption of planning documents and process improvements that accelerate housing production and facilitate compliance to implement the sixth cycle of the regional housing needs assessment, and

WHEREAS, the Department has issued a NOFA and Application on January 27, 2020, in the amount of $119,040,000 for assistance to all California jurisdictions, and

WHEREAS, a public meeting was held on June 2nd, 2020, at the Modesto City Hall, in the basement Council Chambers, located at 1010 10th Street, Modesto, California, at which time and place Modesto's LEAP grant application submittal was considered by the Modesto City Council.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that the Community and Economic Development Director is hereby authorized and directed to apply for and submit to the Department the Application.

BE IT FURTHER RESOLVED that the Director of Community and Economic Development is hereby authorized to execute all necessary grant documents, agreements, MOUs and other documentation required by the LEAP Grants Program on behalf of the City of Modesto.

BE IT FURTHER RESOLVED that in connection with the LEAP grant, if the Application is approved by the Department, the City of Modesto Director of Community and Economic Development is authorized to submit the Application, enter into, execute, and deliver on behalf of the Applicant, a State of California Agreement (Standard Agreement) for the amount of $500,000, and any and all other documents required or deemed necessary or appropriate to evidence and secure the LEAP grant, the Applicant's obligations thereto and all amendments thereto.

BE IT FURTHER RESOLVED that the City shall be subject to the terms and conditions as specified in the NOFA, and the Standard Agreement provided by the Department after its approval. The Application and any and all accompanying documents are incorporated in full as part of the Standard Agreement. Any and all activities funded, information provided, and timelines represented in the Application will be enforceable through the fully executed Standard Agreement, the Applicant hereby agrees to use the funds for eligible uses and allowable expenditures in the manner presented and specifically identified in the approved Application.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-243

RESOLUTION APPROVING A WILL SERVE LETTER AND OUTSIDE SERVICE AGREEMENT WITH OSIEL LUNA AND KARINA LUNA HUSBAND AND WIFE AS JOINT TENANTS, TO CONNECT TO THE CITY OF MODESTO'S EXISTING SEWER SYSTEM FOR THE PROPERTY LOCATED AT 605 MAZE BLVD (APN: 030-005-008), AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO THE SIGN THE WILL SERVE LETTER AND EXECUTE THE OUTSIDE SERVICE AGREEMENT

WHEREAS, Osiel Luna and Karina Luna, husband and wife as joint tenants own residential property located at 605 Maze Blvd which is located outside of Modesto City Limits and inside the City's Sphere of Influence, and

WHEREAS, the property located at 605 Maze Blvd, is not connected to City's sewer system and is requesting a sewer connection due to a failing septic system, and

WHEREAS, on November 25, 2014, by Resolution No. 2014-473, Council approved amending City Council Policy 5.002, and

WHEREAS, on December 9, 2014, City Council approved adoption of Ordinance No.3612-C.S. amending City of Modesto Municipal Code Section 11-1.05, and

WHEREAS both of these amendments included language allowing the City Manager, upon the recommendation of the Director responsible for utility system planning to approve standard agreements of service for extension of sewer services into certain unincorporated areas without City Council approval, and

WHEREAS, the property located at 605 Maze Blvd is not located within one of those designated areas and therefore requires City Council approval prior to allowing the sewer connection, and

WHEREAS, City staff has completed an analysis and determined that it is reasonable for the City of Modesto to provide sewer service to this property, and

WHEREAS, consistent with adopted LAFCO Policy 15, the extension of sewer service is proposed to remedy a health and safety concern in an area with failing septic system, and

WHEREAS, the sewer connection fees shall be paid and associated permits will be obtained prior to connecting to the City sewer system, and

WHEREAS, the property owner has executed an Outside Service Agreement for sewer service with the City as required to receive sewer service outside the City limits.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the Will Serve Letter and Outside Service Agreement for sewer service for the property located at 605 Maze Blvd (APN: 030-005-008) in Modesto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to sign the Will Serve letter and execute the Outside Service Agreement for sewer service.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-244

RESOLUTION OF INTENTION TO ANNEX TERRITORY TO CITY OF MODESTO COMMUNITY FACILITIES DISTRICT NO. 2004-1 (VILLAGE ONE #2) AND TO AUTHORIZE THE LEVY OF A SPECIAL TAX WITHIN THE TERRITORY PROPOSED TO BE ANNEXED (ANNEXATION #18)

WHEREAS, pursuant to Chapter 2.5 Division 2 of Title 5 (commencing with Section 53311) of the California Government Code, commonly known as the "Mello-Roos Community Facilities Act of 1982" (the "Act"), proceedings for the annexation of territory to an existing community facilities district may, pursuant to Article 3.5 of the Act, be instituted by the adoption by the legislative body of a resolution of intention to annex such territory, and

WHEREAS, pursuant to the Act, this Council did, by its Resolution No. 2004-199, adopted on April 6, 2004 (the "Resolution of Formation"), establish the City's Community Facilities District No. 2004-1 (Village One #2) (the "District"), and

WHEREAS, pursuant to the Act, this Council did, by its Resolution No. 2004-681, adopted on December 14, 2004, clarify the Rate and Method of Apportionment with respect to the Maximum Special Taxes to be generated by a parcel that has been rezoned, and

WHEREAS, pursuant to the Act, this Council did, by its Resolution No. 2004-683, adopted on December 14, 2004 ("Resolution of Creation of Tax Zone #2), create Tax Zone #2 within the District, and

WHEREAS, the One-Time Facilities Special Tax component of the special taxes is higher in Tax Zone #2 than in Tax Zone #1, and

WHEREAS, pursuant to California Streets and Highways Code Section 3113.5, this Council did, by its Resolution No. 2005-566, adopted on November 9, 2005, direct that all prior modifications, amendments and annexations to the District be consolidated into a single map of the District, specifically all prior boundary maps and amendments thereto related to formation of the District and Annexation Nos. 1 through 10 to the District, and

WHEREAS, on November 23, 2005, said boundary maps were consolidated into a single map entitled "Consolidation of Boundary Maps of Community Facilities District No. 2004-1 (Village One #2)" and recorded with the County Recorder of the County of Stanislaus at Book 4 of Maps of Assessments and Communities Facilities Districts, at Page 33 (the "Consolidated Boundary Map"), and

WHEREAS, subsequent to the recordation of the Consolidated Boundary Map, additional territory was annexed to the District through Annexations Nos. 11, 12, 13, 14, 15, 16, and 17, and

WHEREAS, this Council hereby determines that the public convenience and necessity require the annexation of additional certain territory to the District, and

WHEREAS, the territory to be annexed is within the City limits, and

WHEREAS, it is intended that the territory be annexed to Tax Zone #2.

