



CITY AUDITOR'S OFFICE
FINAL REPORT



**WATER AND WASTEWATER UTILITIES FISCAL REVIEW
PERFORMANCE AUDIT**

March 11, 2025

Moss Adams LLP
999 Third Avenue, Suite 2800
Seattle, WA 98104
(206) 302-6500



This report is intended for the internal use of the City of Modesto,
and may not be provided to, used, or relied upon by any third parties.

Table of Contents

I. Executive Summary	1
A. Introduction	1
B. Summary of Findings and Recommendations	1
II. Introduction	3
A. Background	3
B. Scope and Methodology	3
C. Statement of Compliance with GAGAS	4
III. Commendations	5
IV. Findings and Recommendations	6
A. Utilities Fund Expenditures	6
B. Funding Mechanisms	10
Appendix A: Sources and Uses Analysis	15
Appendix B: Rate Study Best Practice Checklist	18
Appendix C: Peer Benchmarking	20
Appendix D: Management Response	23

I. EXECUTIVE SUMMARY

A. INTRODUCTION

As part of the City of Modesto's (the City's) fiscal year 2024–2025 internal audit program, Moss Adams LLP (Moss Adams) conducted a review to evaluate the City's fiscal management of its water, wastewater, and storm drain utilities to identify opportunities for improvement in sustainability, effectiveness, equity, and transparency. This included a review of the sources and uses of funds, rate setting, other fees and charges, billing, and policies and procedures. We conducted this performance audit between September 2024 and January 2025 using a four-phased approach consisting of project planning and management, fact-finding, analysis, and reporting.

B. SUMMARY OF FINDINGS AND RECOMMENDATIONS

Findings and recommendations are grouped into two categories: 1) Utilities Fund Expenditures and 2) Funding Mechanisms. Detailed findings and recommendations are provided in [Section IV](#) of this report. The Sources and Uses Analysis is discussed in the [Utilities Capital Project Budgets](#) section (Finding 1) and provided in [Appendix A](#). The City's response to recommendations is included in [Appendix D](#).

FINDINGS AND RECOMMENDATIONS		
Utilities Fund Expenditures		
1.	Finding	The Department lacks a systematic approach to tracking total anticipated project costs within its Capital Improvement Program (CIP), leading to large fluctuations in project costs and raising potential transparency and cash flow issues.
	Recommendation	Clearly document total project anticipated costs, update totals as new projects are added, and evaluate project budget versus actuals to assess trends.
2.	Finding	The City lacks key maintenance data, an asset management system, and staff capacity to effectively address utility-related maintenance needs.
	Recommendation	<ul style="list-style-type: none">A. Collect and track maintenance data including installation dates, renewal periods, and estimated costs.B. Utilize Lucity as an asset management system, or explore other systems to track asset management data more effectively and efficiently.C. Evaluate inspection staffing within the Utilities Department to address maintenance needs.D. Review recruitment strategies and compensation practices for inspectors within the Utilities Department to ensure effectiveness.

FINDINGS AND RECOMMENDATIONS

Funding Mechanisms

3.	Finding	The City's storm drain budget is projected to decline over the next five years, impacting the City's ability to maintain the program that helps prevent flooding and protects the City's water quality.
	Recommendation	<p>A. Evaluate reallocating storm drain fees, establishing development impact fees, and levying special taxes to fund the storm drain program more effectively over time.</p> <p>B. Consider reallocating street sweeping expenditures to be financed by a different fund than the storm drain fund.</p>
4.	Finding	Although water and wastewater rates have increased in recent years, the City has not adjusted related fees in over a decade, which may result in insufficient revenue to cover costs.
	Recommendation	Evaluate water and wastewater fees to ensure costs are adequately covered.
5.	Finding	Despite grant opportunities, the Utilities Department lacks the capacity to pursue and manage grants effectively due to the absence of a dedicated grants management position.
	Recommendation	Consider establishing a dedicated grants management position (potentially as a shared resource for City departments) to streamline the grant application process and reduce the workload on existing staff.

II. INTRODUCTION

A. BACKGROUND

As part of the City’s FY 2024–2025 internal audit program, Moss Adams conducted a review to evaluate the City’s fiscal management of its water, wastewater, and storm drain utilities. This included a review of the sources and uses of funds, rate setting, other fees and charges, billing, and policies and procedures to identify opportunities for improvement in sustainability, effectiveness, equity, and transparency.

The City’s Utilities Department (Utilities, the Department) has four divisions: Administration, Water Services, Wastewater Services, and Engineering Services. The Department plans, designs, constructs, operates, and maintains the infrastructure of all City water, wastewater, and storm drain systems. It also prepares plans and studies to address current and future water resource needs, develops utility rates, and participates in regional water partnerships to improve water operational efficiencies and provide services for nearby districts and agencies. The Department is overseen by a director and has over 250 employees.

B. SCOPE AND METHODOLOGY

This performance audit was conducted between September 2024 and January 2025. It examined utility fiscal management including sources and uses of funds, rate setting, other fees and charges, billing, and policies and procedures to identify opportunities for improvement. This project consisted of four phases that are detailed below.

PHASE		DESCRIPTION
1	Project Initiation and Management	This phase concentrated on comprehensive planning and project management, including identifying employees to interview and documents to review, communicating results, and providing regular updates on project status.
2	Fact-Finding	<p>This phase included interviews, document review, and peer benchmarking.</p> <ul style="list-style-type: none">● Interviews: We conducted interviews with Utilities leaders, managers, and staff, as well as staff in the Budget division and Finance department. Overall, we spoke to 22 City employees. The purpose of these interviews was to gain insights into the current operational environment, including strengths and opportunities for improvement related to fiscal management within Utilities at the City.● Document Review: We reviewed a variety of documents, data, and information provided by the City, including but not limited to budget documents, rate studies, city resolutions, master plans, engineering reports, facilities assessments, customer engagement documents, and billing information.● Peer Benchmarking: We performed peer benchmarking with three peer organizations: the City of Livermore, the City of Tracy, and the Modesto Irrigation District. Our benchmarking analysis included a review and comparison of fiscal management practices.

