

Water Conservation Plan Update

PREPARED FOR

City of Modesto



PREPARED BY



Water Conservation Plan Update

Prepared for

City of Modesto

Project No. 418-60-20-63



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Date



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Appendix A. Making Water Conservation a California Way of Life

LIST OF ACRONYMS AND ABBREVIATIONS

AFY	Acre-Feet Per Year
ARTDA	Amended and Restated Treatment and Delivery Agreement
CalWEP	California Water Efficiency Partnership
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Information System
City	City of Modesto
CWC	California Water Code
DMMs	Demand Management Measures
DWR	Department of Water Resources
ET _o	Evapotranspiration
GPCD	Gallons Per Capita Per Day
MG	Million Gallons
MGD	Million Gallons Per Day
MID	Modesto Irrigation District
MMC	Modesto Municipal Code
MRWTP	Modesto Regional Water Treatment Plant
Plan	Water Conservation Plan
Primer	Making Water Conservation a California Way of Life – Primer of 2018 Legislation on Water Conservation and Drought Planning, Senate Bill 606 (Hertzberg) and Assembly Bill 1668 (Friedman)
SB X7-7	Water Conservation Act of 2009
SOI	Sphere of Influence
State Water Board	State Water Resources Control Board
TDA	Treatment and Delivery Agreement
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan
WWTP	Wastewater Treatment Plant

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1.0 INTRODUCTION

1.1 Overview of the City's Water Conservation Program

Water conservation and water resource management are important to the City of Modesto (City) to assure water supply reliability for its customers. The City maintains a Water Conservation Program that is administered through the Water Services Division of the City's Utilities Department. In addition to maintaining ongoing water conservation measures, the City has implemented significant water conservation efforts during the drought years of 1976-1977, 1987-1992, and 2012-2016.

In March 1990, the City Council approved a Water Conservation Program (Section 11-1.14 of Title 11 of the Modesto Municipal Code (MMC)), which combined a strong education program with watering restrictions and prohibition of water waste. A detailed Water Conservation Plan was prepared and adopted in 2011 to better define the City's Water Conservation Program and to plan for conservation program implementation in the future. In 2017, the City updated their Water Conservation Plan (Plan), building upon the Demand Management Measures (DMMs) and conservation strategies identified in its 2015 Urban Water Management Plan (UWMP). These DMMs allowed the City to meet its 2020 water use target, as set forth by the Water Conservation Act of 2009 (SB X7-7, Steinberg, 2009). SB X7-7 mandated the State achieve a 20 percent reduction in urban per capita water use by 2020.

In 2018, new landmark water conservation legislation was signed into law. Together, Assembly Bill 1668 (Friedman) and Senate Bill 606 (Hertzberg) build on the Water Conservation Act of 2009 and lay out a new long-term water conservation framework for California. The new legislation (known as the 2018 Water Conservation Legislation) provided a framework for programs and initiatives for urban water users to use water more wisely, eliminate water waste, and strengthen local drought resilience. At the time of preparation of this Plan, the State is developing new standards for indoor (non-residential) water use, outdoor residential water use, commercial, industrial, and institutional (CII) water use for landscape irrigation with dedicated meters, and water loss. In the future, urban water suppliers will be required to stay within annual water budgets based on standards for their service areas and provide reports to the State.

In anticipation of the pending water use requirements from the State, the City is updating its Plan. The overall goal of this Plan is to develop a system-wide water conservation plan containing acceptable water efficiency measures and an implementation plan which will decrease water use and water loss while using the most cost-effective methods. The City anticipates continuing and expanding its Water Conservation Program to meet new and upcoming regulatory requirements that would require water use objectives less than the established SB X7-7 target.

The City actively manages its Water Conservation Program and has implemented DMMs described in the Plan. The City strives to meet its future water use objectives by working in a friendly, respectful, and positive manner with homeowners, businesses, and property managers. The City plans to continue managing water demands in its service area through public outreach, education, customer service, and enforcement.

As the City moves forward with its Plan, it also plans to strengthen its One Water Modesto program to communicate the value of water in all forms. This program presents a holistic approach to the City’s water resources, inclusive of potable water, storm water, groundwater, surface water, wastewater, and recycled water. By providing consistent messaging, the City seeks to improve awareness of water resources and infrastructure through public outreach and engagement.

1.2 Relationship to the City’s 2020 UWMP

In previous UWMPs, a substantial amount of data was required to document a water supplier’s progress in implementing fourteen specific DMMs. In 2014, Assembly Bill 2067 simplified, clarified, and updated reporting requirements for DMMs. Focus has turned away from detailed descriptions of each of the fourteen DMMs and has turned to key water conservation measures that are being implemented to achieve compliance with SB X7-7 (the Water Conservation Act of 2009). For retail agencies, the number of DMMs has been reduced from fourteen to six measures (plus an “other” category). A narrative description of the status of the DMMs and how the DMMs will help the water supplier achieve its SB X7-7 water use targets are required to be discussed in the 2020 UWMP, and is provided in Chapter 9 of the City’s 2020 UWMP. A brief summary of the status of the City’s DMMs are also included in this Water Conservation Plan Update.

1.3 Contents and Organization

This update to the City’s Plan has been prepared based on the guidance provided in the California Water Code (CWC) §10631(e). The *Making Water Conservation a California Way of Life – Primer of 2018 Legislation on Water Conservation and Drought Planning, Senate Bill 606 (Hertzberg) and Assembly Bill 1668 (Friedman)* (Primer), developed by the California Department of Water Resources (DWR) and the State Water Resources Control Board (State Water Board), was used also as a reference and is included as Appendix A. At time of preparation of this Plan, rulemaking and regulations are pending at the State level.

This Water Conservation Plan Update is organized into the following sections:

- Section 1.0: Introduction
- Section 2.0: Background
- Section 3.0: Conservation Policies and Goals
- Section 4.0: Water Use Patterns and Trends
- Section 5.0: Demand Management Measures
- Section 6.0: Future Water Conservation Policies

2.0 BACKGROUND

2.1 History

Currently, the City’s water service area consists of one large “contiguous” service area and several “outlying” non-contiguous service areas. The central contiguous service area is primarily defined by the City’s current sphere of influence (SOI) and includes Modesto, Salida, portions of North Ceres, and several unincorporated Stanislaus County “islands.” These County islands include Empire, Bret Harte, and West Modesto, among several others. The outlying service areas are not contiguous to the central service area and include Grayson, Del Rio, Ceres (Walnut Manor), and portions of Turlock. The City also serves potable water to the Jennings Wastewater Treatment Plant (WWTP) via a groundwater well located at the plant. The City’s water service area is shown on Figure 2-1.

The City has been providing potable water service to its urban area since 1895 through the purchase and acquisition of several private water companies. Until 1995, the sole source of water supply to the City was groundwater pumped from the San Joaquin Valley Groundwater Basin. Beginning in the 1940s, increased water demands resulting from growth, along with periodic drought conditions, contributed to a reduction in groundwater levels and created a cone of depression in the groundwater aquifer underlying the City.

In the early 1990s, the City, the Modesto Irrigation District (MID), and the former Del Este Water Company, formed the Modesto Domestic Water Partnership (in 1995, the City acquired the Del Este Water Company) to use a portion of MID’s surface water rights for municipal uses, and entered into a Treatment and Delivery Agreement (TDA) to cover the design, construction, operation (i.e., governing delivery of treated surface water from MID to the City), and financing for the Initial Phase (Phase One) of the Modesto Regional Water Treatment Plant (MRWTP). This new surface water treatment plant, along with associated storage and delivery facilities, became operational in 1995, and the City has purchased wholesale treated surface water from MID since. This availability of surface water supply has allowed the City to reduce and stabilize groundwater pumping rates to allow for groundwater aquifer recovery.

The MRWTP is owned and operated by MID and consists of an original Phase One and a Phase Two Expansion. Phase One of the MRWTP has a treatment capacity of 30 million gallons per day (MGD), with a maximum functional capacity of 42.5 MGD. Per the original TDA, the MRWTP delivers a total annual supply of up to 33,600 acre-feet per year (AFY) to the City. This treated surface water supply from MID, coupled with the available groundwater supply (together termed a “conjunctive supply”) is used to meet the City’s water supply needs for municipal customers in the contiguous service area located north of the Tuolumne River (this is the southern boundary of the MID service area).

The MRWTP Phase Two Expansion project was completed in 2016 and provides a total capacity of 60 MGD, with a total annual supply of up to 67,200 AFY. It should be noted that the total supply (67,200 AFY) is based on normal and wet year annual averages. The delivery of Phase One and Phase Two treated surface water is governed by the October 2005 Amended and Restated TDA (ARTDA), which includes formulas to determine supply reductions during dry years.

2.2 Physical Setting

The climate of the City’s service area is best described as Mediterranean, characterized by hot, dry summers and cool winters. Precipitation in the area averages about 12.2 inches per year.

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Water use is dependent on various climate factors such as temperature, precipitation, and evapotranspiration (ET_o). Climate data, including temperature and precipitation estimates, were obtained for Modesto, California. The period of record was March 1, 1906 to June 9, 2016. ET_o includes plant transpiration and water lost through evaporation from the soil and surface-water bodies. In general, the reference ET_o is given for turf grass, which is then corrected for a specific crop type. Local ET_o data was obtained from California Irrigation Management Information System (CIMIS) monitoring station in West Modesto (Station #71).

The historical climate characteristics affecting water management in the City’s service area are shown in Table 2-1.

Table 2-1. Monthly Average Climate Data Summary

Month	Standard Monthly Average ET _o ^(a) , inches	Average Total Rainfall ^(b) , inches	Average Temperature ^(b) , Degrees Fahrenheit	
			Maximum	Minimum
January	1.12	2.44	53.8	37.6
February	1.95	2.07	60.9	40.8
March	3.63	1.93	66.9	43.5
April	5.27	1.03	73.3	46.8
May	6.96	0.46	81.2	51.8
June	7.93	0.13	88.3	56.6
July	7.99	0.02	94.3	60.0
August	6.93	0.04	92.3	58.8
September	5.14	0.17	87.7	56.0
October	3.46	0.63	77.9	49.6
November	1.74	1.24	64.6	41.7
December	1.12	2.05	54.4	37.7
Total	53.2	12.2	74.6	48.4

(a) Source: California Irrigation Management Information System (CIMIS) data for Station #71: Modesto (downloaded October 20, 2020).

(b) Source: Western Regional Climate Center data for DWR for Modesto, California (period of record: March 1, 1906 to June 9, 2016).

2.3 System Description

The City currently uses a conjunctive water use strategy with two primary water sources to meet potable water demands within the City’s service area. These include:

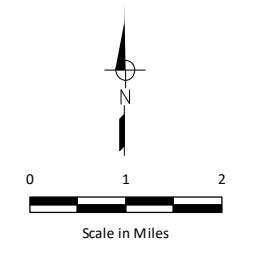
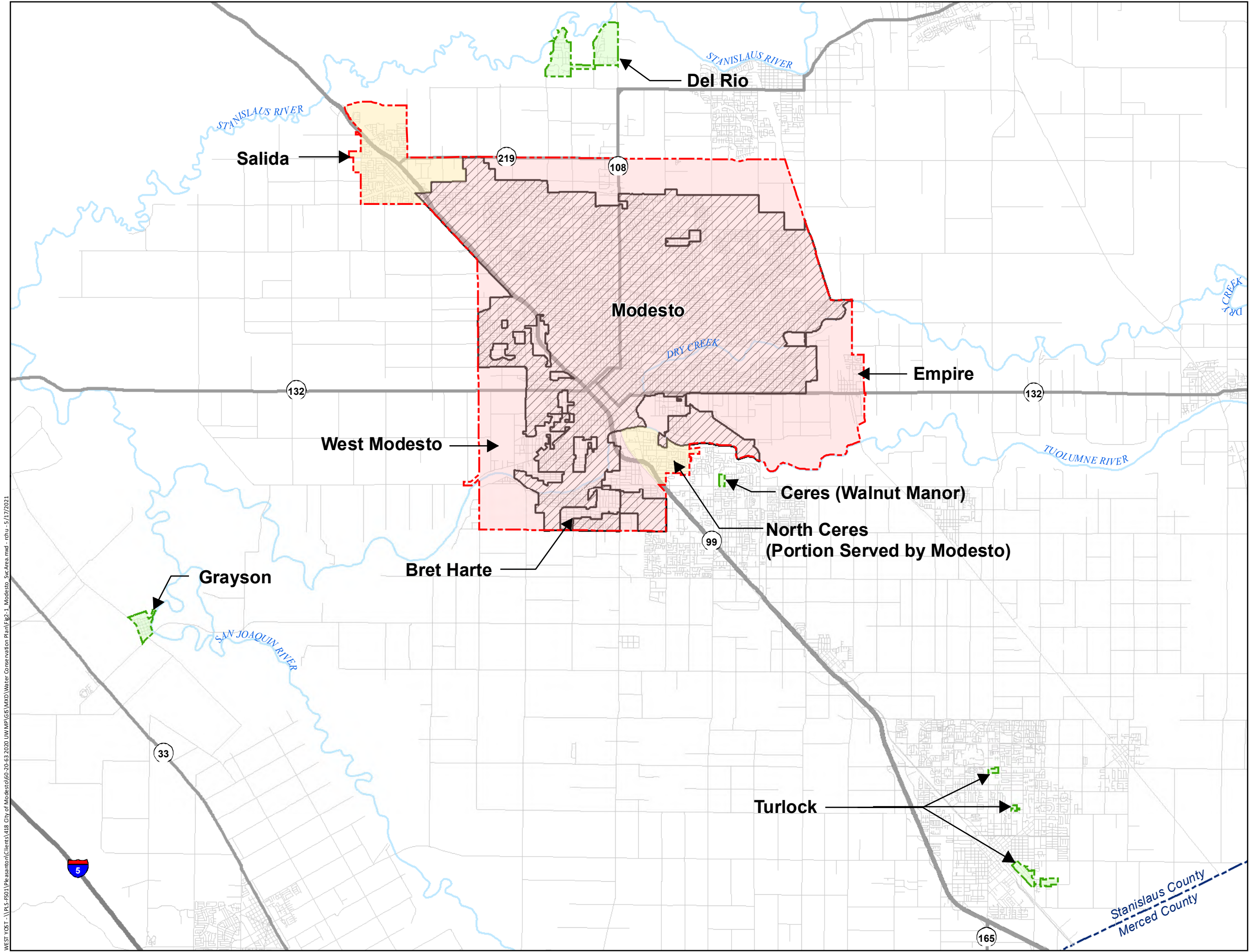
- Surface water from the Tuolumne River via Modesto Reservoir and treated at MID’s MRWTP, which is purchased on a wholesale basis from MID; and
- Local groundwater pumped from City wells located throughout the City’s service area.