NOW, THEREFORE, BE IT RESOLVED, by Council of the City of Modesto that the Council finds and orders the following:

1. The above recitals are true and correct.

2. The current boundaries of the District are shown on the Consolidated Boundary Map as supplemented by the map entitled "Annexation Map No. 11 of

Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 4 of Maps of Assessment and Community Facilities Districts, at Page 36, the map entitled "Annexation Map No. 12 of Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 4 of Maps of Assessment and Community Facilities Districts, at Page 42, the map entitled "Annexation Map No. 13 of Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 4 of Maps of Assessment and Community Facilities Districts at Page 57, the map entitled "Annexation Map No. 14 of Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 4 of Maps of Assessment and Community Facilities Districts at Page 98, the map entitled "Annexation Map No. 15 of Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 5 of Maps of Assessment and Community Facilities Districts at Page 52, and the map entitled "Annexation Map No. 16 of Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 5 of Maps of Assessment and Community Facilities Districts at page 67, and the map entitled "Annexation Map No. 17 of Community Facilities District No. 2004-1 (Village One #2)" on file with the County Recorder at Book 5 of Maps of Assessment and Community Facilities Districts at page 87. The territory proposed to be annexed to the District (the "Territory") is described in Exhibit A, attached hereto.

3. The boundaries of the Territory are also shown on the map thereof, entitled "Annexation Map No. 18 of Community Facilities District No. 2004-1 (Village One #2)", City of Modesto, County of Stanislaus, State of California," on file in the office of the City Clerk, which map is hereby approved and adopted. Pursuant to

Sections 3110.5 and 3113 of the California Streets and Highways Code, the City Clerk shall endorse her certificate on the original and one copy of the map evidencing the date and adoption of this Resolution, file the original in her office and, not later than fifteen (15) days after the adoption of this Resolution, file a copy of the map with the County Recorder of the County of Stanislaus. The map shall contain the legends provided in Sections 3110 and 3110.5 of the California Streets and Highways Code; including a reference to the title, book, page and recording date of the original boundary map of the District.

4. The public facilities and services to be provided for the District are set forth in the Resolution of Formation. It is intended that these same facilities and services be provided to the Territory.

5. The special taxes to be levied in the District are set forth in the Resolution of Formation. It is intended that the same special taxes be levied in the Territory, except that the increase of the One-Time Facilities Special Tax component of the special taxes, as authorized by the Resolution of Creation of Tax Zone #2, shall be levied in the Territory.

6. A public hearing on this Resolution will be held at 5:30 p.m., or as soon thereafter as practicable, on Tuesday July 14, 2020, at the regular meeting place of the City Council, City Council Chambers, Basement Level, 1010 Tenth Street, Modesto, California 95354, such time being not less than 30 or more than 60 days following the adoption hereof.

7. At the hearing, any interested persons for or against the annexation of the Territory to the District, and the levy of the special taxes therein, may appear and will be

heard and considered. Any protest may be made orally or in writing. However, any protests pertaining to the regularity or sufficiency of the proceedings shall be in writing and clearly set forth the irregularities and defects to which the objection is made. All written protests shall be filed with the City Clerk on or before the time fixed for the public hearing. Written protests may be withdrawn in writing at any time before the conclusion of the hearing.

8. The City Clerk is directed to publish, not later than seven days prior thereto, a notice of the hearing, in the form required by the Act, in a newspaper of general circulation published in the area of the District, being the Modesto Bee, and otherwise in accordance with Section 6061 of the California Government Code, stating (a) the text or a summary of this Resolution, (b) the time and place of the hearing, and (c) that all interested persons for or against the proposed annexation or the levying of the special tax therein will be heard.

9. If a majority (but at least six) of the registered voters residing within the District or a majority (but at least six) of the registered voters residing within the Territory, or the owners of one-half or more of the area of the land in the District and not exempt from the special tax, or the owners of one-half or more of the Territory, file written protests against the proposed annexation, and the protests are not withdrawn so as to reduce the value of the protests to less than a majority, no further proceedings to annex the Territory to the District, or to levy in the Territory the special taxes to be levied in the District, shall be taken for a period of one year from the date of the decision of the Council on the issues discussed at the hearing.

10. At the conclusion of the hearing, if the Council determines to annex the Territory to the District, it will submit the levy of the special taxes to the qualified electors of the Territory in a special election.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Ridenour

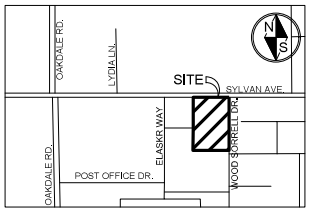
ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

Annexation Map No. 18 of
Community Facilities District No. 2004-1 (Village One #2)
City of Modesto, County of Stanislaus, State of California



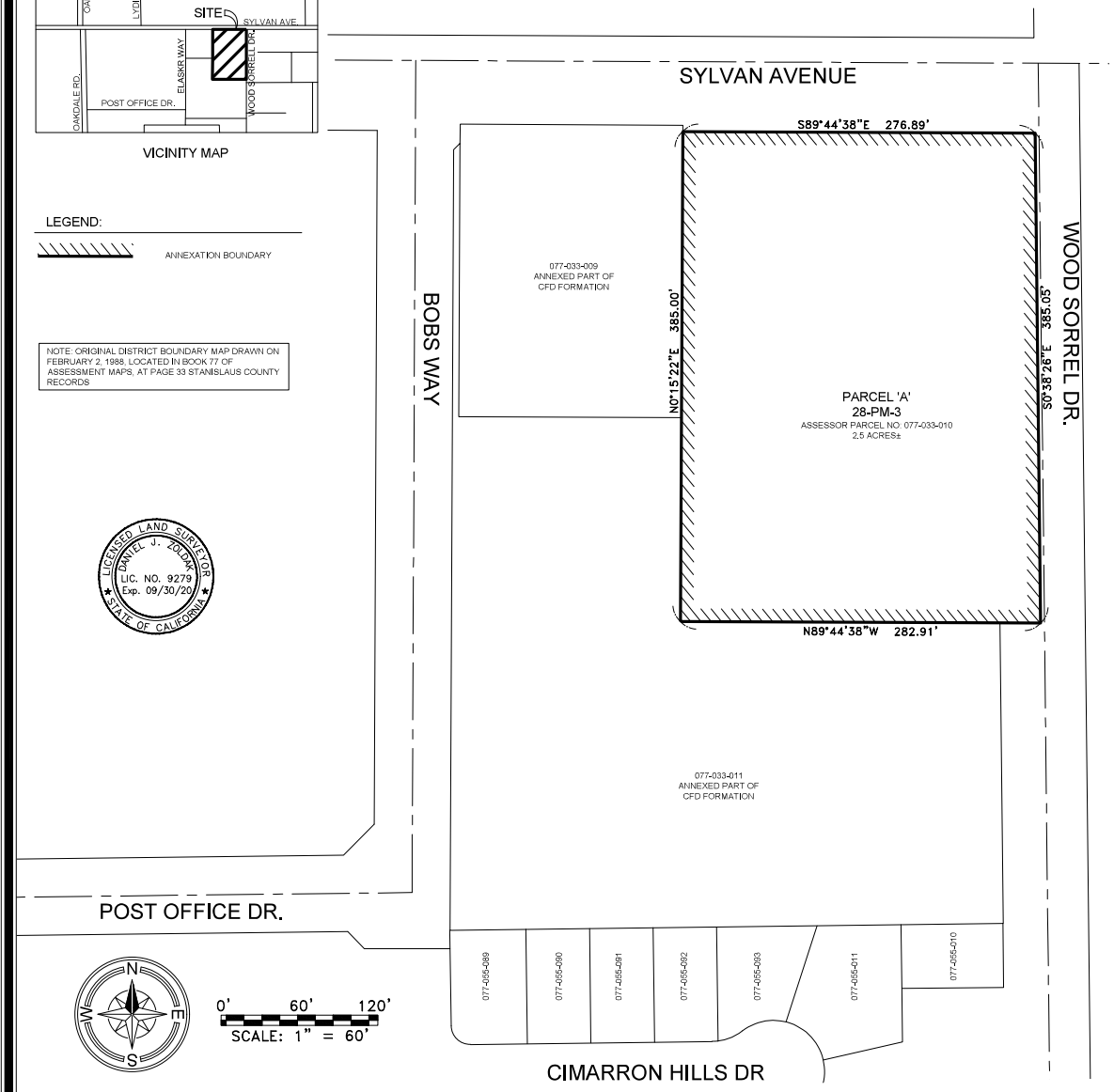
VICINITY MAP

LEGEND:

ANNEXATION BOUNDARY

NOTE: ORIGINAL DISTRICT BOUNDARY MAP DRAWN ON FEBRUARY 2, 1988, LOCATED IN BOOK 77 OF ASSESSMENT MAPS, AT PAGE 33 STANISLAUS COUNTY RECORDS

LICENSED LAND SURVEYOR
DANIEL J. ZOLDAK
LIC. NO. 9279
Exp. 09/30/20
STATE OF CALIFORNIA



0' 60' 120'
SCALE: 1" = 60'

FEBRUARY 27, 2020 SHEET 1 OF 1

Filed in the Office of the City Clerk of the City of Modesto this _____ day of _____, 2020.

STEPHANIE LOPEZ, City Clerk

By: _____
_____
Print Name

I hereby certify that this map showing the proposed boundaries of Annexation No. 18 to City of Modesto Community Facilities District No. 2004-1 (Village One #2), City of Modesto, County of Stanislaus, State of California, was approved by the City Council of the City of Modesto at a regular meeting thereof, held on the _____ day of _____, 2020, by its Resolution No. 2020-___.

STEPHANIE LOPEZ, City Clerk

By: _____
_____
Print Name

This is a map of the area proposed to be annexed to the City of Modesto Community Facilities District No. 2004-1 (Village One #2), City of Modesto, County of Stanislaus, State of California, the Consolidation Boundary Map for which was recorded on November 23, 2005, in Book 4 of Maps of Assessment and Community Facilities Districts, at Page 33, in the Office of the County Recorder, of Stanislaus County, State of California.

A map of Annexation No. 11 to the District was recorded on February 9, 2006 in Book 4 of Maps of Assessment and Community Facilities Districts, at Page 36, in that office.

A map of Annexation No. 12 to the District was recorded on April 26, 2006 in Book 4 of Maps of Assessment and Community Facilities Districts, at Page 42, in that office.

A map of Annexation No. 13 to the District was recorded on September 8, 2006 in Book 4 of Maps of Assessment and Community Facilities Districts, at Page 57, in that office.

A map of Annexation No. 14 to the District was recorded on May 29, 2008 in Book 4 of Maps of Assessment and Community Facilities Districts at Page 98.

A map of Annexation No. 15 to the District was recorded on November 4, 2016 in Book 5 of Maps of Assessment and Community Facilities Districts at Page 52.

A map of Annexation No. 16 to the District was recorded on November 9, 2017 in Book 5 of Maps of Assessment and Community Facilities Districts at page 67.

A map of Annexation No. 17 to the District was recorded on June 11, 2019 in Book 5 of Maps of Assessment and Community Facilities Districts at page 87.

STEPHANIE LOPEZ, City Clerk

By: _____
_____
Print Name

Filed this _____ day of _____, 2020 at the hour of _____ o'clock ___. m. in Book _____ of Maps of Assessment and Community Facilities Districts at page(s) _____ in the Office of the County Recorder of the County of Stanislaus, State of California.

DONNA LINDER, County Recorder of the
County of Stanislaus, State of California

By: _____
_____
Print Name

LARS ANDERSEN & ASSOCIATES, INC.
CIVIL ENGINEERS - LAND SURVEYORS - PLANNERS
4694 WEST JACQUELYN AVENUE, FRESNO CALIFORNIA 93722
TEL: 559 276-2790 FAX: 559 276-0850 WWW.LARSANDERSEN.COM

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-245

RESOLUTION APPROVING THE FIRST AMENDMENT INCREASING THE AGREEMENT AMOUNT WITH GOODWIN CONSULTING GROUP (GCG), FOR THE ADMINISTRATION OF THE CITY COMMUNITY FACILITIES DISTRICTS SERVICES BY $111,900 FROM $155,200 TO A NEW TOTAL AMOUNT NOT TO EXCEED $267,100, AND EXTENDING THE TERM OF THE AGREEMENT FROM JUNE 30, 2020 TO JUNE 30, 2022, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AGREEMENT

WHEREAS, on May 8, 2018, by Resolution 2018-170, the City entered into a three-year Professional Consultant Services agreement with Goodwin Consulting Group in the amount of $155,200 for the annual administration of Community Facilities Districts (CFDs), and

WHEREAS, the City has determined that CFDs and Assessment Districts (ADs) are necessary funding mechanisms to construct and maintain infrastructure for new development areas, and

WHEREAS, since 1996, the City of Modesto has formed fourteen Community Facilities Districts ("CFDs") pursuant to the "Mello-Roos Community Facilities Act of 1982", and

WHEREAS, the City has been working with Goodwin Consulting Group in the annual administration of the fourteen CFD's, since 2001, and

WHEREAS, as part of the annual CFD administration services, Goodwin Consulting Group will oversee the preparation and dissemination of SEC-required continuing disclosure reports to the municipal bond market, arbitrage rebate and yield reduction calculations for tax-exempt bond issues, annual reporting to the California Debt and Investment Advisory Commission, bond payoff calculations for property owners, inquiries from taxpayers, and tax delinquency monitoring and foreclosure assistance, and

WHEREAS, in accordance with Modesto Municipal Code 8-3.204(a), Exceptions to Formal Bidding Requirements, the agreement is for professional services and, therefore, exempt from the bidding requirement, and

WHEREAS, the Goodwin Consulting Group contract will be paid through the annual maintenance tax of each CFD, and

WHEREAS, the City would like to extend the term of the agreement with Goodwin Consulting Group from June 30, 2020 through June 30, 2022 for a new total amount not to exceed $267,100.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the first amendment with Goodwin Consulting Group for administration of the City Community Facilities Districts services by $111,900 from $155,200 to a new total amount not to exceed $267,100, and extending the term of the agreement from June 30, 2020 to June 30, 2022.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-246

RESOLUTION APPROVING THE PURCHASE OF NINE (9) FORD POLICE INTERCEPTORS TO SONORA FORD, SONORA, CA, FOR A TOTAL AMOUNT NOT TO EXCEED $357,632 AND AUTHORIZING THE PURCHASING MANAGER, OR HER DESIGNEE, TO EXECUTE THE PURCHASE ORDER

WHEREAS, the replacement of nine (9) Police Interceptors was approved by the City Manager and City Council with the adopted Fiscal Year 2019-2020 budget; and