PHASE		DESCRIPTION
3	Analysis	Based on the information gained during our fact-finding phase, we conducted and consolidated research on relevant industry standards and best practices. We identified potential areas for improvement and developed practical recommendations.
4	Reporting	We communicated the results of our analysis with findings and recommendations, presented first in a draft report we reviewed with management to confirm the practicality and relevance of recommendations before finalizing the report.

C. STATEMENT OF COMPLIANCE WITH GAGAS

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

III. COMMENDATIONS

It is important to note the City's areas of strength and existing good practices that can be leveraged for further improvements. The following is a list of commendations that the Moss Adams team would like to note:

- **Billing:** Interviewees reported the City is in the process of implementing a new billing software set to go live in April or May of 2025. This software will automate some of the manual billing processes that are currently in practice and provide more transparency to customers on their bills through a user-friendly customer portal.
- **Budget Process:** The Department has monthly meetings to monitor and discuss its budget on a regular basis, which is a best practice to support effective financial management and accountability. Many interviewees reported this process is beneficial and collaborative, allowing teams to make budget adjustments as needed. Additionally, interviewees reported that staff track expenses on a granular level which allows the Department to easily identify outliers and variances. This is a strong practice to support the identification of potential issues (e.g., significant variances in budget projections or miscoded expenditures).
- **Customer Satisfaction:** The Department receives feedback from customers through customer service calls and feedback surveys following work requests. Customer feedback has generally been positive over the last few years. Most respondents surveyed by the City (82%) reported an excellent rating on wastewater work orders from 2021 to 2024. All 34 water customers who called the City from 2020 to 2024 on matters related to water had complimentary responses for water utilities.
- **Equity:** To support equitable services, several steps in the City's rate study process involve public engagement through outreach and public hearings. Additionally, the City provides a assistance program that provides discounts on utility bills for residents enrolled in an eligible public assistance program.
- **Rate Study Process:** The City's rate study process is generally aligned with best practices, including sustainable financial management practices from the Environmental Protection Agency's Office of Wastewater Management. A comparison of the City's rate study process to best practices is included in [Appendix B](#).

We would like to commend Utilities staff and management for their willingness to assist us in this assessment process. These commendations, coupled with our findings and recommendations, provide an overview of areas of strengths and weaknesses that can help improve Utilities operations and reduce risk at the City.

IV. FINDINGS AND RECOMMENDATIONS

Our findings and recommendations are grouped into two categories: 1) Utilities Fund Expenditures and 2) Funding Mechanisms.

A. UTILITIES FUND EXPENDITURES

Utilities Capital Project Budgets

1.	Finding	The Department lacks a systematic approach to tracking total anticipated project costs within its Capital Improvement Program (CIP), leading to large fluctuations in project costs and raising potential transparency and cash flow issues.
	Recommendations	Clearly document total project anticipated costs, update totals as new projects are added, and evaluate project budget versus actuals to assess trends.

Most funding for the Utilities Department is generated from charges for services, fees, intergovernmental service agreements, and interest income. Most expenses are related to infrastructure maintenance and capital improvement projects. A detailed analysis of the sources and uses of funds for the City’s Utilities Department is included in Appendix A. Based on the City’s preliminary pro forma budget reports for FY24, the City’s revenues for water, wastewater, and storm drain services were insufficient to cover expenses. Staff reported this was largely due to unanticipated increases in capital improvement expenses. This condition required the City to use reserve funds to cover expenses in FY24.

The City at large does not require total anticipated project costs be tracked in the CIP or other public documents. The Department uses internal cash flow forecasting spreadsheets to manage project costs, but these documents are not consistently maintained or publicly accessible, impacting transparency around total capital project costs.

The Department documents the design portion of a project in the CIP budget as these are known costs at the beginning of the project. Later, when construction contracts are awarded, the CIP budget is increased to account for these costs. As the project continues, the budget is adjusted to account for other project changes such as combing projects or changing project scopes. In reviewing three CIP projects, we found the original budget (which only represented the design portion) had large percentage increased throughout the project following approval of the construction phase.

Project Number	FY22-23 Budget (Design Portion)	Total Budget Adjustments (Construction Portion)	FY24-25 Budget (Total Project Cost)	Percent Increase
101094	\$7,560,000	\$15,024,837	\$22,584,837	199%
100535	\$3,039,400	\$5,526,488	\$8,565,888	182%

Project Number	FY22-23 Budget (Design Portion)	Total Budget Adjustments (Construction Portion)	FY24-25 Budget (Total Project Cost)	Percent Increase
100851	\$240,000	\$11,059,582	\$11,299,582	4608%

In addition, the Department’s total CIP budgets show significant increases in multiple capital projects since FY23. Utilities capital project budgets increased nearly \$23 million between FY23 and FY24 and are projected to increase another \$84 million between FY24 and FY25. It is difficult to determine the reason for these increases because the Department uses a phased budget approach. This phased approach results in an inability to verify the initial project cost estimates, as discrepancies often arise from the inclusion of additional projects or costs not originally accounted for. Additionally, this approach lacks a realistic total project estimate that may lead to funding shortfalls that require the use of reserves. Cost overruns on Utilities capital projects are an industry challenge. All peer organizations reported some challenges with budget overruns, due to increased inflation in recent years and challenges accurately estimating costs.