City residents within the contiguous service area north of the Tuolumne River (including North Modesto, Salida, and Empire) generally rely on treated surface water supply from MID year-round, supplemented with groundwater as needed. Water demands for the contiguous service area located south of the Tuolumne River (South Modesto) and the City’s outlying service areas are met entirely with groundwater supply year-round.

The major water distribution system facilities in the City's contiguous and outlying service areas are shown on Figure 2-1 and Figure 2-2.

The City's contiguous service area consists of approximately 900 miles of transmission and distribution pipelines. MID owns and operates a portion of the transmission mains traversing the City, and these transmission mains provide treated surface water through a series of turnouts that can control water supply into the City's water distribution system. The contiguous system is served by the City's groundwater wells and ten at-grade storage tanks with a combined total storage capacity of 32.1 million gallons (MG). Each storage tank has a booster pump station to pump water from the tank into the distribution system. There are also two 5.0-MG MRWTP reservoirs (10.0 MG total) that are owned and operated by MID which deliver treated water from MID to downstream transmission mains.

The City's outlying service areas are served by groundwater wells located in each of the outlying service areas. The Grayson service area has an at-grade storage tank (0.16 MG of available storage) and booster pump station. Within the Del Rio service area, the City has also nearly completed construction of a new 0.25-MG tank and associated booster pump station, as well as new groundwater Wells 68 and 70. The other outlying service areas are served from the existing groundwater wells or connections to neighboring agencies. As noted above, the City also serves potable groundwater to the Jennings WWTP.



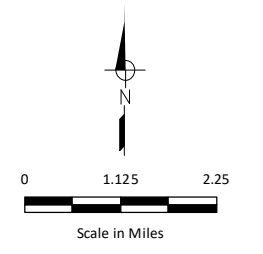
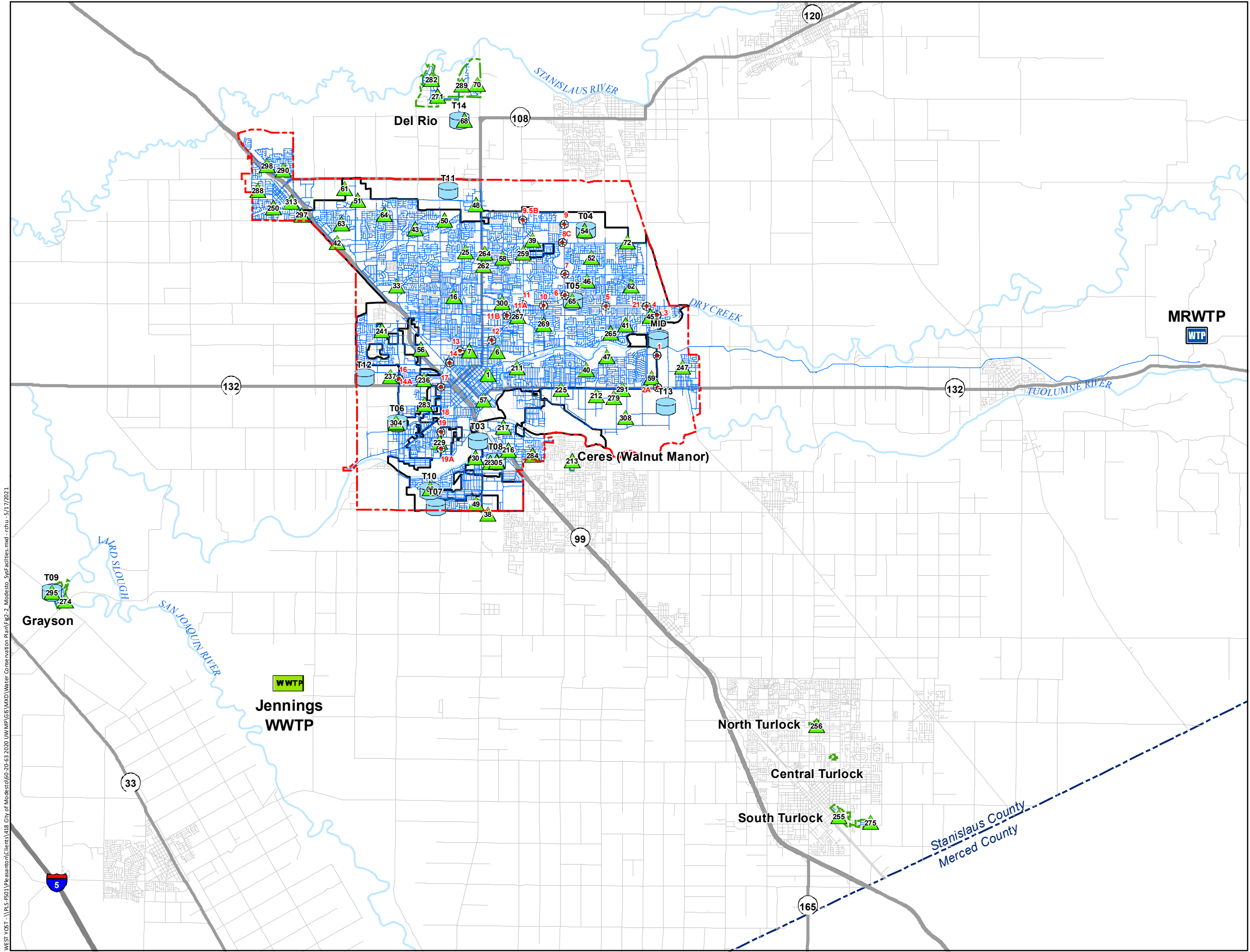
- Legend**
- Sphere of Influence (SOI)
 - Contiguous Service Area
 - Contiguous Area Outside of SOI
 - Outlying Service Area
 - City Limits

- Notes:**
1. Sphere of influence boundary obtained from the City on 11/6/2014.
 2. The City's contiguous service area is co-terminus with the City's SOI boundary except for the Salida and North Ceres areas.
 3. City limit boundary based on County GIS data downloaded on October 6, 2014.










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Figure 2-1
City of Modesto
Water Service Areas
 City of Modesto
 Water Conservation Plan Update



Legend

-  Modesto Regional Water Treatment Plant (MRWTP)
-  Jennings Wastewater Treatment Plant
-  Active Well
-  Tank and Booster Pump Station
-  MID Turnout
-  Existing Pipeline
-  Contiguous Service Area
-  Outlying Service Area
-  City Limits

- Notes:**
1. Tier 1 and 2 MID turnovers are shown.
 2. City limit boundary based on County GIS data downloaded on October 6, 2014.

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Figure 2-2
City of Modesto
Existing Water System Facilities
 City of Modesto
 Water Conservation Plan Update

3.0 CONSERVATION POLICIES AND GOALS

The City's goals are to promote the need for water conservation through public outreach, education, customer service, and enforcement. The City strives to meet this challenge by working in a friendly, respectful, and positive manner with homeowners, businesses, and property managers. The City has developed the following policy statement, reflecting its belief in water conservation:

To protect, conserve, and manage all water resources for the current and future needs of the community and the environment.

The City's seeks to make water conservation a standard practice in normal water supply conditions, and this Plan is prepared for that purpose. The goal of the City's Water Conservation Program is presented in Section 3.1.

Outside of normal water supply conditions, the City may experience foreseeable and unforeseeable water shortages that require more intensive water conservation efforts. The City's Water Shortage Contingency Plan addresses foreseeable and unforeseeable water shortages that may occur and is discussed in Section 3.2.

3.1 Water Conservation as a Way of Life

The overall Water Conservation Program goal is to develop a system-wide water conservation plan consisting of water efficiency measures appropriate for its service area and an implementation plan which will improve water use efficiency and water loss while using the most cost-effective methods. With the preparation and implementation of this Plan, the City aims to:

- Maintain water efficiency programs that are appropriate for its climate, economy, demographics, and land uses;
- Improve awareness of water resources and infrastructure by public outreach and engagement through its One Water Modesto initiative; and
- Provide an implementation program for conservation measures based on affordability and feasibility.

The City intends for water conservation to be a regular way of life in its water service area.

3.2 Water Shortage Contingency Plan

More intensive water conservation efforts are required during water shortage conditions. Water shortages occur whenever the available water supply cannot meet the normally expected customer water use. This can be due to foreseeable or unforeseeable events, including climate change, drought, and catastrophic events. The City's Water Shortage Contingency Plan (WSCP) presents the City's plans to respond to a water shortage condition and helps prevent catastrophic service disruptions. The WSCP was prepared concurrently with the City's 2020 UWMP and adopted by the City Council. The WSCP may be revised independently from the UWMP process on an as needed basis to meet the City's changing needs.

MMC §11-1.14 supports the City's WSCP, which describes the City's strategy for preparing and responding to water shortages. The WSCP includes water shortage stages and associated shortage response actions, including water conservation requirements during various stages of water shortage. The latest copy of the WSCP is available on the City's website: www.modestogov.com/860.

4.0 WATER USE PATTERNS AND TRENDS

4.1 Historical Water Use

The City has historically been among the fastest growing areas in California. The City's population grew steadily from 1996 through 2004 (at an average rate of 1.8 percent per year). However, since 2005, growth within the City's service area has slowed significantly as a result of the national and statewide economic downturn. Growth from 2010 to 2020 has remained at about one percent per year.

Annual water production for the City peaked in 2002 and has decreased annually since then with major decreases in 2009 and 2010 and more recently in 2014 through 2016. The significant decreases in water production for 2009 and 2010 are most likely attributed to the economic downturn. The more recent 2014 through 2016 decreases are due to increased conservation efforts during the 2012-2016 drought.

As of July 1, 2015, water utility customers in Waterford and Hickman are no longer being served by the City of Modesto. Therefore, the historical water use and population from the Waterford and Hickman service areas are not included in this Plan.

Historical per capita water use for the City's contiguous and outlying service areas between 2005 and 2020 is presented in Table 4-1 and illustrated on Figure 4-1. The City's per capita water use has decreased from a high of 274 gallons per capita per day (GPCD) in 2005 and 2007 to 175 GPCD in 2020. Water use between 2014 and 2016 decreased significantly in response to the drought due to increased conservation efforts and the City's continued meter retrofit program for residential customers. Water use rebounded beginning in 2017 but remains significantly below 2005 levels as shown on Figure 4-1.

4.2 Compliance with SB X7-7

SB X7-7 requires a state-wide average 20 percent reduction of urban per capita water use¹ by the year 2020. As part of the City's compliance with SB X7-7, the City established its baseline per capita water use and final (2020) per capita water use target. The City's baseline daily per capita water use is 285 GPCD. Using Method 1 for 2020 water use target calculation, as described in Section 5.2 of the City's 2020 UWMP, the City's confirmed 2020 compliance target is 228 GPCD.

As verified in Section 5.6 of the City's 2020 UWMP, the City's per capita water use in 2020 was 175 GPCD, which is well below the 2020 water use target of 228 GPCD.

¹ For SB X7-7 compliance, the City's per capita water use goal and compliance GPCD is based on total water use for all customer classes including unmetered uses and losses.

Table 4-1. Historical Per Capita Water Use^(a)

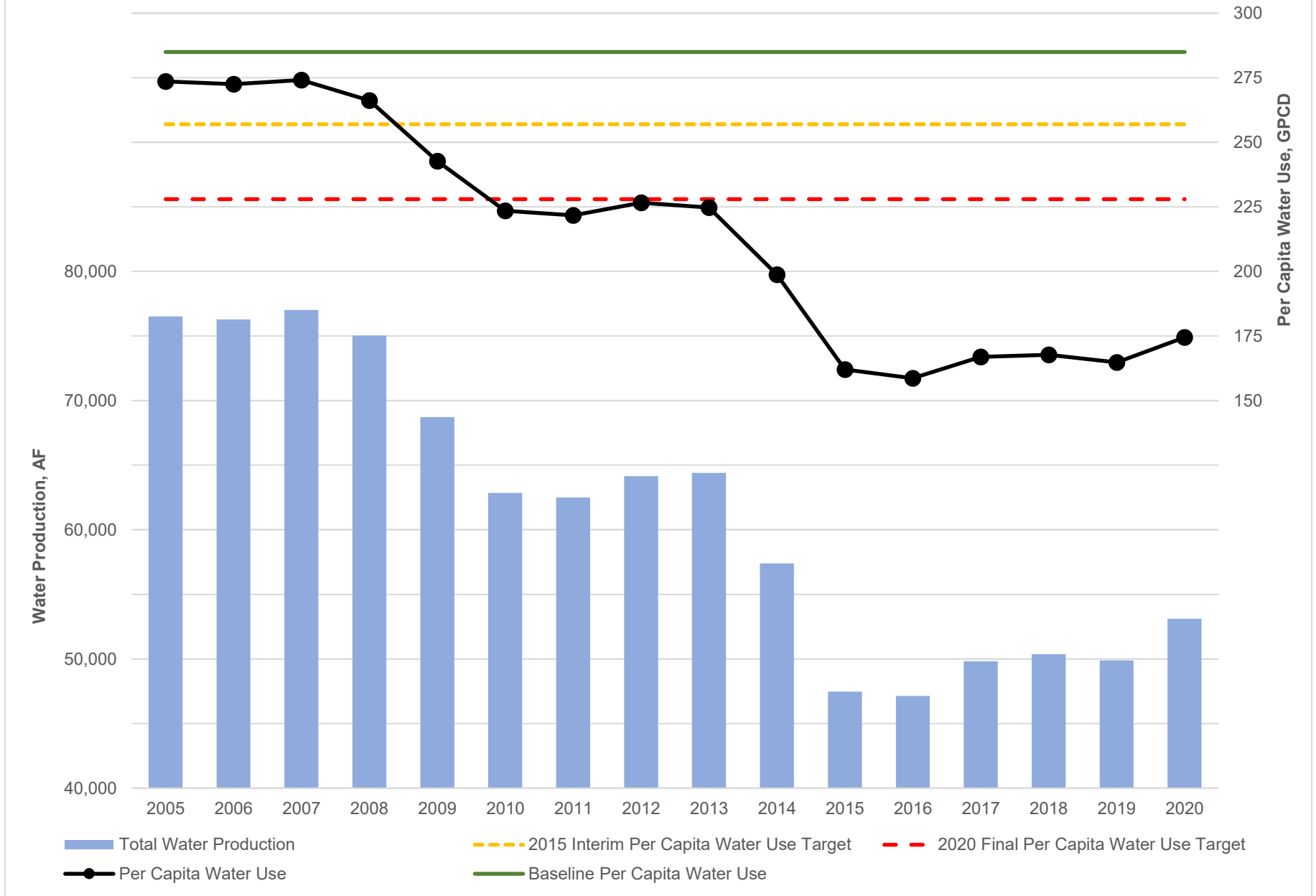
Year	Total Population ^(b)	Total Annual gallons	Water Production ^(c) AF	Per Capita Water Use ^(d) , GPCD
2005	249,691	24,933,028,521	76,517	274
2006	249,918	24,854,274,476	76,275	272
2007	250,877	25,096,996,024	77,020	274
2008	251,639	24,448,696,132	75,030	266
2009	252,838	22,395,558,895	68,729	243
2010	251,098	20,478,260,041	62,845	223
2011	251,668	20,366,747,154	62,503	222
2012	252,777	20,905,112,631	64,155	227
2013	255,919	20,987,211,431	64,407	225
2014	257,830	18,702,448,079	57,396	199
2015	259,187	15,464,601,113	47,459	163
2016	264,485	15,356,760,565	47,128	159
2017	266,485	16,232,262,046	49,815	167
2018	268,144	16,410,572,819	50,362	168
2019	270,299	16,254,467,517	49,883	165
2020	270,974	17,303,966,789	53,104	175

- (a) Includes the City’s contiguous and outlying service areas, except Hickman and Waterford. As of July 1, 2015, the City no longer serves Hickman and Waterford. Therefore, historical water use and populations from Hickman and Waterford have been removed from the totals presented above.
- (b) Population for 2005-2015 is based on Table 3-1 in the City of Modesto’s 2017 Water Conservation Plan. Population for 2016-2020 is based on information received from the City for its 2020 UWMP.
- (c) Water production from 2005-2015 is based on Table 3-1 in the City of Modesto’s 2017 Water Conservation Plan. Water production from 2016-2020 is based on information received from the City for its 2020 UWMP.
- (d) Per capita water use shown is based on City’s total water use for all customer classes.