WHEREAS, the strategic replacement of vehicles and equipment is essential in maintaining current operations, facilities, and/or services; and

WHEREAS, these vehicles are classified as emergency response vehicles and will replace various police patrol units that have been involved in collisions and are considered a total loss or units that have reached their mileage cap of 125,000 miles; and

WHEREAS, Modesto Municipal Section 8-3.203 requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid; and

WHEREAS, on February 19, 2020, the Purchasing Division issued RFB 1920-24 for Nine (9) Ford Police Interceptors on the City's website under the commodity code 07000 for Automotive Vehicles and Related Transportation Equipment; and

WHEREAS, eleven (11) companies chose to download the RFB document, three companies chose to respond, none of the bidders were local vendors; and

WHEREAS, on March 17, 2020 bids were formally opened in the City Clerk's office, Sonora Ford, Sonora, CA, was the lowest responsive and responsible bidder; and

WHEREAS, based on providing the overall lowest responsive and responsible bid which conforms to the Modesto Municipal Code, 8-3.203, City staff recommends the award of bid for nine (9) Ford Police Interceptors to Sonora Ford, Sonora, CA.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the purchase of nine (9) Ford Police interceptors to Sonora Ford, Sonora, CA for a total amount not to exceed $357,632.

BE IT FURTHER RESOLVED, that the Purchasing Manager, of her designee, is hereby authorized to execute the purchase order.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-247

RESOLUTION APPROVING THE AWARD OF PROPOSAL AND AGREEMENT FOR FUEL CARD-LOCK SERVICES TO STAN BOYETT & SON, INC. DBA BOYETT PETROLEUM, MODESTO, CA FOR A FIVE-YEAR AGREEMENT WITH TWO ONE-YEAR EXTENSION OPTIONS FOR AN ANNUAL ESTIMATED COST OF $1,800,000, AND A TOTAL AMOUNT NOT TO EXCEED $12,600,000 OVER SEVEN YEARS, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto Fleet Services is required to maintain fuel services for all of the City of Modesto's owned vehicles and equipment; and

WHEREAS, by providing designed fuel cards for vehicles and equipment valid at various approved Boyett Petroleum gas stations in and around the City of Modesto for city-owned vehicles and equipment to obtain fuel; and

WHEREAS, on September 6, 2019 the Stanislaus County General Services Agency (GSA) and the City of Modesto Purchasing Division issued Request for Proposal No. 19-48-AH for Fuel Card-Lock Services; and

WHEREAS, notice of solicitation was posted on the County's website and emailed directly to vendors; and

WHEREAS, on October 18, 2019 proposals were formally opened at the Stanislaus County GSA office. One company chose to respond; and

WHEREAS, Stan Boyett & Son dba Boyett Petroleum, Modesto, CA was the awarded proposer based on the evaluation criteria; and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to be formally bid; and

WHEREAS, an award of bid and agreement for Fuel Card-Lock Services, for citywide use to Stan Boyett & Son dba Boyett Petroleum, Modesto, CA, conforms to the Modesto Municipal Code because the City complied with the formal bid procedures alongside the General Services Agency, Stanislaus County Purchasing Division and Boyett Petroleum was the only bidder.

NOW, THEREFORE, BE IT RESOLVED by the Council and the City of Modesto that it hereby approved the award of proposal and agreement for Fuel Card-Lock Services to Stan Boyett & Son dba Boyett Petroleum, Modesto, CA for a five (5) year agreement with two (2) one-year extension options for an annual cost of $1,800,000 and a total amount not to exceed $12,600,000 over seven years.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement in form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-248

RESOLUTION APPROVING THE EXTENSION OF THE COMPOST FACILITY FLEXIBLE SALES PRICING PILOT PROGRAM APPROVED ON APRIL 2, 2019 FOR TWO ADDITIONAL YEARS EFFECTIVE JUNE 1, 2020 THROUGH MAY 31, 2022, AND ESTABLISHING A $60 TIP FEE, PLUS AN ANNUAL CONSUMER PRICE INDEX ADJUSTMENT, FOR CUSTOMERS OUTSIDE CITY OF MODESTO

WHEREAS, the City of Modesto Compost Facility began operation in January 1997 due to the City's waste being comprised of a high level of compostable materials and the City being designated as a City of Trees, and the Compost Facility would provide a way for the City to handle its own green waste and forestry materials, and

WHEREAS, the City also rolled out a two-can residential garbage and recycling collection program which provided a green can for all residential waste, and

WHEREAS, over time that green can functionality has expanded to include all yard waste, paper waste and food waste, and

WHEREAS, the Compost Facility's primary and state mandated purpose is to process the City's diverted yard waste, paper waste, and food waste materials into a reusable soil amendment, this keeping materials from the landfill and lowering our disposal rate, and

WHEREAS, compost is also donated to community gardens and landscape projects, parks, schools, churches, and for use in our own City projects, and

WHEREAS, annually the Facility receives approximately 55,000 tons of raw compostable waste materials and processes it into about 25,000 tons of compost, and

WHEREAS, in Fiscal Year 2017-2018 SCS Engineers, Inc. was hired to conduct a comprehensive review of the City's solid waste system, including the compost facility and

AMENDED ON JUNE 8, 2021 BY RESOLUTION 2021-218

its operations, and

WHEREAS, one of the findings discussed the changes in state law that made organic recycling and composting mandatory, and the demands that would have on the facility operationally and financially, but there was no discussion on what the impacts of the new influx of materials would be, or what would happened to the quality of the compost or the market conditions, and

WHEREAS, AB1826 and SB1383 mandate organics recycling resulting in a 75% diversion of organics materials out of landfills and into composting facilities, yet there are no laws mandating the public or private sectors purchase the finished product back, and

WHEREAS, the new supply of material is estimated to be over 20 million tons annually which creates an overabundance of product inventory statewide and the competition makes pricing and materials quality key factors for moving the project, and

WHEREAS, the new supply of incoming organics material is heavily contaminated with glass, plastics, and trash, and

WHEREAS, an increase in public education and enforcement will help over time, but expensive machinery and labor-intensive efforts are needed long term to separate out the contamination, and

WHEREAS, due to the contamination levels, compost sales have dropped by 40% and created an oversupply of product at the facility and storing the material can lead to permit violations, and

WHEREAS, this product needs to be moved in order to continue processing incoming material, and while some of the product can be spread on City land, due to the glass it is not feasible to use it in City parks or sports fields, and nut farmers have even

diminished their use of the product, and

WHEREAS, on June 12, 2018, by Resolution No. 2018-240, Council approved the pricing for compost product sales with an annual Consumer Price Index (CPI) adjustment each year, and on April 2, 2019, by Resolution No. 2019-140, Council approved a flexible pricing pilot program for one year to help with the oversupply of product and to determine its effectiveness in moving product, and

WHEREAS, under the flexible pricing pilot program, the Integrated Waste Program Manager was able to advertise and offer discounted pricing such as seasonal or oversupply specials up to 50% off the product as necessary to make room on the site to try and stay in compliance with state law, and

WHEREAS, since the Flexible Sales Pricing Pilot Program was approved, the Compost Facility recorded approximately 15 bulk-sale customers (purchases over 100 tons) receiving as much as 50% off, and