Accurate and complete estimates are important to ensure sufficient funds are available from a project’s initiation to completion, while minimizing the use of reserve funds or the need for additional financing. In FY24 the Department had to draw \$17,618,204 in reserves from water and wastewater funds to cover the increase in capital project spending. Inaccurate, phased estimates and insufficient budget monitoring can impact effective financial management and public trust in the City’s capital project budgeting processes.

The Department should clearly document total project anticipated costs, update totals as new projects are added, and evaluate project budget versus actuals to assess trends. The Department should first clearly document total project anticipated costs that includes an estimate for all project phases. These estimates are likely to change throughout the project but a total estimated cost will help in planning the project to ensure the City has sufficient funds and resources to complete the project.

The Department should also update totals as new projects are added. As noted, changes are likely to occur throughout the project. These changes, including the addition of new projects should be added to the project budget as they occur. This practice will help the City evaluate the impact of combining projects to potentially save costs and resources and ensure funds are used effectively. This will also provide better transparency in cases of cost savings or budget overruns.

Finally, the Department should report project budget versus actuals to assess trends such as financial accountability or project efficiency in cases of budget savings. When significant budget overruns occur, projects should be evaluated for the cause to determine if practices should be adjusted such as changing how project budgets are estimated.

Asset Maintenance Needs

2.	Finding	The City lacks key maintenance data, an asset management system, and staff capacity to effectively address utility-related maintenance needs.
	Recommendations	<ul style="list-style-type: none">A. Collect and track maintenance data including installation dates, renewal periods, and estimated costs.B. Utilize Lucity as an asset management system, or explore other systems to track asset management data more effectively and efficiently.C. Evaluate inspection staffing within the Utilities Department to address maintenance needs.D. Review recruitment strategies and compensation practices for inspectors within the Utilities Department to ensure effectiveness.

The City has taken steps to address infrastructure concerns for its utilities—such as developing and maintaining current master plans with prioritized infrastructure projects. Staff reported they are working on updating the Supervisory Control and Data Acquisition (SCADA) system to support more effective monitoring of its infrastructure. They also reported the City recently purchased a new truck equipped with closed-circuit television (CCTV) cameras that can inspect water lines, sewer systems, and storm drains to support the City with more proactive and preventative maintenance needs. In FY24, the Department repaired 540 water leaks, replaced 112 damaged fire hydrants, and cleaned over 464.2 miles of sewer pipe—all measures to support effective maintenance of the City’s water and wastewater infrastructure. However, the City lacks comprehensive maintenance data, an effective asset management system, and staff capacity to address utility maintenance needs fully and effectively.

Maintenance Data

The City has some asset management data for utilities, including data in its Facilities Conditions Assessment Report (FCA) completed for wastewater in 2022. However, the City does not have comprehensive information such as installation dates, renewal periods, or estimated costs for all its water, wastewater, and storm drain infrastructure. Additionally, the data is not maintained in a consistent database or system to support efficient operations (see [Asset Management System](#) below). Without comprehensive asset management data, the City is limited in its ability to predict and proactively address maintenance needs in a prioritized and efficient manner. This results in a more reactive approach to maintenance that is often less strategic and more costly. Maintained assets are vital for the sustainability of operations and the safety of the community, ensuring access to clean water and the safe management of wastewater.

The Department should collect and track comprehensive maintenance data to proactively prepare and plan for repairs and replacements of utility assets. Key asset maintenance information to track includes asset description, installation date, estimated repair or replacement date, expected lifecycle, location, conditions assessment, maintenance records, usage data, compliance checks, performance metrics, and estimated cost to repair or replace. This information is important in making data-driven decisions such as estimated budgets, future project costs, and staffing needs to perform inspections or repairs. This information is standard for asset management programs and will help to better predict and plan for the Department’s future.

Asset Management System

The City does not use an asset management system to store and track all asset management data in one location. It currently uses Lucity as a work order management system; however, it also has asset management capabilities that are not fully utilized by the Department. Instead of relying on a centralized system, staff reported using various spreadsheets and institutional knowledge to gather information on asset conditions and maintenance schedules.

Though prioritized maintenance is being completed and tracked, without a centralized asset management system the Department struggles to proactively and efficiently identify, track, and plan for repair and maintenance needs. Comprehensive, accessible, and accurate information is essential for more robust preventive maintenance and the associated budget forecasting process. Unplanned maintenance needs due to system failures or emergencies can create significant unexpected costs and adversely affect the Department’s budgets and utility rates. Staff interviewed expressed particular concern regarding wastewater maintenance needs, noting that these pipes tend to corrode quickly and require repairs or replacements more frequently than initially anticipated. This situation requires substantial funding for maintenance. When small maintenance issues are not addressed, they can escalate into larger, more expensive problems, including emergency replacements. Emergencies and major replacement projects impose additional costs and resource demands on the City. Furthermore, increased water and wastewater maintenance needs can lead to flooding, water quality issues, and sewer backups, all of which can negatively impact the health and livability of the community.

The Department should explore how to use Lucity as an asset management system or explore a new, comprehensive system to track this data in one place. Using an asset management system will allow for more accurate information about assets and a more efficient process that helps staff make informed decisions on when repairs or maintenance are needed and plan for the associated costs in the budget. This will allow the Department to better estimate costs and resource needs. This is particularly important in periods where many assets require maintenance at one time and in equitably prioritizing which areas have more needs based on maintenance data.

Staffing

Staff reported the City lacks adequate inspectors to address utility-related maintenance needs and that turnover in inspector positions has negatively impacted proactive maintenance. Staff also reported difficulty recruiting new staff for vacant positions. Inspectors play a vital role in identifying maintenance needs before issues escalate.

Year	2022	2023	2024
Percent of inspector turnover for the year	0%	50%	33%

Staff reported challenges with retention and recruitment are due in part to retirements, relocations, and competitive pay challenges. Without adequate inspectors, the Department may not be aware of asset conditions that need attention through repairs or maintenance. This can lead to more costly fixes or replacements.