Notes (see Figure 4-1):

- Baseline Per Capita Water Use = 285 GPCD
- 2015 Interim Per Capita Water Use Target= 257 GPCD
- 2020 Final Per Capita Water Use Target = 228 GPCD

Figure 4-1. Historical Annual Water Use



4.3 Water Use Patterns

Table 4-2 presents the City’s past urban water use by sector. As shown, single family residential accounts comprised over half (51 percent) of the City’s total water use in 2020. This increase in single family use from 2015 is due to the City’s near completion of its metering program which has installed water meters on previously unmetered residential connections (as shown, the unmetered use has decreased from 9.1 percent in 2015 to 1.2 percent in 2020).² By sector, industrial and institutional/governmental accounts consume the least amount of water in the City’s service area (approximately 4.0 and 3.6 percent of the City’s total demand in 2020, respectively).

Table 4-2. Historical Water Use by Sector^(a)

Water Use Type	Volume, AFY		Percent of Total Demand	
	2015 ^(b)	2020 ^(c)	2015	2020
Single Family	20,203	27,081	42.6%	51.0%
Multi-Family	4,710	5,420	9.9%	10.2%
Commercial	7,537	8,110	15.9%	15.3%
Industrial	2,728	2,115	5.7%	4.0%
Institutional/Governmental	1,486	1,933	3.1%	3.6%
Landscape	1,744	2,520	3.7%	4.7%
Unmetered	4,305	615	9.1%	1.2%
Losses (10 percent)	4,746	5,310	10.0%	10.0%
Total	47,459	53,104	100%	100%

- (a) Volumes do not include production from Hickman and Waterford service areas, which are no longer served by the City of Modesto.
- (b) Table 4-1 in the City’s 2020 UWMP.
- (c) Table 4-2 in the City’s 2020 UWMP.

Monthly water production for the City usually peaks in either July or August with the lowest monthly water use typically occurring in the winter months of December, January, and February. The City’s monthly water production for 2015 through 2020 is shown in Table 4-3.

² As of 2020, approximately 97 percent of the City’s metering program is complete. All services should be metered by 2022.

**Table 4-3. Monthly Water Production^(a)
Volume, AF**

Month	2015	2016	2017	2018	2019	2020
January	2,768	2,439	2,425	2,696	2,605	2,570
February	2,601	2,383	2,156	2,676	2,269	3,042
March	3,643	2,683	2,682	2,835	2,630	3,421
April	4,055	3,229	2,948	3,388	3,632	3,729
May	4,192	4,366	4,648	4,857	4,332	5,203
June	4,754	5,264	5,392	5,485	5,392	5,616
July	5,478	6,029	6,335	6,188	6,081	6,166
August	5,586	6,203	6,651	6,166	6,307	6,260
September	4,926	5,147	5,658	5,545	5,644	5,553
October	4,105	4,049	4,720	4,508	4,666	4,797
November	2,767	2,789	3,187	3,422	3,682	3,672
December	2,585	2,546	3,014	2,597	2,645	3,075
Total	47,459	47,128	49,815	50,362	49,883	53,104

Source: Data provided by City staff in January 2021

(a) Volumes do not include production from Hickman and Waterford service areas, which are no longer served by the City of Modesto.

5.0 DEMAND MANAGEMENT MEASURES

This section describes the DMMs that the City is implementing or plans to implement to meet future water use objectives. The City's current DMMs include:

- Water waste prevention ordinances
- Metering
- Conservation pricing
- Public education and outreach
- Programs to assess and manage distribution system real loss
- Water conservation program coordination and staffing support
- Residential conservation programs
- CII customer conservation programs
- Large landscape irrigation conservation programs
- Rebate programs

The City anticipates continuing the DMMs described herein. To analyze the effectiveness of each DMM, the City will maintain records of the metrics associated with each.

5.1 Existing Demand Management Measures

The City's existing DMMs are summarized in Table 5-1, which describes each DMM, the applicable customer class(es), and recent implementation. Public outreach intensity bolsters the participation and effectiveness of the other DMMs listed, as evidenced by customers' significant water use reductions during the 2012-2016 drought.

Table 5-1. Existing Demand Management Measures

DMM Name	DMM Description	Applicable Customer Class(es)	Recent Implementation
Water Waste Prevention Ordinances	Prohibit water waste within service area through rules and regulations formalized in the MMC ^(a)	All Customers	MMC §11-1.14 defines water waste; Resolution 2017-406 limits outdoor water use and remains effective.
Metering	Use water meters to measure and track customer water use	All Customers	As of 2020, approximately 97 percent of the City's metering program is complete. All services should be metered by 2022.
Conservation Pricing	Assess a volumetric charge to encourage conservation, so high users pay more	All Customers	Current water rates include a volumetric charge, which may be increased during droughts.
Public Education and Outreach	Promote water conservation to the public as a standard behavior	All Customers	Attending public events (e.g., Earth Day in the Park), distributing conservation kits, and giving school presentations.
Managing Distribution System Losses	Maintain and monitor the water distribution system to minimize water losses	All Customers	Implementing regular maintenance programs (e.g., meter recalibration, pump efficiency testing, water main flushing), water production monitoring, and leak detection/repair.
Water Conservation Program Coordination and Staffing Support	Provide dedicated staff to develop, implement, and manage the City's water conservation program	All Customers	Employing a full-time Water Conservation Specialist, administrative support, and temporary/seasonal employees as needed.
Residential Conservation Programs	Provide services to raise awareness and reduce everyday water use at home	Residential	Conducting water surveys, programming sprinkler systems, and providing water conservation kits.
CII Conservation Programs	Provide water use survey services to new and existing CII customers	CII	Adopting Commercial Green Building Code, conducting water use surveys, and evaluating operations and equipment.
Large Landscape Irrigation Conservation Programs	Improve water efficiency of large landscapes	All Customers	Implementing smart irrigation systems and/or using shallow aquifers at City parks, conducting large landscape surveys, and City staff reviewing plans and inspecting construction for projects with large landscaped areas.
Rebate Programs	Reimburse customers for replacing or improving existing appliances, equipment, or facilities to improve water use efficiency	All Customers	Ongoing rebates for turf replacement, high efficiency clothes washers and toilets, drip irrigation systems, and smart irrigation controllers.

(a) By resolution, the City Council can also declare a water shortage stage and additional water use restrictions.

Table 5-2 summarizes the rebate programs that the City implemented in the past five years. Through its toilet, clothes washer, turf, and irrigation rebate programs, the City saved approximately 1.34 billion gallons of cumulative water use between fiscal years 2015-2016 and 2019-2020. The City found its turf replacement rebate program to be highly successful, as the budget for that program was quickly depleted. Outdoor landscape water conservation typically results in the greatest water savings, particularly given the City’s climate.

The City found that rain barrel rebates and high-efficiency nozzle rebates did not attract many participants and may not be appropriate or effective within its service area.

Table 5-2. City of Modesto Rebate Programs from 2016 to 2020^(a)

Program	Rebate Incentive	Number of Replaced/ Installed Units
Turf Replacement	\$2 per sf (maximum \$3,000 per account)	409,713 sf
High Efficiency Clothes Washer	\$200 maximum per account	262 clothes washers
High Efficiency Toilet	\$100 maximum per toilet	1,135 toilets
Rain Barrel ^(b,c)	\$50 per 50-gallon barrel (\$100 maximum per account)	35 barrels
High Efficiency Sprinkler Nozzle ^(b,c)	\$2 per nozzle (maximum \$60 per account)	290 nozzles
Drip Irrigation ^(c)	\$0.50 per sf (maximum \$1,000 per account)	78,900 sf ^(d)
Smart Irrigation Controller ^(c)	\$75 per account	150 controllers

Source: Data from City’s Water Conservation Specialist, January 2021.

- (a) Fiscal Years Ending 2016-2020.
 - (b) Offer ended June 30, 2020.
 - (c) Program started Fiscal Year Ending 2017.
 - (d) Estimated area at \$0.50/sf based on rebate expended (\$39,450).
- sf = square feet

5.2 Potential Future Demand Management Measures

Over time, some DMMs may saturate the City’s service area and demand hardening may occur. For example, if many customers use the high efficiency clothes washer rebate, eventually enough customers will have replaced their clothes washers that relatively few remain to take advantage of this rebate. New initiatives can help maintain the City’s water conservation momentum.

Potential future DMMs under consideration by the City include a dishwasher rebate and a requirement to replace inefficient water fixtures in homes being sold or remodeled. The City is also considering converting a smaller City park to a demonstration garden or landscape area, where visitors could learn about climate-appropriate plants and landscaping, gardening, and watering tips.

Participation in the California Water Efficiency Partnership (CalWEP) (www.calwep.org) could provide the City with resources to advance its water conservation efforts, if needed.

6.0 FUTURE WATER CONSERVATION POLICIES

The 2018 Water Conservation Legislation establishes a new foundation for long-term water conservation and drought planning to adapt to climate change and the associated longer and more intense droughts in California. This legislation builds on SB X7-7 and expands authorities and requirements for urban water use efficiency by setting standards for indoor residential water use and requires the State Water Board, in coordination with DWR, to adopt efficiency standards for outdoor residential water use, CII outdoor water use with dedicated irrigation meters, and water loss.

DWR and the State Water Board developed the Primer to summarize the 2018 Water Conservation Legislation³ and outline the key authorities, requirements, timeline, roles, and responsibilities of State agencies, water suppliers, and other entities during implementation of actions described in the 2018 Water Conservation Legislation. The Primer is included as Appendix A to this Plan.

Rulemaking is currently in progress, and the City’s required water use objectives have not yet been set. The City intends to update its water conservation policies and expand, if necessary, its Water Conservation Program implementation to comply with future water use objectives.

6.1 Pending Water Use Standards

The Legislature established indoor residential water use standards as 55 GPCD until January 2025, 52.5 GPCD from 2025 to 2029, and 50 GPCD in January 2030, or a greater standard recommended by DWR and the State Water Board. DWR and the State Water Board are also in the process of developing new standards for outdoor residential use, outdoor CII use with dedicated irrigation meters and water losses. These standards will require the City to develop water use objectives, provide annual reports, and update their UWMP as discussed in Section 6.2.

6.2 Future Water Use Objectives and Reporting

In accordance with CWC §10609.20(c), the City’s water use objectives will be based on the estimated efficient indoor and outdoor residential water use, efficient outdoor irrigation of CII landscaped areas, estimated water losses, and estimated water use for variances approved by the State Water Board aggregated across the population in its water service area. In the near future, the State Water Board is anticipated to adopt guidelines and methodologies for calculating the water use objectives that incorporate water use standards discussed in Section 6.1.

By January 1, 2024, and January 1 of every year thereafter, the City will need to calculate its urban water use objectives and actual water use and provide an annual report to the State.

³ Making Water Conservation a California Way of Life – Primer of 2018 Legislation on Water Conservation and Drought Planning, Senate Bill 606 (Hertzberg) and Assembly Bill 1668 (Friedman).

Making Water Conservation a California Way of Life

[Making Water Conservation a California Way of Life](#)

Final



MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

Primer of 2018 Legislation on Water Conservation and Drought Planning
Senate Bill 606 (Hertzberg) and Assembly Bill 1668 (Friedman)

PREPARED BY



California Department
of Water Resources

AND



State Water Resources
Control Board

NOVEMBER 2018



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GLOSSARY

The following key terms are listed below for easy reference. Where applicable, existing definitions from the statute and regulations are provided. Additional terms that are relevant to the 2018 legislation and its implementation are introduced in the document where appropriate. However those terms are not defined in the current statute or regulation and may be modified throughout implementation.

agricultural water supplier	<p><i>(For agricultural water management plan)</i> A water supplier or contractor for water, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water, as defined in CWC §10608.12(a).</p> <p><i>(For farm-gate delivery reporting)</i> A water supplier or contractor for water, either publicly or privately owned, providing 2,000 acre-feet or more of surface water annually for agricultural purposes or serving 2,000 or more acres of agricultural land, as defined in CWC §531(b).</p>	urban retail water supplier	A water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes, as defined in CWC §10608.12(t)
drought risk assessment	A method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in CWC §10635(b), as defined in CWC §10612.	urban water supplier	The combination of urban retail or wholesale water suppliers, defined by CWC §10608.12(t) and §10608.12(w), respectively; the term is also defined by CWC §10617.
irrigable land	Undefined in the legislation; to be defined through implementation.	urban water use efficiency standards	The standards effective through CWC §10609.4 (indoor residential use) or adopted by State Water Board (outdoor residential, water loss, and CII outdoor irrigation of landscape areas with dedicated meters) pursuant to CWC §10609.2.
irrigated land	Undefined in the legislation; to be defined through implementation.	urban water use objective	An estimate of aggregate efficient water use for the previous year based on adopted water use efficiency standards and local service area characteristics for that year, as described in CWC §10609.20, as defined in CWC §10608.12(u).
performance measures	Actions to be taken by urban retail water suppliers that will result in increased water use efficiency by commercial, institutional and industrial (CII) water users. Performance measures may include, but are not limited to, educating CII water users on best management practices, conducting water use audits, and preparing water management plans. Performance measures do not apply to process water, as defined in CWC §10608.12(n)).	urban wholesale water supplier	A water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes, as defined CWC §10608.12(w).
potable reuse	Direct potable reuse, indirect potable reuse for groundwater recharge, and reservoir water augmentation, as defined in CWC §13561, as defined in CWC §10608.12(o).	water loss	The total of apparent losses and real losses (California Code of Regulations, title 23, §638.1(a) and §638.1(k), respectively) in an urban water supplier's system. Apparent losses means losses due to unauthorized consumption and/or nonphysical (paper) losses attributed to inaccuracies associated with customer metering or systematic handling errors. Real losses means the physical water losses from the pressurized potable water system and the supplier's potable water storage tanks, up to the point of customer consumption.
process water	Water used by industrial water users for producing a product or product content or water used for research and development, as defined in CWC §10608.12(p).	water shortage contingency plan	A document that incorporates the provisions detailed in CWC §10632(a) and is subsequently adopted by an urban retail water supplier, as defined in CWC §10617.5.
recycled water	Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource, as defined in CWC §13050(n), as defined in CWC §10608.12(q).	water supply and demand assessment	A method that looks at current year and one or more dry year water supplies and demands for determining water shortage risks per CWC §10632.1, as defined in CWC §10618.