WHEREAS, the bulk purchases totaled 10,384 tons through early January 2020 when in comparison to the same time period of April 2018 through January 2019, the bulk sales were only 6,249 tons, and

WHEREAS, the ability to move product is a critical component of our composting operations and permit regulations, and the pilot showed it was evident that having the ability to negotiate pricing and offer competitive rates was a benefit to the facility, and

WHEREAS, staff would like to further extend the pilot program for two more years offering up to 75% specials for seasonal and oversupply demands to try to keep the Compost Facility in permit compliance and add room for incoming product processing, and

WHEREAS, staff continues to receive calls and inquiries about taking in more product from outside the City of Modesto, and due to limited capacity and the need to be selective, staff is proposing establishing a non-Modesto customer tip fee of $60/ton, and

WHEREAS, the tip fee is a critical revenue element in addressing the ever-increasing labor, equipment, and regulatory costs to process material from the mandated state diversion requirements, and

WHEREAS, under the current tip fee of $27.59/ton there is an estimated budget shortfall of $400,000 in FY 2020/2021 especially as the need to replace aging equipment is at the forefront, and

WHEREAS, a tip fee increase to non-Modesto customers will help increase revenues and assist in reducing the budget shortfall without impacting City of Modesto customers, as well as affording the facility the opportunity to be more selective in the material allowed in which will help control labor costs, equipment usage, and improve the quality of the finished product which ultimately impacts sales, and

WHEREAS, surveys conducted indicate that the average tip fee for landfills, transfer stations, and compost facilities ranges from $45/ton to $90/ton, and

WHEREAS, the facility has customers willing to pay and even do long-term contracts with good quality material for $60/ton.

NOW, THEREFORE, BE IT RESOLVED, by the Council of the City of Modesto that it hereby approves the extension of the Compost Facility Flexible Sales Pricing Pilot Program to become effective June 1, 2020 through May 31, 2022 wherein the Integrated Waste Program Manager would be able to advertise and offer discounted pricing such as. seasonal or oversupply specials up to 75% off of the compost product for sale, and

establish a $60/ton tip fee, plus annual CPI, for customers outside City of Modesto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, Acting City Attorney

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-249

RESOLUTION APPROVING A REVISED LIST OF PROJECTS TO BE FUNDED WITH ROAD REPAIR AND ACCOUNTABILITY ACT TAX PROCEEDS IN FISCAL YEAR 2020-21, AND RESCINDING RESOLUTION NUMBER 2020-180

WHEREAS, Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017 (Chapter 5, Statues of 2017) was passed by the Legislation and Signed into law by the Governor in April 2017 to address the significant multi-modal transportation funding shortfalls statewide, and

WHEREAS, SB 1 includes accountability and transparency provisions that will ensure the residents of our City are aware of the projects proposed for funding in our community and which projects have been completed each fiscal year, and

WHEREAS, the City must adopt by resolution a revised list of projects proposed to receive fiscal year funding from the Road Maintenance and Rehabilitation Account (RMRA), created by SB 1, which must include description and the location of each proposed project, a proposed schedule for projects completion, and the estimated useful life of the improvement, and

WHEREAS, the City will receive an amount less than the original estimated $4,064,467 in RMRA funding in Fiscal Year 2020-21 from SB 1, and

WHEREAS, the result of the COVID-19 pandemic, events have been canceled, unemployment has increased, and travel has drastically been minimized, all of which has greatly affected state and local revenues, and

WHEREAS, the estimated funding reduction of 15 - 30% would result in the original projected amount of $4,064,467 being reduced to between $3,454,797 and $2,845,127 for FY 20/21, and

WHEREAS, the City project list reflects a reduced funding amount, and

WHEREAS, due to the anticipated reduction in funding, the following two projects were removed from the original list and will be deferred to a future time when funding is available: High Voltage Street Light Maintenance and Upgrade Video Detection, and

WHEREAS, projects listed result in the following life-cycle benefits: Slurry seal project that includes crack seal and asphalt repairs will result in a five to seven-year life extension to existing pavement. Traffic signal and street light maintenance will result in a ten-year extension. Traffic sign and striping maintenance will result in a five-year life extension.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto, that it hereby approved the list of projects **(Attachment A)** for Fiscal Year 2020-21 and funding by SB1: Road Repair and Accountability Act of 2017.

BE IT FURTHER RESOLVED, that Resolution No. 2020-180 be hereby rescinded.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 2nd day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Ridenour, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, ~~Acting City~~ Attorney

Attachment A – FY20/21 SB1 Project List

Project Type	FY 2020-21 Project Name	Total Project Cost	Estimated Project Start Date	Estimated Project Completion Date	Community Benefit Summary
Slurry Seal	Slurry Seal	$1,200,044	May 1, 2020	Sept. 30, 2020	Increase Street life by five to seven years
Crack Seal	Crack Seal	$271,810	Oct.1, 2020	May 1, 2021	Increase Street life by five to seven years
Asphalt Repairs (Dig Outs)	Asphalt Repairs	$200,000	Oct.1, 2020	May 1, 2021	Increase Street life by five to seven years
Traffic Signal & Street Lighting Maintenance	Traffic Signal & Street Lighting Maintenance	$998,690	July 1, 2020	June 30, 2021	LED lighting has ten-year life and is energy efficient
Traffic Sign & Striping Maintenance/Printer	Traffic Sign & Striping Maintenance	$594,190	July 1, 2020	June 30, 2021	Two to five-year life for striping and five-year life for signs
	Total FY 20/21	$3,264,734			

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-250

RESOLUTION APPROVING A FIRST AMENDMENT TO THE LEGAL SERVICES AGREEMENT WITH MEYERS, NAVE, RIBACK, SILVER & WILSON ("MEYERS NAVE"), A PROFESSIONAL LAW FIRM, TO PROVIDE CITY ATTORNEY SERVICES FOR THE CITY, APPOINTING JOSE M. SANCHEZ AS CITY ATTORNEY, EFFECTIVE JUNE 2, 2020, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE THE AMENDMENT

WHEREAS, Meyers Nave has successfully served the City of Modesto as City Attorney and Special Counsel on a wide variety of critical City projects since the Fall of 2013; and

WHEREAS, on May 13, 2014, by Resolution No. 2014-186, Council approved a Legal Services Agreement with Meyers Nave, a professional law firm, to provide City Attorney services for the City, and appointed Adam U. Lindgren as City Attorney; and

WHEREAS, in January 2020, City Attorney Adam Lindgren began a medical leave of absence; and

WHEREAS, in City Attorney Lindgren's absence, Council appointed the Assistant City Attorney Jose M. Sanchez as Acting City Attorney on February 4, 2020; and

WHEREAS, continuing in his recovery, City Attorney Lindgren requested that Acting City Attorney Sanchez be formally appointed as City Attorney, to replace Attorney Lindgren; and

WHEREAS, on June 2, 2020, City Council reported out of Closed Session that City Attorney Adam U. Lindgren, was doing well in his recovery, would not be returning to the City from his medical leave of absence, and that the Council had selected Jose M. Sanchez as the new City Attorney.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a First Amendment to the Legal Services Agreement with Meyers, Nave, Riback, Silver & Wilson ("Meyers Nave"), a professional law firm, to provide City Attorney services for the City, appointing Jose M. Sanchez as City Attorney, effective June 2, 2020.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is authorized to execute the amendment.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	Madrigal
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