The City should evaluate inspection staffing to ensure staffing levels meet the City’s maintenance needs. This assessment should include considerations for the volume of work, complexity of assets,

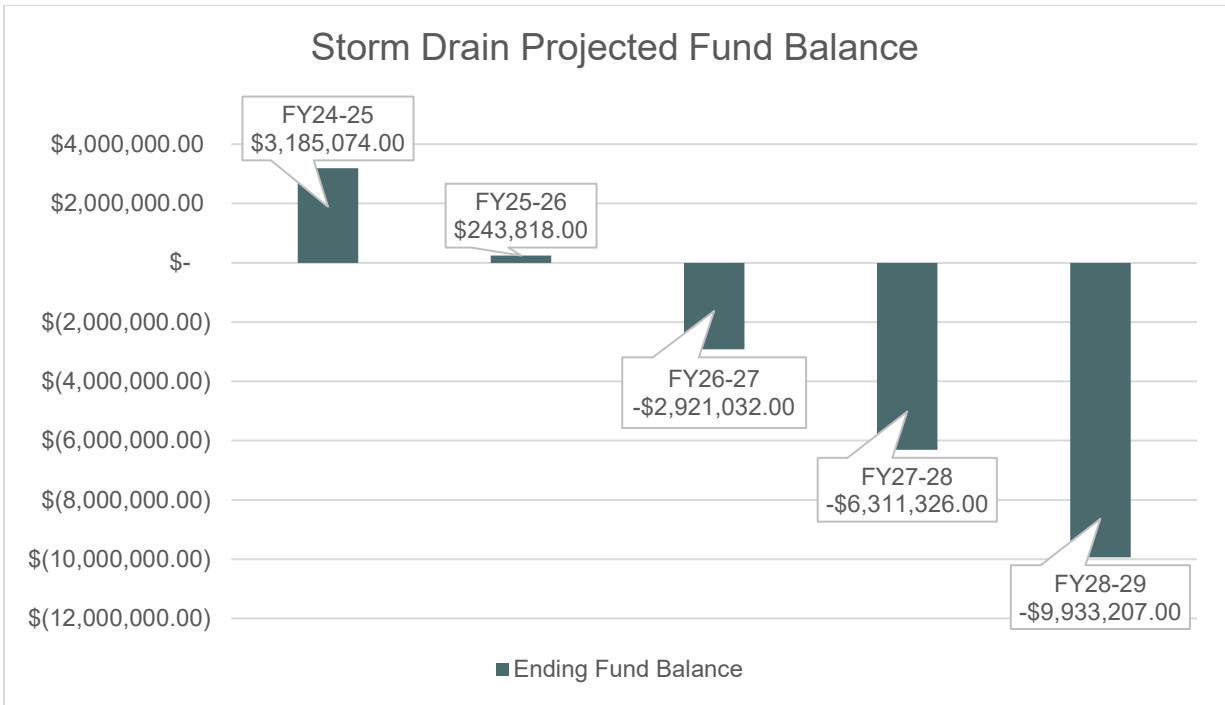
and specific needs of the community. This analysis will be better informed with the comprehensive asset management data and system noted above, to show future trends in potential inspection needs. Additionally, the City should develop targeted recruitment strategies to attract qualified candidates for inspector positions, such as through partnerships with local colleges or vocational schools, by attending job fairs, and initiating outreach activities with professional organizations in relevant fields. The City should also consider reviewing the compensation packages for inspector positions and ensuring they are competitive with similar roles across the industry.

B. FUNDING MECHANISMS

Storm Drain Program Budget

3.	Finding	The City's storm drain budget is projected to decline over the next five years, impacting the City's ability to maintain the program that helps prevent flooding and protects the City's water quality.
	Recommendations	<ul style="list-style-type: none"> A. Evaluate reallocating storm drain fees, establishing development impact fees, and levying special taxes to fund the storm drain program more effectively over time. B. Consider reallocating street sweeping expenditures to be financed by a different fund than the storm drain fund.

As shown in the graph below, the City's storm drain pro forma budget is projected to steadily decrease over the next five years. Interviewees reported that the City has not raised storm drain rates in over 20 years, resulting in minimal revenue for storm drain needs. Storm drains are essential for removing rainwater from streets and helping prevent flooding in the community. They also play a crucial role in keeping drains clean and free from hazardous contamination that can flow into local waterways.



Outdated storm drain rates have led to insufficient revenue to cover necessary maintenance, repairs, and replacements for the City’s storm drains. With aging infrastructure, increased flooding, and the impacts of climate change, securing funding to maintain the storm drainage system is vital. This funding would be used to support infrastructure that can help prevent flooding and road deterioration, and protect water quality for residents.

Under Proposition 218, voters must approve property-related storm drain fee increases; the proposition also allows a protest vote. Staff reported that mobilizing citizens to vote in favor of increased rates is challenging and can be very costly, which has made the City hesitant to pursue a rate increase.

In addition to insufficient revenue due to stale storm drain rates, existing funds are also allocated to other needs, which impacts how much funding is available for storm drain infrastructure improvements. Approximately \$2 million of storm drain funding is allocated to Public Works for street sweeping. To address the funding shortfall for storm drains, staff reported that they pursue grants. However, these strategies may not cover the increasing gap in revenues and expenses in the coming years.

Storm drain funding challenges are not unique to Modesto, given Proposition 218’s application to all of California. The three peer organizations involved in this assessment also reported challenges with raising storm drain rates, and that storm drains are currently funded through a combination of current rates and supplemented by the general fund. Despite these industry wide challenges, the City will need to address gaps in funding or reduce expenses to meet the needs of its community.