ACRONYMS AND ABBREVIATIONS

2017 Framework	<i>Making Water Conservation a California Way of Life, Implementing Executive Order B-37-16</i>	DWR	California Department of Water Resources
AB	Assembly Bill	GPCD	gallons per capita daily
AWMP	Agricultural Water Management Plan	Legislature	California State Legislature
CDFA	California Department of Food and Agriculture	MWEL	Model Water Efficient Landscape Ordinance
CEC	California Energy Commission	SB	Senate Bill
CII	Commercial, industrial, and institutional	SGMA	Sustainable Groundwater Management Act
CPUC	California Public Utilities Commission	State Water Board	State Water Resources Control Board
CWC	California Water Code	UWMP	Urban Water Management Plan
DRA	Drought Risk Assessment	WSCP	Water Shortage Contingency Plan

USEFUL LINKS

- Executive Order B-37-16, Making Water Conservation a California Way of Life: https://www.gov.ca.gov/wp-content/uploads/2017/09/5.9.16_Attested_Drought_Order.pdf
- Senate Bill 606, as chaptered: http://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB606
- Assembly Bill 1668, as chaptered: http://leginfo.ca.gov/pub/15-16/bill/asm/ab_1651-1700/ab_1668_bill_20160927_chaptered.pdf
- Senate Bill X7-7, as chaptered: http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=200920107SB7
- DWR Water Use and Efficiency Program: <https://water.ca.gov/Programs/Water-Use-And-Efficiency>
- State Water Board Water Conservation Portal: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/

PHOTOGRAPHY CREDITS

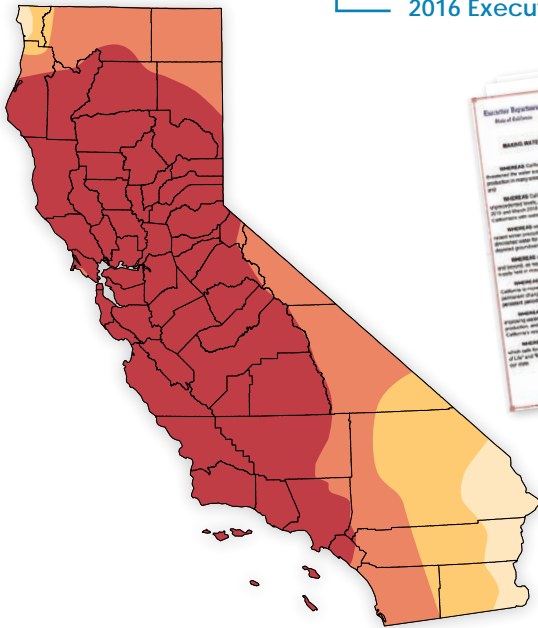
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- Steve Payer, DWR – Pages 31
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Introduction

01 Introduction

California Drought 2012-2016



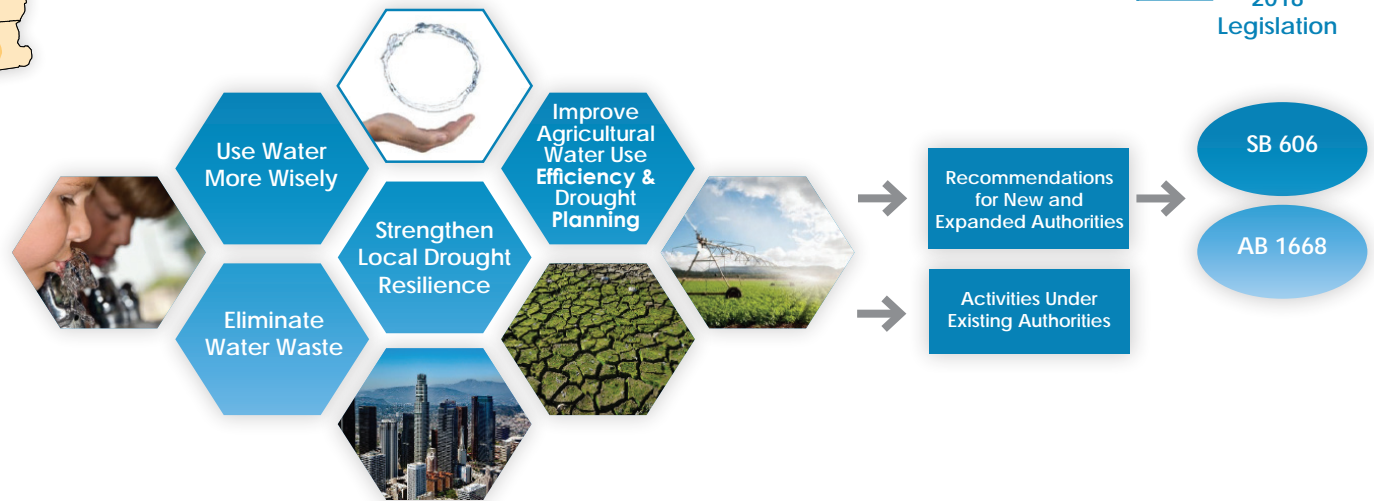
2016 Executive Order B-37-16



In 2018, the California State Legislature (Legislature) enacted two policy bills, (Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman)), to establish a new foundation for long-term improvements in water conservation and drought planning to adapt to climate change and the resulting longer and more intense droughts in California. These two bills amend existing law to provide expanded and new authorities and requirements to enable permanent changes and actions for those purposes, improving the state's water future for generations to come.

SB 606 and AB 1668 are direct outcomes of Governor Brown's Executive Order B-37-16 issued in May 2016. The recommendations in the April 2017 report entitled *Making Water Conservation a California Way of Life, Implementing Executive Order B-37-16* (2017 Framework) and subsequent extensive legislative outreach efforts informed the development of SB 606 and AB 1668. The 2017 Framework was prepared by the California Department of Water Resources (DWR), State Water Resources Control Board (State Water Board), California Public Utilities Commission (CPUC), California Department of Food and Agriculture (CDFA), and California Energy Commission (CEC) in response

2017 Framework Report to Implement Executive Order B-37-16



2018 Legislation

to Executive Order B-37-16 to establish a long-term framework for water conservation and drought planning. The 2017 Framework built on the conservation realized during the recent drought, as well as implementation of the Governor's California Water Action Plan.¹ The resulting 2017 Framework outlined a suite of actions that can be implemented under existing authorities and, where necessary, recommended additional actions that can be implemented with new or expanded authorities given by the Legislature. To that end, the Legislature enacted SB 606 and AB 1668, which provide complementary authorities and requirements that affect water conservation and drought planning for urban water suppliers, agricultural water suppliers, and small water suppliers and rural communities.

As an initial implementation action, DWR and the State Water Board prepared this primer to summarize the authorities, requirements, and schedules included in the new legislation. Where appropriate, roles and responsibilities of State agencies, water suppliers, and other parties are highlighted. During the implementation process, DWR, the State Water Board, and other State agencies will further develop data, information, guidelines, and other technical assistance to help realize the bills' intended outcomes. These agencies will solicit broad stakeholder and public participation throughout implementation.

The content of this primer is organized by the four primary goals in Executive Order B-37-16 and the 2017 Framework: (1) use water more wisely, (2) eliminate water waste, (3) strengthen local drought resilience, and (4) improve agricultural water use efficiency and drought planning. The majority of the new and expanded authorities relate to achieving the goal of using water more wisely, with the addition of a chapter in the California Water Code (CWC), Chapter 9 (commencing with §10609) of Part 2.55 of Division 6. The table on the following page presents major new and expanded authorities provided by SB 606 and AB 1668. For ease of reference, relevant law citations are included in the discussion, and applicable authorizing bills, SB 606 (SB) and AB 1668 (AB), are identified. Descriptions of new requirements and authorities are presented along with milestones and legislated deadlines. Callout boxes are used to highlight specific details or topics. Corresponding statutory roles and responsibilities are noted, where appropriate.

This document does not address actions described in the Executive Order B-37-16 and the 2017 Framework that rely on existing authorities other than to the extent necessary to describe changes made by SB 606 and AB 1668.

¹ The California Water Action Plan was first released in 2014 and then updated in 2016.



Making Water Conservation a California Way of Life – Major Areas of Coverage in SB 606 and AB 1668 of 2018

Primary Goals	Major Areas of Coverage in SB 606 (SB) and AB 1668 (AB)
Use Water More Wisely	<ul style="list-style-type: none"> • Water budget-based method for quantifying urban water use objectives • Urban retail water use efficiency standards adoption and water use objectives • Urban retail water use objective implementation, reporting, and enforcement • Expanded civil liability for violations
Eliminate Water Waste	<ul style="list-style-type: none"> • Affirmation for continued implementation of existing requirements enacted by SB 555 of 2015 for setting urban retail water loss standard, methodology, and reporting requirements • Recommendations to Legislature on expanding water loss reporting requirements for urban wholesale water suppliers
Strengthen Local Drought Resilience	<ul style="list-style-type: none"> • Emergency declaration based on local water shortage • Urban water shortage contingency planning, methodology, reporting, and enforcement • Amendments to existing urban water management reporting and enforcement • Countywide drought planning for small water suppliers and rural communities
Improve Agricultural Water Use Efficiency and Drought Planning	<ul style="list-style-type: none"> • Water budget-based method for quantifying agricultural water use efficiency • Amendments to existing agricultural water delivery reporting and requirements • Drought resiliency and response planning, and requirements for agricultural water use



Use Water More Wisely

02 Use Water More Wisely

SB 606 and AB 1668 do not change existing implementation of the Water Conservation Act of 2009² through 2020. Rather, the legislation provides new and expanded authorities needed for implementation of a water budget-based approach to conservation and water use efficiency as recommended in the 2017 Framework. This approach is described in a new CWC chapter (commencing with §10609) related to the urban water use objective and water use reporting, to be realized through new urban water use efficiency standards to be adopted by the State Water Board, in coordination with DWR, by June 30, 2022. The approach aims at advancing the State's goals to mitigate for and adapt to climate change.

Most new authorities and requirements for urban water use efficiency are in AB 1668, with a few supplemental provisions in SB 606. The resulting CWC §10609 requires DWR and the State Water Board to establish standards for (1) indoor residential use; (2) outdoor residential use; (3) outdoor CII use with dedicated irrigation meters; and (4) water losses. The legislation also requires DWR and the State Water Board to establish performance measures for CII water use and appropriate variances for unique uses that can have a material effect on water use of an urban retail water supplier. The Legislature recognizes the substantial diversity of businesses and institutions throughout the state, and requires collection of additional data as part of implementation.

The legislation also requires urban retail water suppliers to calculate and report their urban water use objectives following adoption of the new standards. New State policies reflected in these CWC amendments could have substantial effects on long-term urban water use and management by urban water suppliers. For this reason, the legislation requires a thorough review of the progress, outcomes, and effects of near-term implementation. In addition, the legislation requires DWR and the State Water Board to seek broad stakeholder and public input throughout implementation.

In this primer, the significant CWC amendments that provide new authorities and requirements for using water more wisely are grouped by six major topics: (1) urban water use efficiency standards and urban water use objective; (2) CII performance measures; (3) State-provided data; (4) reporting requirements; (5) compliance, enforcement, and legislative oversight; and (6) streamlining data reporting. All new requirements associated with urban water use efficiency standards are addressed in **USE WATER MORE WISELY** with the exception of the water loss standard that is included in **ELIMINATE WATER WASTE**.



An **urban water use efficiency standard** is a numeric standard for each category in CWC §10609.2, as set by the Legislature (indoor residential, see §10609.4) or as set by the State Water Board, in coordination with DWR (outdoor residential, water loss, and CII outdoor irrigation of landscape with dedicated meters, see §10609.2).



An **urban water use objective** is an estimate of aggregate efficient water use for the previous year based on adopted water use efficiency standards and local service area characteristics for that year (CWC §10608.12(u) **(AB)**).



An **urban retail water supplier** is a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes (CWC §10608.12(t) **(AB)**).

² Also known as SB X7-7; commencing with CWC §10608.

URBAN WATER USE EFFICIENCY STANDARDS AND WATER USE OBJECTIVE

The legislation sets standards for indoor residential use and requires the State Water Board, in coordination with DWR, to adopt efficiency standards for outdoor residential use, water losses, and CII outdoor landscape areas with dedicated irrigation meters, as described in this section. These volumetric standards apply to an urban retail water supplier that will use the efficiency standards to calculate its urban water use objective, which is later compared with its actual aggregate water use for reporting purposes.

The Legislature deemed the State Water Board's actions for adopting and implementing water use efficiency standards to be Class 8 actions for protecting the environment, as defined in Section 15308 of Title 14 of the California Code of Regulations. Therefore, these actions are categorically exempt from provisions of the California Environmental Quality Act (CWC §10609.34 [SB](#)).

All new requirements for urban water use objectives are effective after June 2022 when the State Water Board adopts urban water use efficiency standards, performance measures, and variances. The legislation does not modify the current statewide goal of a 20 percent reduction in urban per capita water use by 2020 (i.e., suppliers' 2020 targets) as established under the Water Conservation Act of 2009³. AB 1668 requires that implementation of the new authorities and requirements result in statewide conservation exceeding current statewide targets³ (CWC §10609.2(d) [AB](#)). The following provides details on the legislated requirements for developing and adopting water use efficiency standards, applications of the standards in urban water use objective calculations, and additional implementation oversight.