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MODESTO CITY COUNCIL
RESOLUTION NO. 2020-251

RESOLUTION AMENDING FISCAL YEAR 2019-2020 ANNUAL OPERATING AND CAPITAL IMPROVEMENT FUND BUDGETS AND AUTHORIZING THE CITY MANAGER, TO TAKE THE NECESSARY STEPS TO IMPLEMENT THE PROVISIONS OF THIS RESOLUTION

WHEREAS, a financial analysis has been completed and it has been determined that a budget adjustment is required to the Annual and Capital Improvement Budgets of the City of Modesto for Fiscal Year 2019-20.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the Fiscal Year 2019-20 Annual Operating and Capital Improvement budget as shown in **Exhibit A**, which is **attached** hereto and incorporated by reference herein.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

EXHIBIT A

FISCAL YEAR 2019-20

COMMUNITY AND ECONOMIC DEVELOPMENT

- A budget adjustment in the amount of $3,551,707 is necessary to establish the transfer from Project 101254 – Transfer of NSP2 Funds to CDBG, and budget the transfers in to the following projects:
    - 101219 – Youth Access Center $478,386
    - 101215 – Kansas House Project $2,527,942
    - 101209 – PFI South MLK S&R $295,379
    - 1130-14010-61130-000000-01330 $250,000

  The US Department of Housing and Urban Development (HUD) has authorized these funds to be used in accordance with the approved City CDBG Annual Action Plan. These funds are currently held in project 101254, and a budget adjustment is necessary to create the transfer of funds to the projects listed above and allocate to the projects discretionary expense budgets.

FIRE DEPARTMENT

- A budget adjustment is necessary to amend the Industrial Fire District budget as approved in Fund 6100, JPA-Industrial Fire Fund, by the Industrial Fire Board in December 2019. The revenues are being increased by $74,910, which is offset by an increase to the expense of the final disbursements to the JPA members by $74,910.

PARKS RECREATION & NEIGHBORHOODS

- A budget adjustment is necessary to appropriate the revenue and expenditure budget for the Modesto Tourism and Marketing District (MTMD) agreement. This agreement was approved by Council on January 28, 2020 and established a Modesto Tourism Marketing District Owner's Association agreement that provides marketing and promotional programs intended to increase hotel room night sales at all hotels paying into the MTMD. The agreement set up the City as a pass-through agency for the Convention and Visitor's Bureau for this program but when the item was brought forward to Council the resolution to establish appropriation authority was not included. This adjustment will correct that action and establish a revenue budget of $286,499 and an expenditure budget of $286,499 in accounts 0100-34301-47056 (Special Assessments - Modesto Tourism Marketing District) and 0100-34301-53505 (Intergovernmental Services - Other), respectively.

- A budget adjustment is necessary to amend the Tuolumne Regional River Park Joint Power Agreement (TRRP JPA) budget in the amount of $54,418. To increase the operating budget by $29,059 for tree trimming and to increase the transfer from the TRRP JPA Fund to the TRRP CIP Fund by $25,039. These adjustments have been approved by the TRRP JPA Commission.

- A budget adjustment is necessary in the amount of $222,874 for the Little Legion Hall Fire Demo project within the TRRP CIP Fund by recognizing insurance claim proceeds

received from the fire at the Little Legion Hall and programming offsetting expenses for improvements to Legion Hall as approved by the TRRP JPA Commission.

PUBLIC WORKS

- *The following adjustments are being made from the various city Fleet Replacement sub-funds to the Fleet Replacement Fund (5409). This action is being done to reimburse the Fleet Replacement Fund (5409) for vehicle purchases that had been made as required by fund accounting rules in FY 19-20 for the October 2019 – March 2020 period. Below is a table showing the net effect in each sub-fund as a result of the various adjustments.*

Fund	*Fund Name*	*Net Impact of Adjustments*
1709	Surface Transportation Fleet Replacement	$227,700
4109	Water Fleet Replacement Fund	$455,917
4219	Wastewater Fleet Replacement Fund	$28,974
4489	Storm Drainage Fleet Replacement Fund	$187,991
5410	GF Equipment Replacement	$178,699
	Total Transfer Outs	**$1,079,281**
5409	Transfer In – Fleet Management Fleet Replacement	$1,079,281
	Total Transfer Ins	**$1,079,281**

A budget adjustment is necessary to establish a transfer in the amount of $227,700 from Surface Transportation Fleet Replacement Fund 1709 to Fleet Replacement Fund 5409 for purchases made in FY 19/20: (2) Tractor Loader w/ Backhoe and (2) concrete grinders.

A budget adjustment is necessary to establish a transfer in the amount of $455,917 from Water Fleet Replacement Fund 4109 to Fleet Replacement Fund 5409 for purchases made in FY 19/20: (1) truck hydro excavator.

A budget adjustment is necessary to establish a transfer in the amount of $28,974 from Wastewater Fleet Replacement Fund 4219 to Fleet Replacement Fund 5409 for purchases made in FY 19/20: (1) Truck ¾ Ton regular cab with long bed.

A budget adjustment is necessary to establish a transfer in the amount of $187,991 from Storm Drainage Fleet Replacement Fund 4489 to Fleet Replacement Fund 5409 for purchases made in FY 19/20: (2) loaders with claw attachments.

A budget adjustment is necessary to establish a transfer in the amount of $178,699 from General Fund Equipment Fleet Replacement Fund 5410 to Fleet Replacement Fund 5409 for purchases made in FY 19/20: (1) Sedan Investigation, (1) Sedan Patrol, (1) Sedan Patrol K-9, (1) Truck ½ ton extended cab, (1) Sedan, and (1) SUV 4x2.

- A budget adjustment is necessary to increase the Fleet Management Fund (5400) revenue (vehicle and equipment maintenance-Interfund account) and expense (professional services account) budget by $518,727 due to the increase in City vehicle and equipment rentals. As part of the new rental policy and to allow for more appropriate tracking of rentals, all expenses related to equipment and vehicle rentals are incurred within the Fleet Management Fund and are offset with revenue collected through the Fleet monthly O&M billing.