The California Stormwater Quality Association (CASQA) proposes the following list of resources that stormwater managers in California may consider in overcoming funding barriers¹:

- **Storm Drain Utility Fees:** CASQA recommends that utilities departments set up storm drain utility fees as an enterprise fund, to charge fees for services delivered to the public. The City already does this through the storm drain enterprise fund.
- **Realignment of Services:** CASQA recommends reallocating storm drain activities under water, sewer, or trash collection services, which are exempt from Proposition 218. For example, street sweeping funding could be reallocated to a different service. Street sweeping accounted for almost 30% of the City’s storm drain budget in FY24, which is a significant portion of the fund. In addition, no other peer city interviewed funds street sweeping with the storm drain budget. Reallocating street sweeping may be the easiest first step in reducing the gap in the storm drain budget. Additional opportunities to reallocate activities may also exist. The City of Livermore funds storm drain projects through stormwater user fees, a development impact fee, the General Fund, and Federal Emergency Management Agency (FEMA) funding. The City of Tracy funds storm drain expenses through customer utility rate payments and the General Fund.
- **Local Development Impact Fees:** CASQA recommends setting up development fees—a fee imposed on developers to cover or offset the cost of public facilities related to development projects. The City of Livermore partially funds storm drain projects through an impervious surface development impact fee.
- **Special Taxes:** CASQA recommends special taxes, which require a two-thirds majority vote for approval. This may provide an easier avenue than attempting to raise storm drain rates. For example, CASQA recommends a special tax called a *parcel tax*. According to CASQA, parcel taxes on individual properties are the most common type of special tax for storm drain services. These taxes are levied against real property and can be flat fees or aligned with acreage, building size, impervious surface cover, or land uses. Culver City, Los Angeles, Santa Cruz, and Santa Monica have all successfully implemented parcel taxes for storm drain services.

In addition to recommendations from CASQA, the City may also consider using its share of the state gas tax to address improvements in storm drains. According to the California State Controller, entities that have a Special Gas Tax Street Improvement Fund and Road Fund may use funding to finance storm drain construction or reconstruction. This is another way to help fund storm drain projects for the continued operation of the City’s storm drain program.

Fee Setting

4.	Finding	Although water and wastewater rates have increased in recent years, the City has not adjusted related fees in over a decade, which may result in insufficient revenue to cover costs.
	Recommendation	Evaluate water and wastewater fees to ensure costs are adequately covered.

The Department is primarily funded by utility rates and some separate fees/charges (e.g., connection and installation charges, meter fees, pavements fees, capacity charges, and reimbursement fees).

¹ <https://www.casqa.org/resources/stormwater-funding/sustainable-stormwater-program-funding>

While water and wastewater rates have steadily increased over the last few years, the City has not raised water and wastewater-related fees/charges in over 10 years. Staff reported this is because a cost analysis has not been conducted to assess whether fines and fees are meeting the City's needs (i.e., covering specific costs or deterring certain activities).

The Department may also consider new storm drain fees to adequately cover costs. One storm drain related fee CASQA recommends is a local development impact fee (see the [Storm Drain Program Budget](#) section). Impact fees may also be relevant to water and wastewater, depending on the types of capital projects related to new developments at the City. In addition, because the City does not currently charge fees for storm drain inspections, the costs of inspections are absorbed by other revenue sources. Another fee in the industry is a conservation fee to encourage water conservation efforts. No other peers reviewed have this, but this fee may be used to penalize excessive water use during drought conditions, which can promote sustainability of water resources over time.

The City should evaluate water and wastewater fees to ensure they adequately cover related costs, including staff time, overtime, and additional resources. Adjusting fees is a strategy for ensuring that costs are met, as these fees are independent of Proposition 218, making implementation easier.

Grant Opportunities

5.	Finding	Despite grant opportunities, the Utilities Department lacks the capacity to pursue and manage grants effectively due to the absence of a dedicated grants management position.
	Recommendation	Consider establishing a dedicated grants management position (potentially as a shared resource for City departments) to streamline the grant application process and reduce the workload on existing staff.

The Department lacks the capacity to pursue new grants and monitor awarded grants due to the absence of a dedicated grants management position. Currently, some grant responsibilities are contracted out to consultants and others are managed by internal engineers or project managers. However, these staff members have other responsibilities and priorities that take away from researching or overseeing grant activities. Without dedicated resources for grants management, the City may miss out on valuable funding opportunities for essential projects or be limited in its ability to effectively monitor grants.

The City has been successful in obtaining several grants. As reported in the FY24 Operating Budget, it received \$11.6M in State grants for utility projects, and \$19.9M in grant applications is pending approval. In FY24, the City was awarded grants for projects related to storm drain and well treatment systems and pipes. Staff also reported they are actively working on obtaining a grant to help fund SCADA updates.

Modesto's percentage of grants that cover expenses is smaller than one peer (the City of Livermore) but larger than the City of Tracy and the Modesto Irrigation District, which did not have any grant revenue in their FY23 financial reports (also see [Appendix C](#)). All three peers interviewed for this assessment likewise do not have a dedicated grants management position. One peer, like the City of Modesto, has a consultant at the city to help find and apply for grants. Another city is considering

hiring a consultant to assist with grants. Currently, all peers have department staff apply for and manage grants. Several also mentioned they do not fund many projects with grants as historically there have not been many grants for utilities. However, they have seen an increase in relevant grants for utilities in the last few years.

The City should consider designating a dedicated grants management position, potentially as a shared resource among various City departments. This role would alleviate the burden on existing staff by focusing on researching and applying for grants. While departments would still need to ensure that staff have the capacity to oversee grant management, this dedicated position could enhance the identification of relevant grant opportunities and increase the likelihood of successful applications. Typically, grant management positions are self-sustaining, as they generate revenue through the acquisition of grant funds, some of which may cover the salary of the position.