Urban Water Use Efficiency Standards

SB 606 and AB 1668 contain specific requirements for developing and adopting water use efficiency standards. The legislation:

- Requires DWR, in coordination with the State Water Board, to conduct necessary studies and investigations and authorizes the agencies to recommend to the Legislature efficiency standards for indoor residential use that include benefit and impact assessments for applying such standards by January 1, 2021. These jointly-recommended standards may more appropriately reflect the best practices for indoor residential water use than the

³ AB 1668 requires the long-term water use efficiency standards be set at a level designed so that the aggregate water use objectives, "...together with other demands excluded from the long-term standards such as CII indoor water use and CII outdoor water use not connected to a dedicated landscape meter..." will exceed the 2020 statewide conservation targets (CWC §10609.2(d) [AB](#)).

default standards set by the Legislature in CWC §10609.4(a) ^(AB). DWR will develop these recommendations in coordination with the State Water Board and collaboratively with stakeholders (CWC §10609.4(b) ^(AB)).

- Requires DWR, in coordination with the State Water Board, to conduct necessary studies and investigations and develop recommendations to the State Water Board by October 1, 2021 for:
 - Standards for outdoor residential water use that apply to residential irrigable lands, including provisions for swimming pools, spas, and ornamental water features that are artificially supplied with water, and incorporating principles of the Model Water Efficient Landscape Ordinance (MWELO)⁴ (CWC §10609.6 ^(AB)).
 - Standards for CII outdoor irrigation of landscape areas with dedicated irrigation meters or other means of measurement, and shall incorporate principles of the MWELO (CWC §10609.8 ^(AB)).
 - Appropriate variances for unique uses that can have a material effect on an urban retail water supplier's urban water use objective and the corresponding thresholds of significance (CWC §10609.14 ^(AB)).
 - Guidelines and methodologies that identify how an urban retail water supplier calculates its urban water use objective (CWC §10609.16 ^(AB)).
- Requires the State Water Board, in coordination with DWR, to adopt long-term standards for outdoor residential water use, outdoor irrigation with dedicated irrigation meters in connection with CII water use, and a volume for water loss by June 30, 2022. Before adoption, the State Water Board shall make proposed standards and identified potential effects available for public comment by May 30, 2022 (CWC §10609.2 ^(AB)).
- Requires the State Water Board to adopt appropriate variances, guidelines, and methodologies for calculating urban water use objectives (CWC §10609.2(e) ^(AB)).
- Requires the State Water Board, in coordination with DWR, to adopt water loss standards for urban retail water suppliers no earlier than January 1, 2019, and no later than July 1, 2020, pursuant to CWC §10608.34⁵ (CWC §10609.12 ^(AB)). See **ELIMINATE WATER WASTE** for additional related requirements.



*Different from other water use efficiency standards, DWR and the State Water Board may develop recommendations to the Legislature on standards for indoor residential use. On the **water supplier level**, effective standards will follow provisions in CWC §10609.4(a) ^(AB):*

- 55 gallons per capita daily (GPCD) until January 1, 2025
 - The greater of 52.5 GPCD or a standard recommended by DWR and the State Water Board for the 2025 standard from January 1, 2025, through December 31, 2029
 - The greater of 50 GPCD or a standard recommended by DWR and the State Water Board for the 2030 standard after January 1, 2030
- These standards do not require reporting or measurements on the customer level.*



For efficiency standards related to outdoor residential irrigation and outdoor CII landscape areas with dedicated meters, "principles of the model water efficient landscape ordinance" means those provisions of the MWELO applicable to the establishment or determination of the amount of water necessary for efficient landscape irrigation. These provisions include, but are not limited to, the following (CWC §10609.9 ^(AB)):

- Evapotranspiration adjustment factors, as applicable
- Landscape area
- Maximum applied water allowance
- Reference evapotranspiration
- Special landscape areas, including provisions governing evapotranspiration adjustment factors for different types of water used for irrigating landscape

⁴ Adopted by DWR pursuant to the Water Conservation in Landscape Act of 2017 (commencing with CWC §65591).

⁵ Enacted by SB 555 of 2015.

AB 1668 requires that when adopting water use efficiency standards, the State Water Board shall consider the effects of the proposed standards on local wastewater management, developed and natural parklands, and urban tree health (CWC §10609.2(c) **AB**).



An urban retail water supplier may have certain unique uses that can have a material effect on its urban water use objective. DWR will recommend appropriate variances and, for each variance, the associated threshold of significance for consideration in adoption by the State Water Board. Appropriate variances may include, but are not limited to, the following (CWC §10609.14 **AB**):

1. Significant use of evaporative coolers
2. Significant populations of horses and other livestock
3. Significant fluctuations in seasonal populations
4. Significant landscaped areas irrigated with recycled water having high levels of total dissolved solids
5. Significant use of water for soil compaction and dust control
6. Significant use of water to supplement ponds and lakes to sustain wildlife
7. Significant use of water to irrigate vegetation for fire protection
8. Significant use of water for commercial or noncommercial agricultural use

Each urban retail water supplier should request and may receive approval from the State Water Board for use of adopted variances in calculating its urban water use objective. The State Water Board shall make the approved variances by urban retail water supplier and associated supporting data available on its website.

To accommodate unforeseen circumstances of individual urban retail water suppliers, SB 606 allows the State Water Board to waive urban water use efficiency standard requirements for a period of up to five years. However, the permissible conditions are limited to an urban retail water supplier with deliveries that are significantly affected by changes in water use because of damages from a disaster. The State Water Board is also required to consider the breadth of the damage and the time necessary for the damaged areas to recover from the disaster (CWC §10609.38 **SB**).

Urban Water Use Objective

SB 606 establishes a method to estimate the aggregate amount of water an urban retail water supplier would have used in the previous year if all that water had been used in compliance with adopted efficiency standards. The aggregate amount, or “urban water use objective,” is an estimate of aggregate efficient water use from the previous calendar or fiscal year based on adopted water use efficiency standards and local service area characteristics for that year, as described in CWC §10609.20 (CWC §10608.12(u) **AB**). More specifically, the annual urban water use objective is the sum of the following (CWC §10609.20(c) **SB**)⁶:

1. Aggregate estimated efficient indoor residential water use.
2. Aggregate estimated efficient outdoor residential water use.
3. Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use.
4. Aggregate estimated efficient water losses.
5. Aggregate estimated water use for approved variances.

By comparing the amount of water actually used in the previous year with the urban water use objective for that year, an urban retail water supplier can determine if it has achieved the required level of water use efficiency for the previous year. With this comparison, local urban retail water suppliers will be in a better position to help eliminate unnecessary use of water, that is, water used in excess of that needed to accomplish the intended beneficial use (CWC §10609(a) **AB**).

Emphasis on the aggregate amount of all categories of urban water use in meeting the urban water use objective provides an urban retail water supplier with flexibility⁷ in promoting and implementing water conservation measures in its own service area. This emphasis also means that urban water use efficiency requirements are applicable on the water supplier

⁶ The allowable bonus incentive for potable water reuse is discussed separately later in this subsection.

⁷ That the urban water use objective may be calculated on either a fiscal or calendar year provides flexibility, as does the ability to determine what measures are to be implemented.

level and not on the individual customer level. An urban retail water supplier that does not meet its objective may be required by the State Water Board to enact policies and programs that result in additional water savings.

To maintain consistency with State policy encouraging potable reuse⁸, SB 606 allows a bonus incentive for an urban retail water supplier that delivers water from a groundwater basin, reservoir, or other source that is augmented by potable reuse water. The bonus incentive is to adjust the supplier's urban water use objective by the volume of potable reuse water delivered to residential customers and landscape areas with dedicated irrigation meters in connection with CII water use. The bonus incentive shall be limited in accordance with one of the following: (A) the bonus incentive shall not exceed 15 percent of the urban water supplier's water use objective for any potable reuse water produced at an existing facility; and, (B) the bonus incentive shall not exceed 10 percent of the urban water supplier's water use objective for any potable reuse water produced at any facility that is not an existing facility. An existing facility is defined as one with a completed environmental review on or before January 1, 2019, that becomes operational on or before January 1, 2022, and that uses microfiltration and reverse osmosis technologies to produce the potable reuse water (CWC §10609.20(d) **SB**). See **REPORTING REQUIREMENTS** for more information on annual reporting of urban water use and calculation of urban water use objective.

CII PERFORMANCE MEASURES

AB 1668 requires DWR, in coordination with the State Water Board, to conduct necessary studies and investigations to develop recommendations on performance measures for CII water use by October 1, 2021, for consideration in adoption by the State Water Board (CWC 10609.10(a) **AB**). Prior to recommending performance measures for CII water use, DWR is required to solicit broad public participation from stakeholders and other interested parties related to the following considerations (CWC §10609.10(b) **AB**):

- CII water use classification system.
- Minimum size thresholds for converting mixed CII meters to dedicated irrigation meters.
- Technologies that could be used in lieu of requiring dedicated irrigation meters.
- Best management practices including water audits and water management plans for CII customers above a certain size, volume of use, or other threshold.

DWR's recommendations shall be consistent with the October 21, 2013, report to the Legislature by the CII Task Force titled, *Water Use Best Management Practices*⁹, including the technical and financial feasibility recommendations provided in that report, and shall support the economic productivity of CII sectors (CWC §10609.10(c) **AB**).

⁸ Potable reuse includes direct and indirect reuse, as defined in CWC §13561.

⁹ See <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Files/CII-Volume-I-july-2014.pdf> and <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Files/CII-Volume-II-july-2014.pdf>




*For the studies, investigations, and report related to a standard for indoor residential water use that DWR will conduct in coordination with the State Water Board, AB 1668 requires collaboration with and input from a broad group of stakeholders. That group includes, but is not limited to, environmental groups; experts in indoor plumbing; and water, wastewater, and recycled water agencies (CWC §10609.4(b)(2) **AB**).*


STATE-PROVIDED DATA

AB 1688 recognizes the need for studies and investigations to support development of urban water use efficiency standards. As part of DWR's implementation efforts, it will conduct these studies and investigations in coordination with the State Water Board and in collaboration with stakeholders. AB 1688 specifically identifies the need for landscape area data that are required for the analysis of residential outdoor water use, and other supporting data required by urban retail water suppliers to calculate their urban water use objectives:

- Requires DWR, by January 1, 2021, to provide urban retail water suppliers with data regarding the area of residential irrigable lands to calculate aggregated outdoor residential use. The data should be reasonably accurate for the intended uses, taking into consideration California's diverse landscapes and community characteristics (CWC §10609.6(b) and (c) [\(SB\)](#)).
- Requires DWR to provide landscape area data and other data for calculating an urban water use objective at a level of detail sufficient to allow an urban retail water supplier to verify its accuracy at the parcel level (CWC §10609.20(e) [\(SB\)](#)).
- Requires DWR to provide or otherwise identify data related to unique local conditions to support calculation of an urban water use objective (CWC §10609(b)(2)(C) [\(AB\)](#)).



DWR, in collaboration with stakeholders, is conducting a statewide residential landscape area measurement study for California's urban retail water suppliers. The study includes pilots to develop a reliable method for estimating irrigable landscape areas for residential outdoor use. DWR will provide the landscape area data to suppliers by January 1, 2021 (CWC §10609.6(b) and (c) [\(AB\)](#)).



In addition to the annual water use report required under CWC §10609.24(a) [\(SB\)](#), SB 606 authorizes the State Water Board to issue a regulation or informational order requiring urban wholesale and retail water suppliers to provide monthly reports related to water production, water use, or water conservation (CWC §10609.28 [\(SB\)](#)). This provision provides the State Water Board direct authority to readopt a reporting requirement established in the recent drought emergency to ensure continuation of certain reporting.

REPORTING REQUIREMENTS

To support implementing urban water use efficiency standards and meeting urban water use objectives, SB 606 and AB 1668 include schedule and content provisions for a critical reporting requirement – the annual water use report. The legislation also includes changes in Urban Water Management Plan (UWMP) preparation requirements. See **Related Requirements for Urban Water Management Plan Preparation**, **ELIMINATE WATER WASTE**, and **STRENGTHEN LOCAL DROUGHT RESILIENCE** for related requirements.

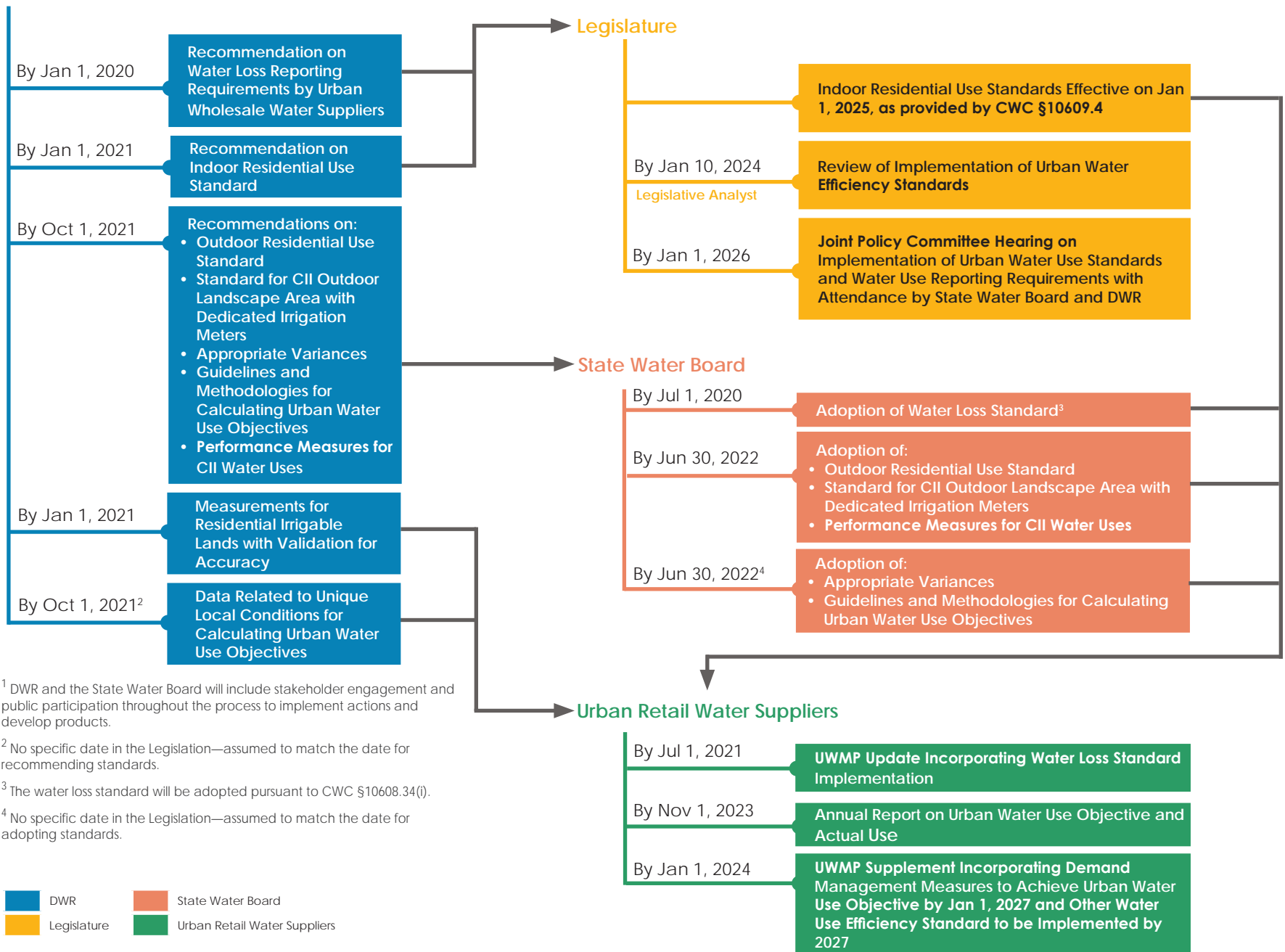
Annual Water Use Report

SB 606 and AB 1668 require each urban retail water supplier, by November 1, 2023, and by November 1 every year thereafter, to:

- Calculate its urban water use objective including estimated indoor residential water use, outdoor residential water use, outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use, water losses, water use in accordance with approved variances, and applicable bonus incentive for potable reuse (CWC §10609.20 [\(SB\)](#) and §10609.14 [\(AB\)](#)).
- Calculate its actual water use including residential water use, outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use, and water losses (CWC §10609.22 [\(SB\)](#)).