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-252

RESOLUTION APPROVING THE AWARD OF PROPOSAL AND AGREEMENT FOR CYBERSECURITY AUDIT SERVICES TO SECURANCE LLC, OF TAMPA, FL, FOR A TOTAL COST NOT TO EXCEED $170,376; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the Information Technology (IT) Department's focus is to provide technology services that are available, reliable and secure, and

WHEREAS, the cybersecurity audit will provide an assessment of security controls so that they can systematically identify programmatic weaknesses and where necessary, establish targets for continuing improvement of the City of Modesto's security operations, and

WHEREAS, at the completion of the project a detailed security audit report will be provided including an assessment of security policies, practices, procedures, a security gap analysis and a prioritized remediation roadmap, and

WHEREAS, the City of Modesto issued its Request for Proposal (No. 1920-13) for an IT Security Audit on October 9, 2019, and

WHEREAS, an RFP Evaluation Committee, comprised of three staff members from the IT Department proposals, and

WHEREAS, based upon the final scores, the RFP Evaluation Committee recommended awarding the agreement to Securance LLC of Tampa, FL for a total cost not to exceed $170,376, and

WHEREAS, Modesto Municipal Code Section 8-3.203 generally requires all purchases, which meet or exceed $50,000 for material, equipment or contractual services to follow formal bid procedures and RFP No. 1920-13 conforms with this MMC.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the award of proposal and agreement to Securance LLC, of Tampa, FL, for a total cost not to exceed $170,376.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-253

RESOLUTION APPROVING THE APPLICATION FOR GRANT FUNDS FOR THE RECREATIONAL TRAILS AND GREENWAYS GRANT PROGRAM IN AN AMOUNT OF $2,968,885 TO FUND DESIGN AND CONSTRUCTION OF THE TUOLUMNE RIVER REGIONAL PARK (TRRP) RIVERWALK – GATEWAY TO NEECE DR PROJECT AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO ACCEPT AND UTILIZE THE GRANT AWARD

WHEREAS, the Recreational Trails and Greenways (RTGG) Grant Program is funded by State of California Parks and Water Bond Act of 2018 (Proposition 68): and

WHEREAS, RTGG funds are made available on a competitive basis to provide assistance to local agencies and community-based organizations with regard to the development non-motorized infrastructure development and enhancements that promote new or alternate access to parks, waterways, outdoor recreational pursuits, and forested or other natural environments to encourage health-related active transportation and opportunities for Californians to reconnect with nature: and

WHEREAS, the Legislature and Governor of the State of California have provided funds for the program shown above; and

WHEREAS, the California Natural Resources Agency has been delegated the responsibility for the administration of this grant program, establishing necessary procedures; and

WHEREAS, said procedures established by the California Natural Resources Agency require a resolution certifying the approval of application(s) by the Applicant's governing board before submission of said application(s) to the State; and

WHEREAS, the Applicant, if selected, will enter into an agreement with the State of California to carry out the project.

NOW, THEREFORE, BE IT RESOLVED that the City of Modesto:

1. Approves the filing of an application for the TRRP Riverwalk - Gateway to Neece Dr Project; and

2. Certifies that Applicant understands the assurances and certification in the application; and

3. Certifies that Applicant or title holder will have sufficient funds to operate and maintain the project(s) consistent with the land tenure requirements; or will secure the resources to do so; and

4. Certifies that it will comply with all provisions of Section 1771.5 of the California Labor Code; and

5. If applicable, certifies that the project will comply with any laws and regulations including, but not limited to, the California Environmental Quality Act (CEQA), legal requirements for building codes, health and safety codes, and disabled access laws, and that prior to commencement of construction all applicable permits will have been obtained; and

6. Certifies that Applicant will work towards the State Planning Priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety as included in Government Code Section 65041.1; and

7. Appoints the City Manager, or designee, as agent to conduct all negotiations, execute and submit all documents including, but not limited to, applications, agreements, payment requests and so on, which may be necessary for the completion of the aforementioned project(s).

BE IT FURTHER RESOLVED that the City Manager or his designee is hereby authorized to accept and utilize the grant award.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-254

RESOLUTION APPROVING AMENDMENT NO. 2 TO THE SITE LEASE AGREEMENT WITH NCWPCS MPL 24 - YEAR SITES TOWER HOLDINGS LLC, TO INCREASE THE EXISTING CELL TOWER LEASE TERMS AT DAVIS PARK TO ALLOW FOR UP TO SIX ADDITIONAL, FIVE-YEAR RENEWAL OPTIONS AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AGREEMENT

WHEREAS, the City of Modesto partners with various cellular service providers by leasing city property for cell towers, and

WHEREAS, these partnerships are a benefit to the residents of the City of Modesto by improving cellular service coverage throughout Modesto, improving coverage for the FCC mandated E911 Services, and also provide annual revenue to the City of Modesto to maintain the City park system, and

WHEREAS, on August 10, 1993, by Resolution No. 93-469, Council approved a 5-year lease agreement with Modesto Cellular Partnership for 1,820 square feet at Davis Park including five (5) extensions of five (5) years each, and

WHEREAS, on January 7, 2003, by Resolution No. 2003-15, Council approved the first amendment to the agreement with the new tenant/operator AT&T Wireless Services of California, including updating the payment terms and approving certain site improvements by the tenant, and

WHEREAS, on October 12, 2013 AT&T, with the consent of the City of Modesto, assigned this lease to the management of Crown Castle Corporation, and notified the City that the site ownership has been assigned to the AT&T subsidiary NCWPCS MPL 24 - Year Sites Tower Holdings, LLC, and

WHEREAS, in February 2018, the City of Modesto was notified by Crown Castle that AT&T would like to amend the existing contract to provide long-term security for subleasing, and

WHEREAS, the amendment includes the following terms:

1) Term extension: Six (6) additional, five (5) year renewal terms which would extend the final contract expiration term until October 31, 2053.

2) Rent escalation: The City has requested a rent escalation of 3% annually on the anniversary of the amendment.

3) Signing Bonus: AT&T will pay the City $12,500 as a signing bonus conditional upon execution of the amendment.

4) Revenue Share: AT&T agrees to pay to the City twenty-five percent (25%) of the rental, license or similar payments actually received from future subtenants.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves Amendment No. 2 to the Site Lease Agreement with NCWPCS MPL 24 - Year Sites Tower Holdings LLC, to increase the existing cell tower lease terms at Davis Park to allow for up to six (6) additional, five-year renewal options.

BE IT FURTHER RESOLVED, that the City Manager, or his designee, is hereby authorized to execute the agreement, in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-255

RESOLUTION ACCEPTING PROPOSITION 68 SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM PLANNING – ROUND 3 GRANT AWARD OF $1,000,000, ON BEHALF OF THE STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION GROUNDWATER SUSTAINABILITY AGENCY AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE ALL GRANT-RELATED DOCUMENTS AND ANY AMENDMENT OR CHANGES THERETO

WHEREAS, in September of 2014, Governor Edmund G. Brown signed into law, the Sustainable Groundwater Management Act of 2014, which changed the method for groundwater management, and

WHEREAS, the Sustainable Groundwater Management Act is a comprehensive three-bill package that sets the framework for statewide sustainable groundwater management by local agencies, and

WHEREAS, the Sustainable Groundwater Management Act requires that a Groundwater Sustainability Agency be formed for all groundwater basins designated by the Department of Water Resources (DWR) as high-priority basins, and

WHEREAS, on January 24, 2017 by Resolution No. 2017-030, Council authorized a Groundwater Sustainability Agency Memorandum of Understanding with the Stanislaus and Tuolumne Rivers Groundwater Basin Association (STRGBA), and

WHEREAS, on August 14, 2019 the STRGBA Groundwater Sustainability Agency (STRGBA GSA) appointed the City to be lead applicant, and

WHEREAS, on October 22, 2019 by Resolution 2019-480, Council approved the submittal of an application on behalf of the STRGBA GSA to the DWR to obtain grant funding.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the acceptance of a Proposition 68 Sustainable Groundwater Management Grant Program Planning – Round 3 grant award of $1,000,000 on behalf of the STRGBA GSA.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute all grant-related documents and any amendment or changes thereto.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-256