APPENDIX A: SOURCES AND USES ANALYSIS

The following tables include the City’s sources and uses of funds for water, wastewater, and storm drain for FY24.

Water	
Sources of Funds	FY24 YTD
Service-related revenue (e.g., charges for services; refunds, damages, and cost recovery/other; service credits)	\$84,165,110
Water development fees	\$1,731,616
Utility assistance fees	\$229,650
Interest income	\$5,426,475
Rental income	\$42,983
Miscellaneous income	\$15,607
Legal settlement	\$238,052
Other income (e.g., sale of assets, project revenue, loan repayment)	\$1,115,712
*Draw from reserves	\$6,491,007
Total Sources of Funds	\$99,456,212
Uses of Funds	
General expenses	\$348,924
Utility bills and collections	\$171,896
Finance expenses (i.e., cashiering, utilities and collections, assistance programs, software)	\$5,525,979
Engineering expenses	\$1,039,797
Administrative expenses	\$3,428,666
Analyses, plans, and studies (e.g., management, systems, studies, rates, SOI)	\$366,820
Maintenance	\$3,481,766
Wells and tanks	\$9,405,818
Water quality	\$2,875,371
Service and meters	\$2,810,930
Grant expenses	\$16,965
Litigation	\$14,268
Transfers to other funds (e.g., projects, grants, wastewater, storm drain, General Fund, IT)	\$1,197,857
Capital planning services	\$739,430
Construction services	\$6,908,820
Water conservation	\$1,155,589
Modesto Irrigation District payments for surface water treatment	\$14,444,022
Other expenses (e.g., ASR Program, Revenue System, UCMR5)	\$411,053
Total debt service	\$12,194,696
Capital improvement projects	\$32,917,545
Total Uses of Funds	\$99,456,212

**The water fund drew from the reserve balance in FY24. Staff reported there were increases in capital project expenses in the year that resulted in the need to draw from reserves to cover expenses.*

Wastewater	
Sources of Funds	FY24 Actuals
Service-related revenue	\$65,692,343
Intergovernmental revenues related to the Del Puerto Water District, the City of Turlock, and other governmental agencies	\$2,725,831
Interest income	\$2,373,873
Rental income	\$508,717
Interfund charges (charges from other departments or divisions, e.g., Public Works or Utilities)	\$1,894,381
Miscellaneous Income	\$4,329,729
Transfers in from other funds (e.g., General Fund, Compost Fund, loans)	\$1,333,493
*Draw from reserves	\$11,127,197
Total Sources of Funds	\$89,985,564
Uses of Funds	
General expenses	\$890,650
Utility bills and collections	\$1,042,114
Engineering expenses	\$387,070
Administrative expenses	\$2,481,890
Plant operations	\$4,679,546
Wastewater collections	\$7,515,513
Lab and environmental services	\$2,283,026
Analyses, plans and studies (e.g., management, systems, studies, rates, SOI)	\$87,346
Maintenance	\$11,942,758
Segregation line (e.g., wastewater barriers to keep wastewater streams separate)	\$507,731
Transfers to other funds (e.g., General Fund, Water Fund, Sewer Fund)	\$5,054,890
Capital improvement services	\$515,595
Non-capital projects	\$2,009,623
Other projects (e.g., Parklawn and Airport)	\$37,931
North Valley Regional Recycled Water Program	\$1,055,674
Sewer Cost Sharing Program	\$4,320
Total debt service	\$10,412,754
Capital improvement projects	\$39,077,131
Total Uses of Funds	\$89,985,564

**The wastewater fund drew from the reserve balance in FY24. Staff reported there were increases in capital project expenses in the year that resulted in the need to draw from reserves to cover expenses.*

Storm Drain	
Sources of Funds	FY24 YTD
Operating revenue	\$5,613,895
Interfund labor and equipment income (charges from other departments or divisions, e.g., Public Works or Utilities)	\$128,519
Interest income	\$167,726
Transfers In (e.g., water fund for the Source Water Protection Program)	\$700,000
Miscellaneous income	\$222,847
Total Sources of Funds	\$6,832,987
Uses of Funds	
General expenses	\$77,178
Utility bills and collections	\$353,224
Sewer collections	\$3,192,915
System analysis	\$41,295
Stormwater lift stations	\$159,747
Street sweeping	\$1,887,196
Compliance	\$924,830
Transfers from other funds (e.g., Water Fund for utility billing software)	\$22,368
Capital improvement projects	\$314
*Additions to reserves	\$173,919
Total Uses of Funds	\$6,832,987

**The storm drain fund added to the reserve balance in FY24, as expenditures came in under budget and interest revenue and fair market value revenue were higher than expected for the year.*

APPENDIX B: RATE STUDY BEST PRACTICE CHECKLIST

This checklist assesses whether the City's rate study process is aligned with best practices. We compared the City's Utilities Rate Studies' Standards Operating Procedures (SOP) and recent rate study to best practices, including those from the [Environmental Protection Agency's Office of Wastewater Management](#).