Major Actions and Products Required to Implement Water Use Efficiency Standards and Urban Retail Water Supplier's Annual Reporting Requirements¹

DWR



¹ DWR and the State Water Board will include stakeholder engagement and public participation throughout the process to implement actions and develop products.

² No specific date in the Legislation—assumed to match the date for recommending standards.

³ The water loss standard will be adopted pursuant to CWC §10608.34(i).

⁴ No specific date in the Legislation—assumed to match the date for adopting standards.

■ DWR ■ State Water Board
■ Legislature ■ Urban Retail Water Suppliers

Summary of Urban Retail Water Supplier's Urban Water Use Objective Calculation

Urban Retail Water Supplier's Urban Water Use Objective (CWC §10609.20(c))

Aggregate estimated efficient indoor residential water use



Aggregate estimated efficient outdoor residential water use



Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use



Aggregate estimated efficient water losses



Aggregate estimated water use for variances approved by the State Water Board



Allowable Bonus Incentive Adjustments

(CWC §10609.20(d)), which shall be limited in accordance with one of the following:

- Volume of potable reuse water from existing facility, with completed environmental review by Jan 1, 2019, that becomes operational by Jan 1, 2022, not to exceed **15% of urban water use objective**
- Volume of potable reuse water from new facility, not to exceed **10% of urban water use objective**



Urban Retail Water Supplier's Urban Water Use Objective, Adjusted For Bonus Incentive

for annual reporting purposes and comparison to the actual water use in the previous year

- Submit an annual report to DWR on the previous year's urban water use (CWC §10609(b)(2)(E) ^(AB); and §10609.24 ^(SB)).

For the preparation of an annual water use report for the previous year, SB 606 and AB 1668 also provide several specific requirements, flexibility, and clarifications. The legislation:

- Requires the calculated urban water use objective, actual urban water use, documentation of implementation of performance measures for CII water use, description of progress made towards meeting an urban water use objective, and relevant supporting data (CWC §10609.24 ^(SB)).
- Provides the flexibility for reporting urban water use objective and actual water use on a calendar or fiscal year basis (CWC §10609.20(b) and §10609.22(b) ^(SB)).
- Allows calculation of an urban water use objective using landscape area and other provided data by DWR or alternative data, if demonstrated to be equivalent or superior in quality and accuracy to DWR's data. DWR may provide technical assistance to an urban retail water supplier to determine the appropriateness of using alternative data for this purpose (CWC §10609.20(e) ^(SB)).

Related Requirements for Urban Water Management Plan Preparation

Following the State Water Board's adoption of urban water use efficiency standards, an urban retail water supplier shall adopt and submit to DWR, by January 1, 2024, a supplement to its adopted 2020 UWMP that includes a narrative describing water demand management measures that the supplier plans to implement to achieve its urban water use objective by January 1, 2027, pursuant to urban water use efficiency standards and their implementation. This supplement is exempt from the public notice, hearing, and adoption requirements associated with UWMP updates and amendments (CWC §10621(f)(2) and §10631(e)(1)(B) ^(SB)).

There are additional provisions related to the preparation and adoption of a UWMP by an urban retail water supplier. See **ELIMINATE WATER WASTE** and **STRENGTHEN LOCAL DROUGHT RESILIENCE** for more UWMP requirements that a water supplier should consider in streamlining its efforts to comply with UWMP preparation, adoption, and submittal requirements.



SB 606 contains a provision that could affect reporting requirements and enforcement during emergency conditions. SB 606 extends the effective period of such an emergency regulation adopted by the State Water Board in response to drought conditions or Governor's proclamation of a state of emergency from 270 days to one year after its adoption (CWC §1058.5(c) ^(SB)).



Reporting requirements and enforcement for urban water use objectives are always on the water supplier level (CWC §10609(a) ^(AB)) and not on the individual customer level. An urban retail water supplier can determine its own implementation priorities and adequate actions to achieve its urban water use objective.

COMPLIANCE, ENFORCEMENT, AND LEGISLATIVE OVERSIGHT

SB 606 and AB 1668 allow for the imposition of civil liability for inefficient water use, provide progressive authority for the State Water Board's enforcement of annual water use reporting, and provide a right for urban retail water suppliers to petition the State Water Board to reconsider its water right orders related to water use efficiency. Details are provided below.

Civil Liability

SB 606 authorizes civil liability to be imposed by local public agencies for violations of certain new water conservation requirements that will be developed through formal rule-making processes (CWC §377^(SB)).

SB 1668 authorizes civil liability for an urban retail water supplier that violates an order or regulation issued by the State Water Board under Chapter 9 (commencing with CWC §10609) of Part 2.55 of Division 6. Civil liability however, for violation of a regulation only applies to violations occurring after November 1, 2027.

Progressive Enforcement for Annual Urban Water Use Reporting

SB 606 provides the State Water Board with new authorities for enforcing the annual urban water use reporting requirement:

- Allows issuance of an informational order or conservation order to, or imposition of civil liability on, an urban water supplier for failure to submit an annual water use report (CWC §10609.24^(SB)).
- Allows for specific State Water Board enforcement actions on a legislatively-defined time table, see the figure on page 17 (CWC §10609.26^(SB)).

Water Right Protection

As the State Water Board also exercises oversight of the State's water rights system, both SB 606 and AB 1668 provide conditions for the State Water Board to adopt and implement water use efficiency standards. The legislation:

- Clarifies the State Water Board's adoption and implementation of water use efficiency standards are to have no effects on water rights or the applicability of CWC §1010 and §1011 related to water right holders' right to conserved water (CWC §10609.36(a)^(SB)).
- Clarifies the conservation orders issued by the State Water Board for compliance with annual water use reporting requirements should not contain any actions to curtail or otherwise limit the exercise of a water right of the supplier or other water right holders (CWC §10609.26(d)^(SB)).

- Extends existing rights to seek reconsideration of State Water Board decisions and orders to decisions and orders made under Part 2.55 (commencing with CWC §10608) of Division 6.

Legislative Oversight

In light of the new authorities and requirements for adopting and implementing urban water use efficiency standards, the Legislature imposed the following legislative oversight that:

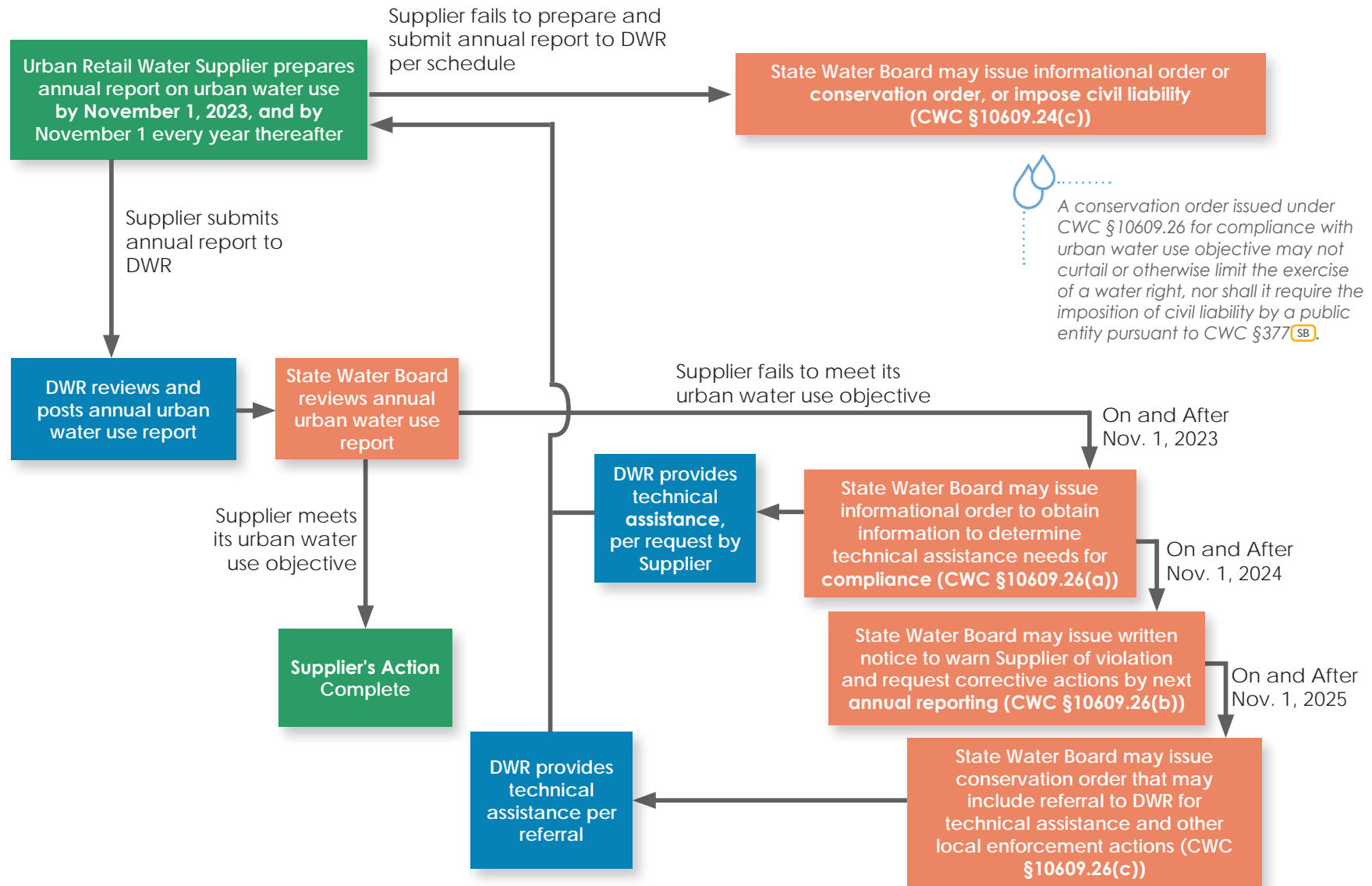
- Clarifies the need for a separate authorization from the Legislature for the State Water Board to update and amend the initially adopted urban water use efficiency standards after 2022 (CWC §10609.36(b) ^{SB}).
- Requires the Legislative Analyst, by January 10, 2024, to conduct a review of implementation of the urban water efficiency standards (CWC §10609.30 ^{SB}).
- Requires DWR and the State Water Board to appear before the appropriate policy committees of both houses of the Legislature on or around January 1, 2026, and report on implementation of the urban water use standards and water use reporting requirements (CWC §10609.32 ^{SB}).

STREAMLINING DATA REPORTING

SB 606 and AB 1668 include additional requirements for DWR and the State Water Board to identify opportunities for streamlining water data reporting and making data and their intended use accessible by the public. The legislation:

- Requires the State Water Board to post on its website a list of all urban retail water suppliers with approved variances, the specific variance or variances, and the data supporting approvals (CWC §10609.14(e) ^{AB}).
- Requires DWR and the State Water Board to identify urban water reporting requirements shared by both agencies to help streamline water data reporting, and post on each agency's website how the data are used for planning, regulatory, or other purposes (CWC §10609.15(a) ^{AB}).
- Requires DWR and the State Water Board to publish data pertaining to urban water use objective reporting requirements collected by both agencies and implement actions to improve data publication and public accessibility according to the principles and requirements of the Open and Transparent Water Data Act of 2016 (CWC §10609.15(c) ^{AB}).
- Requires DWR to post on its website annual urban water use reports and information received from urban retail water suppliers (CWC §10609.24(b) ^{SB}).

Urban Retail Water Supplier's Annual Urban Water Use Reporting Requirements and Corresponding Actions by DWR and State Water Board



*A conservation order issued under CWC §10609.26 for compliance with urban water use objective may not curtail or otherwise limit the exercise of a water right, nor shall it require the imposition of civil liability by a public entity pursuant to CWC §377 **SB**.*

*Note: A water supplier that violates an order or regulation described in CWC §1846.5(b) **AB** may be subject to civil liability. Civil liability, however, for violation of a regulation only applies to violations occurring after November 1, 2027.*

- DWR
- State Water Board
- Urban Retail Water Suppliers



Milestone Schedule: Use Water More Wisely

2020 Jan 1 – DWR may update MWELO or make finding that no update is warranted.
 Dec 31 – Urban water use targets cumulatively result in a 20-percent reduction from the baseline daily per capita water use.

2021 Jan 1 – DWR/State Water Board may submit recommendation on indoor residential water use standard to Legislature.
 Jan 1 – DWR provides residential irrigable land areas to urban water retailers.
 Jul 1 – Urban water suppliers submit UWMPs to DWR within 30 days of adoption.
 Oct 1 – DWR recommends standards for outdoor residential use, CII dedicated landscape irrigation, and unique urban water use variances.
 Oct 1 – DWR develops guidelines and methodologies for calculating urban water use objectives.
 Oct 1 – DWR recommends performance measures for CII water use.

2022 May 30 – State Water Board identifies long-term standards for efficient use of water and proposed standards' effects.
 Jun 30 – State Water Board adopts long-term standards for efficient use of water and related methodology and guidance.
 Jun 30 – State Water Board adopts performance measures for CII water use.
 Jul 1 – DWR submits UWMPs report to Legislature.

2023 Jan 1 – DWR may update MWELO or make finding that no update is warranted.
 Nov 1 – Urban water suppliers submit annual water use report to DWR on urban water use objective, actual urban water use, implementation of CII water use performance measures, and progress towards urban water use objective.
 Nov 1 forward – State Water Board may issue informational order to urban retail water supplier that is not meeting its urban water use objective.

2024 Jan 1 – Urban water suppliers adopt and submit to DWR supplement to adopted 2020 UWMPs on water demand management measures to be implemented by 2027 to achieve urban water use objective.