RESOLUTION APPROVING THE FIRST AMENDMENT TO THE AGREEMENT WITH DAVID KEITH TODD CONSULTING ENGINEERS, INC., DBA TODD GROUNDWATER, FOR THE PREPARATION OF A GROUNDWATER SUSTAINABILITY PLAN AND RELATED TECHNICAL STUDIES FOR THE GSP MODESTO SUBBASIN PROJECT IN THE AMOUNT OF $1,000,000, FOR A NEW NOT TO EXCEED AMOUNT OF $2,469,296, AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE AMENDMENT TO THE AGREEMENT

WHEREAS, on August 14, 2018, per Resolution No. 2018-340, Council approved an agreement with David Keith Todd Consulting Engineers, Inc., DBA Todd Groundwater for the preparation of a Groundwater Sustainability Plan and Related Technical Studies for the GSP Modesto Subbasin Project, in an amount not to exceed $1,469,296, and

WHEREAS, on August 14, 2019 the City was appointed lead applicant on behalf of the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA), and

WHEREAS, on September 9, 2019 the Department of Water Resources (DWR) opened Round 3 of the Proposition 68 Sustainable Groundwater Management Grant Program, and

WHEREAS, on October 22, 2019 by Resolution 2019-480 Council authorized the submittal of an application on behalf to the STRGBA GSA to DWR for additional grant funding, and

WHEREAS, on March 13, 2020 the City, on behalf of the STRGBA GSA received a notice of award for $1,000,000 in grant funding to cover the cost in full for additional work to be performed by Todd Groundwater.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves a First Amendment to the Agreement with Todd Groundwater, for the preparation of a Groundwater Sustainability Plan and Related Technical Studies for the GSP Modesto Subbasin Project in the amount of $1,000,000 for the identified scope of services, for a new total not to exceed of $2,469,296.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute the First Amendment to the Agreement in a form approved by the City Attorney.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-257

RESOLUTION AMENDING THE FISCAL YEAR 2019-2020 MULTI-YEAR PROJECT BUDGET IN THE AMOUNT OF $1,000,000 TO BE TRANSFERRED INTO THE PROJECT FROM WATER FUND RESERVES IN ORDER TO FULLY FUND THE GROUNDWATER SUSTAINABILITY PLAN MODESTO SUBBASIN PROJECT

WHEREAS, certain budgetary transactions are necessary in the amount of **$1,000,000**, in order to fund the Groundwater Sustainability Plan Modesto Subbasin Project, and

WHEREAS, the Fiscal Year 2019-2020 Multi-Year Project Budget must be amended as shown in **Exhibit A**, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves the amendment of the Fiscal Year 2019-2020 Multi-Year Project Budget as shown in **Exhibit A**, **attached** hereto.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Kenoyer, who moved its adoption, which motion being duly seconded by Councilmember Grewal, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Grewal, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	None

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

EXHIBIT A

The purpose of this action is to amend the budget of Multi-Year Project 101131 – GSP Modesto Subbasin in the amount of $1,000,000 to cover expenses associated with a First Amendment to the Agreement with Todd Groundwater for the Preparation of a Groundwater Sustainability Plan and Related Technical Studies for the Modesto Subbasin and to record Proposition 68 Sustainable Groundwater Management Grant Program funds of an equal amount.

	Current Budget	Proposed Adjustment	Revised Budget
Revenue			
Intergov - State Department of Water Resources	$ 1,000,000.00	$ 1,000,000.00	$ 2,000,000.00
Expenses			
Appr Unit C - Discretionary Expenses	$ 1,776,225.00	$ 1,000,000.00	$ 2,776,225.00

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-258

RESOLUTION AUTHORIZING AN AMOUNT OF $1,171,057 TO A REVISED TOTAL AMOUNT OF 3,797,057 TO FUND CLAIMS SETTLEMENTS; AND AUTHORIZING THE CITY MANAGER, OR HIS DESIGNEE, TO EXECUTE THE SETTLEMENTS

WHEREAS, the City of Modesto provides its employees with employee and dependent health insurance coverage; and

WHEREAS, following notice of the current health plan provider's failure to pay outstanding claims, initiated the need for the City to determine most effective way to negotiate unpaid outstanding claims; and

WHEREAS, by Resolution No. 2019-147, the Council approved an agreement with S&S Healthcare Strategies, Ltd. for negotiation of unpaid medical claims; and

WHEREAS, the Council approved the full reimbursement of employees who paid claims on or before March 1, 2019 that should have been paid by previous plan provider, Riverstone Capital; and

WHEREAS, by Resolution No. 2019-147, the Council approved the use of $2,626,000 of Employee Benefits Fund reserves for initial funding of employee reimbursement, claims negotiation and settlement in the amount of $2,626,000; and

WHEREAS, the City began negotiations with providers; and

WHEREAS, negotiations have been successful but additional funds are needed to continue settling outstanding unpaid claims; and

WHEREAS, the City may fund claims settlement through the Employee Benefit Fund.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves additional funding in the amount of $1,171,057 for a total of 3,757,057 for negotiated settlement of remaining outstanding unpaid medical claims with cooperating providers.

BE IT FURTHER RESOLVED that the Director of Human Resources is hereby authorized to serve as the coordinator for the various plans.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to execute all necessary agreements relating to employee and dependent health care to fulfill the intent of this Resolution, in a form approved by Legal Counsel, including such provisions as may be necessary to meet requirements of the Independent Fiduciary.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Grewal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney

PRINT

MODESTO CITY COUNCIL
RESOLUTION NO. 2020-259

RESOLUTION AMENDING THE FISCAL YEAR 2019-20 OPERATING BUDGET IN THE AMOUNT OF $1,998,200 ($827,143 FOR FY19 REMAINING BUDGET AND $1,171,057 FOR THE NEW REQUEST) AND AUTHORIZING THE CITY MANAGER, ORHIS DESIGNEE, TO IMPLEMENT THE PROVISIONS

WHEREAS, funding for the health care contributions mentioned in this agenda item is currently not budgeted in fiscal year 2019-20, and

WHEREAS, certain budgetary actions are required to fulfill this action.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Modesto that it hereby approves amending the fiscal year 2019-20 Operating Budget in the amount of $1,998,200.

BE IT FURTHER RESOLVED that the City Manager, or his designee, is hereby authorized to take the necessary steps to implement the provisions of this resolution.

The foregoing resolution was introduced at a regular meeting of the Council of the City of Modesto held on the 9th day of June, 2020, by Councilmember Ridenour, who moved its adoption, which motion being duly seconded by Councilmember Zoslocki, was upon roll call carried and the resolution adopted by the following vote:

AYES:	Councilmembers:	Ah You, Kenoyer, Madrigal, Ridenour, Zoslocki, Mayor Brandvold
NOES:	Councilmembers:	None
ABSENT:	Councilmembers:	Grewal

ATTEST: _____
STEPHANIE LOPEZ, City Clerk

(SEAL)

APPROVED AS TO FORM:

BY: _____
JOSE M. SANCHEZ, City Attorney