Best Practice Category Item	Best Practice Description	Modesto Adherence	Modesto Alignment
Determine Current Revenues and Expenses	Revenues may include annual collections from rates/charges to customers, interest, transfers, and other sources. Expenditures may include physical equipment, staff, outstanding loans, mortgage payments, and other costs. All costs should be included and budgeted at the appropriate levels.	☒	Per the SOP, budget details, and revenue and expenditure by object reports, current costs are included in the financial information used to determine rates. This includes capital project expenses. The rate study is also supported by an engineering report that provides the justification and allocation of costs for the water and wastewater capital projects.
Determine Reserve	Build reserves into the rate. Note: There are no national standards for reserve amounts, although some funders have requirements for borrowers.	☒	Per the SOP, the reserve balance is included in the financial information used to determine rates. Both the water and wastewater rate studies include reserve policies in the rate setting process (water pg. 64 and wastewater pg. 27).
Project Revenues and Expenses	Project future revenues and expenses by taking into consideration current revenues and expenses and considering changes in the future (e.g., changes in customers, infrastructure costs, capital projects, labor).	☒	Per the SOP, a step in the rate study is for a consultant to develop a 10-year financial plan. Additionally, the rate study includes cost projections (water pg. 65 and wastewater pg. 26) for future users (water pg. 21 and sewer pg. 39) and water demand (water pg. 23).
Determine Rate Structure	Determine what rate structure works best for the City/community.	☒	Per the SOP, one step of the process is to develop appropriate cost allocations and rate designs.
Consider Public Perception	Customers should be aware of changes to rates, and the utility should consider smaller incremental rate increases to ease the shock of rate increases.	☒	Per the SOP, several steps in the process involve public engagement through outreach and public hearings. Communication is a goal in the Charter and each rate proposal is reported to City Council. The City has also instituted smaller rate increases over time rather than one-time large increases.

Best Practice Category Item	Best Practice Description	Modesto Adherence	Modesto Alignment
Consider Regulatory Requirements	Consider regulatory requirements, such as with the state's drinking water standards and regulations.	☒	Both rate resolutions consider regulatory requirements such as state compliance with Proposition 218 (water pg. 1, wastewater pg. 1).

APPENDIX C: PEER BENCHMARKING

We reached out to five peer organizations who have similar water, wastewater, and storm services. Among them, three participated: the Modesto Irrigation District, City of Tracy, and City of Livermore. Our discussions were to understand current and best practices related to the fiscal management of water and wastewater utilities. The benchmarking process involved comparing key data points and current practices, allowing us to identify trends, strengths, and areas for improvement. The table below provides an overview of the key characteristics and observations. Under the table is a summary of lessons learned and best practices based on our conversations.

Metrics	City of Modesto	Modesto Irrigation District	City of Tracy	City of Livermore
Budget (FY24)	\$400,137,714.00	\$636,500,000.00	\$485,677,607.00	\$293,280,402.00
Number of households/accounts served (FY23)	72,418	132,803	27,943	30,835
Number of FTE	1,326	493	506	497
Asset management program (name of system or N/A)	N/A	N/A	N/A	NEXGEN
Percentage of grant revenue to each fund's revenue (Annual Comprehensive Financial Report FY23)	Water – 0.43% Wastewater – 0.66% Stormwater – No revenue (a storm-related grant was awarded in FY24)	No grant revenue for water, wastewater, or stormwater	No grant revenue for water, wastewater, or stormwater	Water – 3.66% Wastewater – 4.49% Stormwater – 18.10%
Dedicated grant staff? (Yes/No)	No	No	No	No
Date of last rate increase	Water – 2023 Wastewater – 2022 Stormwater – over 20 years	Irrigation – 2023 Electric – 2024 Water – 2023	Water – 2020 Wastewater – 2024 Stormwater – over 20 years	Water – 2024 Wastewater – 2024 Stormwater – 2006
Date of last rate study	Water – 2021 Wastewater – 2021 Stormwater – over 10 years	Irrigation – 2023 Electric – 2024 Water – 2023	Water – 2019 Wastewater – 2023 Stormwater – over 20 years	Water – 2022 Wastewater – 2020 Stormwater – 1992

Metrics	City of Modesto	Modesto Irrigation District	City of Tracy	City of Livermore
Advanced Metering Infrastructure (AMI) system? (Yes/No)	No	Yes	Yes	Yes
Storm Drain Funding	Storm drain fees and transfers from other funds, like the Water Fund	No storm drain services	Storm drain fees and General Fund transfers	Storm drain fees, General Fund transfers, FEMA funding, and development impact fees
Street Sweeping Funding	Yes (funded through the Storm Drain Program)	N/A (no street sweeping services)	Yes (funded through the Streets & Right-of-Way Maintenance Program)	Yes (funded through solid waste collection fees)

Peer Benchmarking Lessons Learned and Best Practices

Advanced Metering Infrastructure (AMI) Systems

- All peers use AMI systems. Peers reported AMI systems have significantly improved operational efficiency by automating meter readings, reducing the need for manual meter reading, and allowing for real-time data collection.
- Real-time data provided by AMI facilitates quicker identification of leaks and issues within the system, leading to more timely responses and reduced water loss.
- AMI can enhance customer service by allowing utility staff to address inquiries about usage more effectively, allowing detailed consumption data to be accessed during customer interactions.

Cost Overruns

- Peers emphasized the importance of conducting regular reviews of budget allocations and historical spending to manage budgets and identify potential cost-saving opportunities. Cities emphasized the importance of ensuring that adequate cash reserves are available before initiating capital improvement projects, to avoid reliance on theoretical future funding.

Forecasting Revenues and Expenses

- Forecasting processes varied, but peers agreed that best practice involves comprehensive rate studies every five years. These studies help set realistic revenue expectations based on historical data and anticipated changes in costs (e.g., inflation rates for utilities).
- Peers had varying methods for forecasting revenues and expenses, including applying different inflation rates to expenditure categories, maintaining conservative growth assumptions to avoid overestimating revenues, and incorporating a contingency buffer of 5% to 10% in the budget to account for unexpected expenses and ensure financial stability. The City of Livermore also utilizes a robust asset management system to project future capital costs and integrates these projections into long-term financial plans.