Jan 10 – Legislative Analyst reports to Legislature and public on evaluation of implementation of water use efficiency standards and water use reporting.

Nov 1 – Urban water suppliers submit annual water use report to DWR.

Nov 1 forward -- State Water Board may issue a written notice (warning) to urban retail water supplier that is not meeting its water use objective.

2025 Nov 1 forward – State Water Board may issue conservation order to urban retail water supplier that is not meeting its water use objective.

Nov 1 – Urban water suppliers submit annual water use report to DWR.

2026 Jan 1 – DWR may update MWELO or make finding that no update is warranted.

Jul 1 – Urban water suppliers submit UWMPs to DWR within 30 days of adoption.

Nov 1 – Urban water suppliers submit annual water use report to DWR.

2027 Jan 1 – Urban water suppliers achieve water use objective.

Jul 1 – DWR submits UWMPs report to Legislature.

Nov 1 – Urban water suppliers submit annual water use report to DWR.

Throughout this document, a milestone schedule for implementation by primary goal required by SB 606 and AB 1668 was compiled for easy reference (shown in **blue**). For completeness, other relevant requirements are also included (shown in **dark grey**). In all milestone schedules, only the lead agency is noted for each item. See **Appendix A** for details on additional coordination and collaboration requirements.



Eliminate Water Waste

03 Eliminate Water Waste

Under the second primary goal in Executive Order B-37-16, Eliminate Water Waste¹⁰, the 2017 Framework included three recommendations without need for new authorities: (1) the State Water Board to open a rulemaking process to establish permanent prohibitions on wasteful water practices, (2) the State Water Board and DWR to continue implementing CWC §10608.34 (enacted by SB 555 of 2015) to minimize urban retail water loss, and (3) the CEC to evaluate options for certification of innovative water loss and control technologies. SB 606 and AB 1668 require one new study by DWR, in coordination with the State Water Board, for extending water loss reporting requirements to urban wholesale water suppliers. (See **USE WATER MORE WISELY** for application of the water loss standard in the urban water use objective and associated reporting requirements.)

AFFIRMING EXISTING REQUIREMENTS FOR WATER LOSS STANDARD AND REPORTING

Both SB 606 and AB 1668 affirm the directive for water loss standard adoption and implementation to follow the existing requirements and process set forth in CWC §10608.34 (CWC §10631(d)(3)(A) **SB** and §10609.12 **AB**). CWC §10608.34 requires the State Water Board to adopt standards for urban retail water loss no earlier than January 1, 2019, and no later than July 1, 2020. It also contains reporting requirements. Consequently, SB 606 requires each urban retail water supplier, by July 1, 2021, to adopt and submit to DWR its 2020 UWMP with additional information related to compliance with adopted water loss standards (CWC §10631(d)(3)(C) **SB**). The State Water Board will adhere to the procedures and requirements for stakeholder engagement and public participation in the rule making process. The water loss standard adoption by July 1, 2020, will satisfy the AB 1668 schedule for the State Water Board to adopt the long-term urban retail water use efficiency standards for water loss by June 30, 2022 (CWC §10609.2 **AB**).

FEASIBILITY STUDY FOR EXTENDING WATER LOSS REPORTING REQUIREMENTS

SB 606 requires that DWR, in coordination with the State Water Board, investigate the feasibility of extending the water loss reporting requirement to urban wholesale water suppliers. Targeted urban wholesale water suppliers include private and public entities that provide more than 3,000 acre-feet of water annually for potable municipal purposes at a wholesale level. The legislation requires DWR to make a recommendation to the Legislature by January 1, 2020 (CWC §10608.35 **SB**). In developing its recommendation, DWR will solicit broad public participation from stakeholders and other interested persons.



Milestone Schedule: Eliminate Water Waste

2020

Jan 1 – DWR submits to Legislature recommendation on feasibility of developing and enacting water loss reporting requirements for urban wholesale water suppliers.

July 1 – State Water Board adopts rules requiring urban retail water suppliers to meet performance standards for the volume of water loss.

2021

Jul 1 – Water Suppliers adopt their 2020 UWMPs and show if they have met adopted water loss standard.

2022

Jun 30 – Standards for volume of water loss adopted by State Water Board, pursuant to CWC §10608.34, are used for calculation of urban water use objective.

¹⁰ Discussion of water loss in this section follows the categorization of action in Executive Order B-37-16 and the 2017 Framework. The section headings in this document do not in any manner affect the scope, meaning or intent of the actual statutory language discussed herein.



Strengthen Local Drought
Resilience

04 Strengthen Local Drought Resilience

One of the major lessons learned from the historic 2012 through 2016 drought was that urban water suppliers, small water suppliers, and rural communities must strengthen both local drought resilience and the communication of response actions among various agencies and affected communities. Many urban water suppliers had implemented effective measures to minimize impacts from the drought; however, this outcome was not consistent throughout the state. SB 606 and AB 1668 provide new and expanded authorities and requirements to address these needs, as recommended in the 2017 Framework.

Under the new authorities and requirements, each urban wholesale and retail water supplier must prepare, adopt, and submit a Water Shortage Contingency Plan (WSCP) and conduct a Drought Risk Assessment (DRA) every five years in addition to conducting an annual water supply and demand assessment.¹¹

Small water suppliers and rural communities are often more vulnerable during droughts because of their limited institutional and financial capacities to adapt to changed conditions. However, in recognition of potential diversity and jurisdictional complexities associated with drought planning in these areas, the 2017 Framework recommended allowing State agencies to work with local agencies, stakeholders, and communities on the development of more specific, functional recommendations. The new legislation requires DWR, in consultation with the State Water Board and stakeholders, to identify small suppliers and rural communities at risk of drought and water shortage vulnerability, and to develop by January 2020, recommendations to the Governor and Legislature for improving drought planning for those areas.

These new authorities and requirements for urban water suppliers and for small water systems and rural communities are summarized separately below.

URBAN WATER SUPPLIERS

Primarily through amending the Urban Water Management Planning Act (commencing with CWC §10610), SB 606 provides new and expanded authorities and requirements to strengthen local drought resilience for urban water suppliers, including wholesale and retail water suppliers, as well as public and private water suppliers. These are the same urban water suppliers required to submit UWMPs; that is, urban water suppliers providing either more than 3,000 acre-feet of water annually or with more than 3,000 urban connections.

¹¹ The annual water supply and demand assessment is the basis for the urban water supplier's annual water shortage assessment report.



Recognizing the needs for consistent and streamlined reporting requirements, SB 606 and AB 1668 include amendments for establishing consistent reporting requirements. As an example, SB 606 amends an existing UWMP requirement for a water supply reliability description for multiple dry years to be for a period of drought lasting five consecutive years, consistent with the methodology for the DRA (CWC §10631(f) ^(SB) and §10635 ^(SB)).

New and Expanded Authorities

There are two categories of new and expanded authorities: one related to local planning requirements, and another related to coordinated implementation with delineated roles and responsibilities. Specifically, the legislation:

- Requires each urban water supplier to prepare, adopt, and periodically review a WSCP as part of its UWMP to describe the method, procedures, response actions, enforcement, and communications during six levels of water supply shortage conditions (CWC §10620(d)(2) and §10632 ^(SB)).
- Requires each urban water supplier to conduct a DRA as part of its UWMP to assess water supply reliability (or vulnerability) for a period of drought lasting five consecutive water years starting the year following when the assessment is conducted, and considering both historical drought hydrology and reliability of each source of supply (CWC §10635(b) ^(SB)).

SB 606 recognizes that a regional approach to urban water management planning reduces costs and maximizes potential contributions to conservation, efficient water use, and improved local drought resilience. However, it emphasizes that each urban water supplier shall develop its own WSCP (CWC §10620(d) ^(SB)), consistent with the UWMP requirement (CWC §10620(a) ^(SB)).

Reporting Requirements

SB 606 adds new requirements and amends some existing requirements for urban water suppliers to prepare UWMPs to streamline the process and provide consistency with other provisions in SB 606 and AB 1668, as well as with other recent legislation (e.g., Sustainable Groundwater Management Act (SGMA), commencing with CWC §10720). The legislation:

- Requires each urban water supplier to update and submit its UWMP, by July 1 in years ending in 1 and 6, incorporating updated and new information from the 5 years preceding the plan update (CWC §10621(a) ^(SB)). The Legislature instituted several major changes in UWMP requirements for each supplier to:
 - Include in its UWMP a simple layperson's description of its water supply reliability conditions and its strategy for meeting future water supply reliability needs to provide a general understanding of its plan for overall urban water management (CWC §10630.5 ^(SB)).
 - If groundwater is identified as an existing or planned source of water supply and the underlying groundwater basin is subject to SGMA, include the current version of any groundwater sustainability plan or alternative adopted for SGMA compliance and actions taken by the supplier in coordination with groundwater sustainability agencies or groundwater management agencies to maintain or achieve sustainable groundwater conditions (CWC §10631(b)(4) ^(SB)).



To encourage an urban water supplier to remain vigilant as to its drought risks, SB 606 allows an urban water supplier to update its DRA within the 5-year cycle between UWMP updates (CWC §10635(b) ^(SB)).

- Submit an updated WSCP to DWR within 30 days of its adoption (CWC §10644(b) ^(SB)). This requirement is made consistent with that for an adopted UWMP.
- Make the adopted WSCP available for public review within 30 days after submitting a copy to DWR. DWR is subject to the same requirement after receiving the WSCP (CWC §10645(b) ^(SB)). This requirement is made consistent with that for an adopted UWMP.
- Requires an urban water supplier, by June 1 of each year, to conduct an annual water supply and demand assessment pursuant to CWC §10632(a), and submit to DWR an annual water shortage assessment report with information on anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions as described in the WSCP. An urban water supplier that relies on imported water from the State Water Project or U.S. Department of the Interior, Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocation, or by June 1 of each year, whichever is later (CWC §10632.1 ^(SB)).



SB 606 specifies WSCP content requirements as the following (CWC §10632 ^(SB)):

- Analysis of water supply reliability
- Procedures used for conducting an annual water supply and demand assessment
- Six standard water shortage levels or equivalent
- Shortage response actions
- Communication protocols and procedures
- Customer compliance, enforcement, appeal, and exemption procedures
- Legal authority
- Financial consequence
- Monitoring and reporting requirements and procedures
- Reevaluation and improvement procedures

Coordinated Implementation

SB 606 provides complementary authorities and coordinated roles among different jurisdictions for implementation:

- Urban Water Suppliers:
 - Shall declare a water shortage emergency condition when available water supply is insufficient for human consumption, sanitation, and fire protection within its service area (CWC §350 ^(SB)).
 - Shall follow prescribed procedures and implement determined shortage response actions in its adopted WSCP where feasible and appropriate, or take reasonable alternative actions that are not specified in its WSCP, if needed, without amending its UWMP or WSCP, provided they are included in its annual water shortage assessment report (CWC §10632.2 ^(SB)).
- CPUC:
 - Shall request an urban water supplier include its most recent UWMP and WSCP as part of its general rate case filing (CWC §10621(c) ^(SB)).
- State Water Board:
 - Defer to implementation of locally-adopted WSCPs, to the extent practiceable, during a state of emergency¹² based on drought conditions (CWC §10632.3 ^(SB)).



UWMP and WSCP adoption should follow applicable public notice, hearing, and adoption requirements. SB 606 encourages an urban water supplier to engage diverse social, cultural, and economic elements of the population within the service area when preparing its UWMP and WSCP (CWC §10641 and §10642 ^(SB)).

¹² Declared under the California Emergency Services Act (commencing with § 8550, Chapter 7 of Division 1 of Title 2 of the Government Code).



DWR will provide recommendations on how countywide drought and water shortage contingency plans can be included in county local hazard mitigation plans or otherwise integrated with complementary existing planning processes. DWR will also provide guidance that outlines goals of the countywide drought plans and WSCPs and recommend components including, but not limited to, all of the following (CWC 10609.42(b)(AB)):

1. Assessment of drought vulnerability
2. Actions to reduce drought vulnerability
3. Response, financing, and local communication and outreach planning efforts that may be implemented in times of drought
4. Data needs and reporting
5. Roles and responsibilities of interested parties and coordination with other relevant water management planning efforts

- DWR:
 - May adopt regulations deemed necessary or desirable to implement the Urban Water Management Planning Act and its subsequent amendments (CWC §10657(SB)).
 - Shall prepare and submit to the State Water Board, by September 30 of each year, an annual report on implementation summarizing (1) submitted water supply and demand assessment results and reported water shortage conditions, (2) regional and statewide analyses of water supply conditions developed by DWR, and (3) urban water supplier-specific information regarding various shortage response actions implemented as a result of annual water shortage assessments (CWC §10644(c)(1)(B)(SB)).

Legislative Oversight

SB 606 imposes additional legislative oversight by requesting DWR prepare and submit to the Legislature, by July 1 in years ending in 2 and 7, a report summarizing the adoption status of UWMPs and WSCPs (CWC §10644(c)(1)(A)(SB)). In addition, upon request by the Legislature, DWR shall prepare additional reports and data to support the Legislature in future hearings to review the effectiveness of UWMPs and WSCPs (CWC §10644(c)(1)(A)(SB)).

SMALL WATER SUPPLIERS AND RURAL COMMUNITIES

As demonstrated in the recent drought, small water systems and rural communities often are more vulnerable during droughts or other stressed water supply conditions because of their limited options and financial means. These small water systems and rural communities have vast diversity of geography, resources, and other characteristics. Therefore, to improve their drought resilience, they need to be anchored by and integrated with the capacity, function, and authority of the appropriate local jurisdictions for long-term effectiveness of drought preparedness and response measures.

The Legislature found that counties can have a significant role in improving drought planning for small water suppliers and rural communities. As a result, AB 1668 directs DWR, in consultation with the State Water Board, to develop recommendations and guidance to propose to the Governor and Legislature for addressing drought planning needs of small systems and rural communities throughout the state by January 1, 2020. As part of the recommendations development process, DWR shall use available data, in consultation with the State Water Board and other relevant state and local agencies and stakeholders, to identify water supply risks and vulnerabilities for small water suppliers and rural communities, and notify the public, counties, cities, and groundwater sustainability agencies of its findings (CWC §10609.42(AB)).