Grants

- Cities are beginning to recognize the importance of actively identifying and applying for grants in the utility space, particularly for infrastructure improvements and capital projects. Some of the entities mentioned that have applicable utility grants were the State Revolving Fund, Department of Water Resources (DWR), and Bureau of Reclamation.
- Currently at all peers, grant writing and management responsibilities fall to staff within respective departments, with no dedicated grant management personnel. This has made it challenging to prioritize applying for funding opportunities. The City of Tracy has been utilizing contractors to assist with finding and proofing grant applications.

Rates

- Peers highlighted the necessity of conducting regular rate studies and implementing incremental rate increases, allowing constituents to experience smaller, more manageable increases over time and thereby enhancing public acceptance and minimizing financial strain.
- The City of Livermore emphasized the importance of public outreach to educate constituents about the necessity of rate adjustments and the value of services provided, to foster trust and understanding within the community.

Storm Drain

- All peers are grappling with challenges related to storm drain budgets under Proposition 218, often relying on general funds to bridge funding gaps. Like Modesto, other cities have been unable to raise storm drain rates in many years. The City of Tracy's storm drain rates have remained unchanged for over two decades, while Livermore has not increased its rates since 2006. This highlights a significant need for rate adjustments to ensure sustainable storm drain management.

APPENDIX D: MANAGEMENT RESPONSE

<p>Finding 1: Utility Capital Project Budgets: The department lacks a systematic approach to tracking total anticipated project costs within its Capital Improvement Program (CIP), leading to large fluctuations in project costs and raising potential transparency and accountability issues.</p>	
Recommendations	Management Response/Implementation Plan
<p>Clearly document total project anticipated costs, update totals as new projects are added, and evaluate project budget versus actuals to assess trends.</p>	<p>We acknowledge that some of the CIP projects reviewed by the auditors does not reflect the accurate costs of the projects for various reasons (provided to the auditors), such as increase in project scope to increase design efficiencies, which results in minimizing resident impact during construction. Currently, the cash flow internal document is updated and then the proforma in accordance with it which is included in our adopted operating budget book. Additionally, as part of our five-year rate study, we include the cash flow projections and scenarios for projects. However, we recognize we could present this in a more public facing document. A solution would be to utilize the CIP Database to allow for better tracking year-over-year on each individual project. A change in this process could be implemented immediately and would allow us to earmark and plan for projects 5 years outward. During the award of a contract, the budget can be “trued” up for the actual increases. We are committed to improving the coordination between the internal cash flow/Proforma and the CIP list.</p>
<p>Finding 2: Asset Maintenance Needs: The City lacks key maintenance data, an asset management system, and staff capacity to effectively address utility-related maintenance needs.</p>	
Recommendations	Management Response/Implementation Plan
<p>A Collect and track maintenance data including installation dates, renewal periods, and estimated costs.</p>	<ol style="list-style-type: none"> 1. For most of the infrastructure, the City currently has most installation data in our GIS system. Staff is tracking maintenance of assets through the work order system, Lucity, and will need to assign designated staff members to continually track updates and costs. 2. Staff is at the early stages of developing a more robust Asset Management Plan.
<p>B Utilize Lucity as an asset management system, or explore other systems to track asset management data more effectively and efficiently.</p>	<p>The Department is finishing up a Request of Proposals to conduct an Asset Management Plan gap analysis to assist staff to determine what is needed to centralize all asset data in a single system.</p>

C	Evaluate inspection staffing with the Utilities Department to address maintenance needs.	<p>The Department will re-assess and/or re-adjust staffing levels to transition from a reactive maintenance mode to proactive maintenance mode. A team dedicated to a proactive maintenance program and utilizing technology for work orders and reports will assist in meeting this challenge.</p> <p>Staff will research opportunities to leverage technology and/or request additional resources to ensure maintenance needs continue to be identified, budgeted for, and addressed.</p>
D	Review recruitment strategies and compensation practices for inspectors within the Utilities Department to ensure effectiveness.	Staff will work with Human Resources department to analyze recruitment and retention strategies for the Environmental Compliance Inspector classification. An overall assessment of the organization of assignments / tasks in this work unit could improve retention as well.
<p>Finding 3: Storm Drain Program Budget: The City's storm drain budget is projected to decline over the next five years, impacting the City's ability to maintain the program that helps prevent flooding and protects the City's water quality.</p>		
<p>Recommendations</p>		<p>Management Response/Implementation Plan</p>
A	Evaluate reallocating storm drain fees, establishing development impact fees, and levying special taxes to fund the storm drain program more effectively over time.	Utilities staff is currently coordinating with Budget to identify and implement opportunities for both short term fixes and long-term strategies to address revenue shortfalls in the Storm Drain fund.
B	Consider reallocating street sweeping expenditures to be financed by a different fund than the storm drain fund.	This is currently being reviewed and in discussion for what other funding sources may be available and feasible to cover the street sweeping expenditures. Once the funding sources are identified, staff will be working on an implementation plan for how much of the current expenditures will be covered by the new funding source.
<p>Finding 4: Fee Setting: Although water and wastewater rates have increased in recent years, the City has not adjusted related fees in over a decade which may result in insufficient revenue to cover costs.</p>		
<p>Recommendation</p>		<p>Management Response/Implementation Plan</p>
Evaluate water and wastewater fees to ensure costs are adequately covered.		Impact fees analysis will be included in the next Water and Sewer Rate Studies, anticipated to begin in FY 2027/28.
<p>Finding 5: Grant Setting: Despite grant opportunities, the Utilities Department lacks the capacity to pursue and manage grants effectively due to the absence of a dedicated grants management position.</p>		
<p>Recommendation</p>		<p>Management Response/Implementation Plan</p>
Consider establishing a dedicated grants management position (potentially as a shared resource for City departments) to streamline the grant application process and reduce the workload on existing staff.		City staff has been coordinating with other departments and City Manager's office to potentially centralize grant management as a shared resource.



MOSSADAMS