Milestone Schedule: Strengthen Local Drought Resilience

2020	<p>Jan 1 – DWR identifies small water suppliers and rural communities at risk of drought and water shortage vulnerability, and makes notifications.</p> <p>Jan 1 – DWR proposes development and implementation of countywide drought and WSCPs for small water suppliers and rural communities to Governor and Legislature.</p>
2021	<p>Jul 1 – Urban water suppliers submit UWMP update with DRA and WSCP to DWR within 30 days of adoption.</p>
2022	<p>Jun 1^{1,2} – Urban water suppliers submit annual water shortage assessment report³ to DWR.</p> <p>Jul 1 – DWR submits UWMPs/WSCPs status report to Legislature.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>
2023	<p>Jun 1^{1,2} – Urban water suppliers submit annual water shortage assessment report³ to DWR.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>
2024	<p>Jan 1 – Urban water suppliers adopt and submit to DWR supplement to adopted 2020 UWMPs on water demand management measures to be implemented.</p> <p>Jun 1^{1,2} – Urban water suppliers submit annual water shortage assessment report³ to DWR.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>

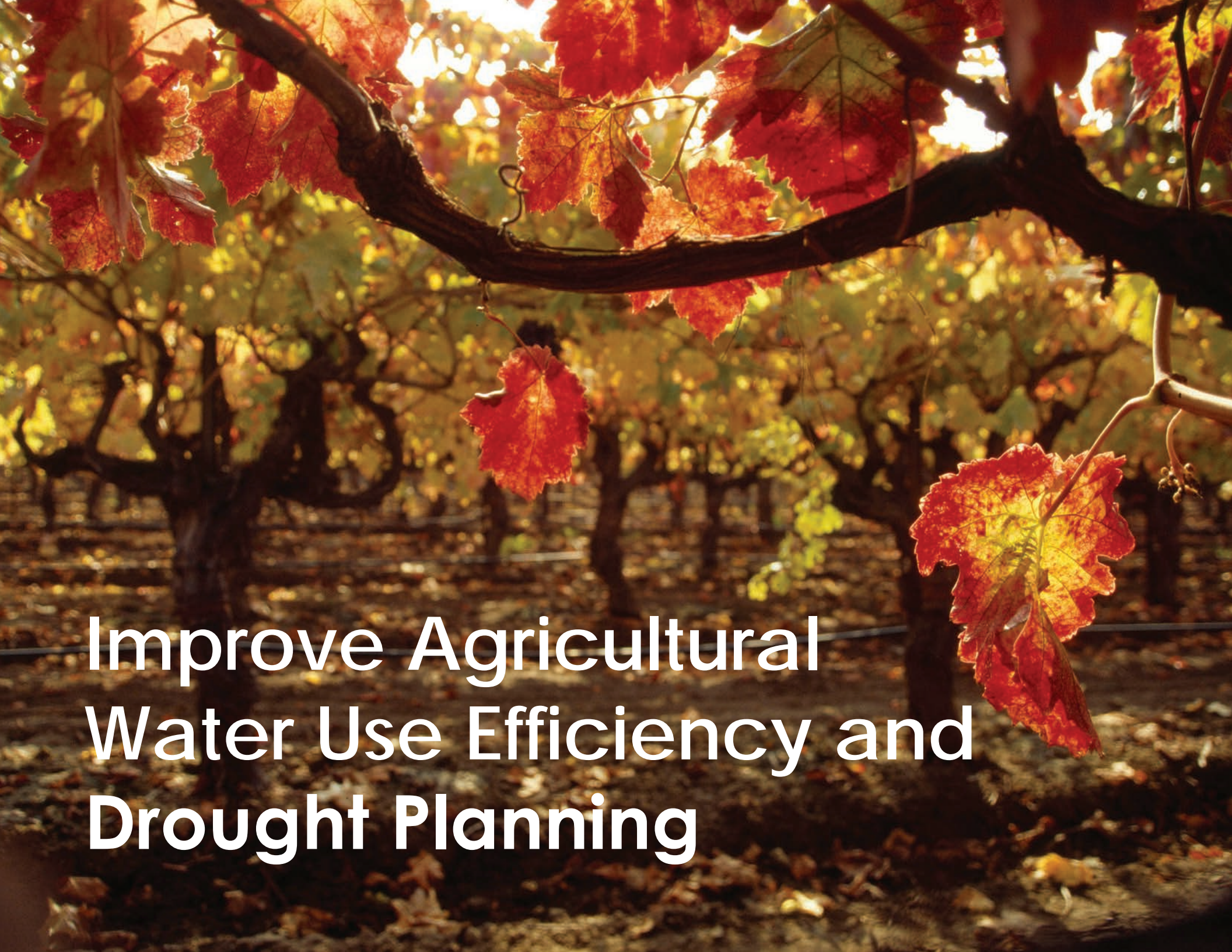
2025	<p>Jun 1^{1,2} – Urban water suppliers submit annual water shortage assessment report³ to DWR.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>
2026	<p>Jun 1^{1,2} – Urban water suppliers submit annual water shortage assessment report³ to DWR.</p> <p>Jul 1^{1,2} – Urban water suppliers submit UWMP update with DRA and WSCP to DWR within 30 days of adoption.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>
2027	<p>Jun 1^{1,2} – Urban water suppliers submit annual water shortage assessment report³ to DWR.</p> <p>Jul 1 – DWR submits to Legislature UWMPs/WSCPs status progress report.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>

NOTE:

¹ For urban water suppliers that receive imported water, the due date is June 1 or 14 days after final allocation from State Water Project or U.S. Department of the Interior, Bureau of Reclamation, whichever is later.

² The inclusion of 2022 as the starting year is to match the availability of WSCPs that are to be adopted by urban water suppliers. DWR encourages urban water suppliers to conduct such assessments prior to 2022 and they may submit their information to DWR.

³ The annual water supply and demand assessment is the basis for the urban water supplier's annual water shortage assessment report.



Improve Agricultural Water Use Efficiency and Drought Planning

05 Improve Agricultural Water Use Efficiency and Drought Planning

Agricultural communities were severely impacted in the recent drought, resulting in unsustainable groundwater use in some areas. Based on recommendations in the 2017 Framework, AB 1668 provides new authorities to add requirements for improving agricultural water use efficiency and drought planning by requiring a water budget-based approach to water management that is consistent with SGMA implementation, and by requesting the addition of a drought plan as part of an agricultural water supplier's agricultural water management plan (AWMP).

The schedule for an agricultural water supplier to complete, adopt, and submit its AWMP was changed to April 1 in years ending in 1 and 6. Agricultural water suppliers that are subject to AWMP and other reporting requirements are those providing water to more than 10,000 irrigated acres (excluding acreage irrigated with recycled water). However, as stated in CWC §10853, an agricultural water supplier that provides water to less than 25,000 irrigated acres, excluding recycled water, shall not be subject to the requirements unless sufficient funding has specifically been provided to that water supplier for the purpose of compliance with AWMP requirements. DWR will solicit input and feedback from stakeholders during the development of guidelines for preparation of AWMPs.

AGRICULTURAL WATER MANAGEMENT PLANS

As part of its AWMP, AB 1668 requires an agricultural water supplier to:

- Develop an **annual water budget** based on the quantification of all inflow and outflow components for the agricultural water supplier's service area. DWR is to provide tools and resources to assist agricultural water suppliers in developing and quantifying the components necessary to develop a water budget (CWC §10826(c) ^(AB)).
- Identify water management objectives based on the water budget and develops, prioritizes, and implements actions to meet those objectives and reduce water loss (CWC §10826(f) ^(AB)).
- Quantify the efficiency of agricultural water use in the service area using one of four methods published in DWR's 2012 report to the Legislature entitled "A Proposed Methodology for Quantifying Efficiency of Agricultural Water Use" (CWC §10826(h) ^(AB)).
- Include a drought plan for periods of limited water supply that contains resilience planning and drought response planning components describing actions by the agricultural water supplier for drought preparedness and management of water supplies and allocations during drought conditions (CWC §10826.2 ^(AB)).



Milestone Schedule: Improve Agricultural Water Use Efficiency and Drought Planning

2019	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR.
2020	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR.
2021	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR. Apr 1 – Agricultural water suppliers update AWMPs and submit no later than 30 days after adoption. Dec 31 - DWR submits status report on efficient water management practices to Legislature.
2022	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR. Apr 30 – DWR submits status report on AWMPs to Legislature.
2023	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR.
2024	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR.
2025	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR.
2026	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR. Apr 1 – Agricultural water suppliers update AWMPs and submit no later than 30 days after adoption. Dec 31 – DWR submits status report on efficient water management practices to Legislature.
2027	Apr 1 – Agricultural water suppliers submit annual farm-gate delivery data to DWR. Apr 30 – DWR submits status report on AWMPs to Legislature.



AB 1668 specifies content requirements of an agricultural water supplier's drought plan as the following (CWC § 10826.2^(AB)):

- Resilience planning
 - Data, indicators, and information needs
 - Methods and procedures for vulnerability assessment
 - Opportunities and constraints for improving resilience planning
- Drought response planning
 - Policies and a process for water shortage declaration
 - Methods and procedures for enforcement, appeal of, or exemption from triggered shortage response actions
 - Methods and procedures for monitoring and evaluation of plan effectiveness
 - Communication protocols and procedures
 - Revenue stabilization measures

REPORTING REQUIREMENTS

AB 1668 adds additional specifications on the farm-gate delivery reporting for agricultural water suppliers that provide 2,000 acre-feet or more of surface water annually for agricultural purposes or serve 2,000 or more acres of agricultural land, as defined in CWC §531(b). Specifically, AB 1668 requires each agricultural water supplier to:

- Submit to DWR, by April 1 of each year, annual aggregated farm-gate delivery data organized by groundwater basin or sub-basin, if applicable, using electronic standardized formats specified by DWR (CWC §531.10^(AB)).

AB 1668 also amends reporting requirements for agricultural water suppliers that provide water to 10,000 or more irrigated acres, excluding recycled water. The legislation requires each agricultural water supplier to:

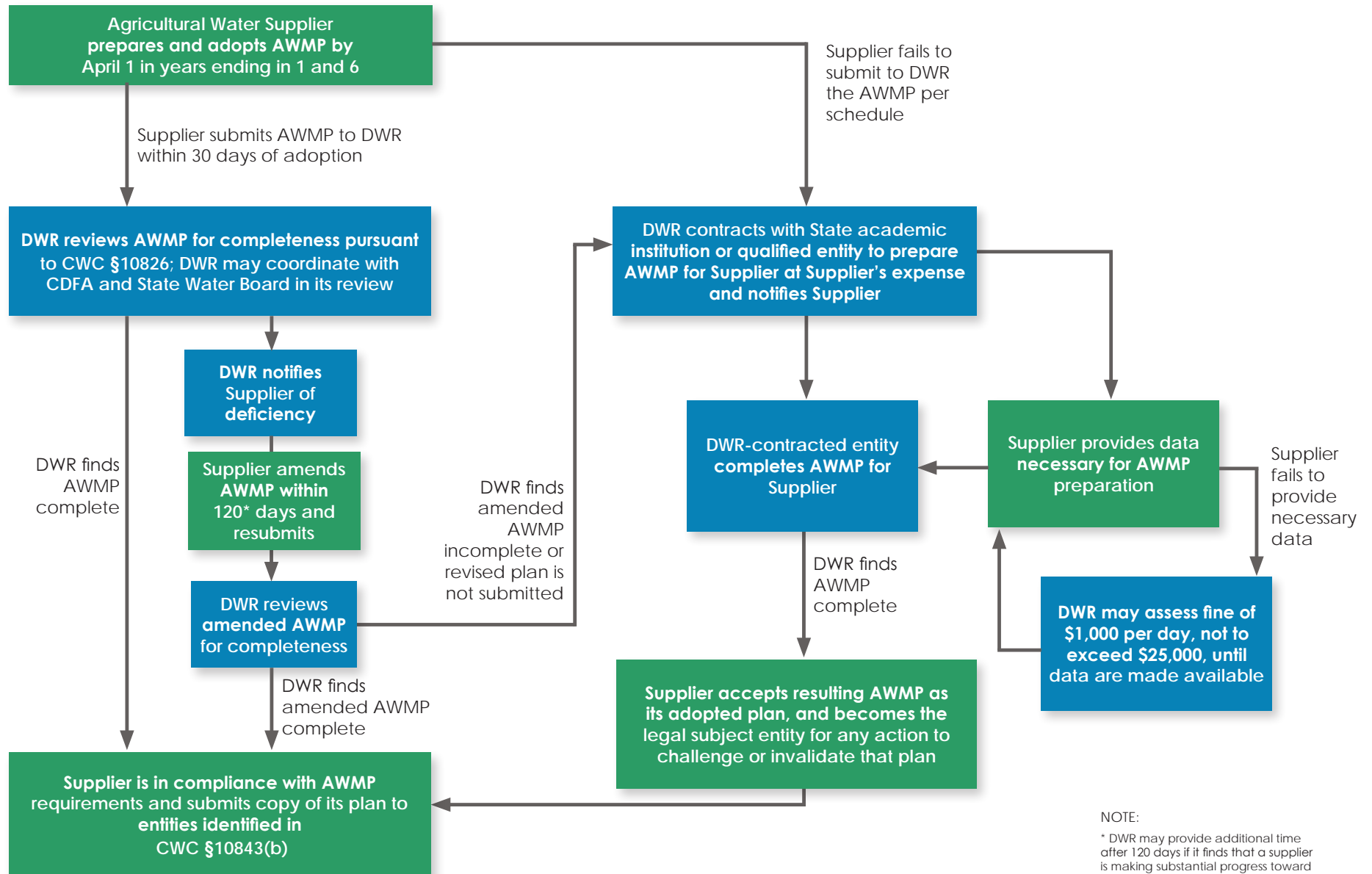
- Use a standardized form specified by DWR to report implemented efficient water management practices as requested by existing law (CWC §10608.48(e)^(AB)).
- Adopt its AWMP, by April 1 in years ending in 1 and 6, with additional provisions for submission, review, and enforcement as depicted in the flowchart on the following page (CWC §10820^(AB)). The next deadline for adoption of an updated AWMP that satisfies the new requirements is April 1, 2021.

To accommodate the AWMP adoption deadline change, AB 1668 modifies DWR's reporting requirement to submit a report summarizing the status of AWMP adoptions by April 30, 2022, and thereafter in the years ending in 2 and 7 (CWC §10845^(AB)).

ADOPTION, REVIEW, AND ENFORCEMENT

AB 1668 provides new authorities and requirements for adoption and review of AWMPs, and for enforcement actions against non-compliant agricultural water suppliers. Under AB 1668, an agricultural water supplier shall submit its adopted AWMP to DWR no later than 30 days after adoption. Based on DWR's review, certain enforcement actions may be imposed by compelling data submittal with penalty or by referring to another entity to prepare the AWMP at the water supplier's expense (CWC §10820^(AB)). The flowchart on the following page shows the process for AWMP adoption, review, and enforcement.

Requirements for Agricultural Water Management Plan Preparation and Adoption by Agricultural Water Suppliers, and DWR's Review and Potential Enforcement Actions (CWC §10820 (AB))



NOTE:
 * DWR may provide additional time after 120 days if it finds that a supplier is making substantial progress toward remedying the deficiency.

■ DWR
■ Agricultural Water Suppliers



Implementation Schedule

06 Implementation Schedule

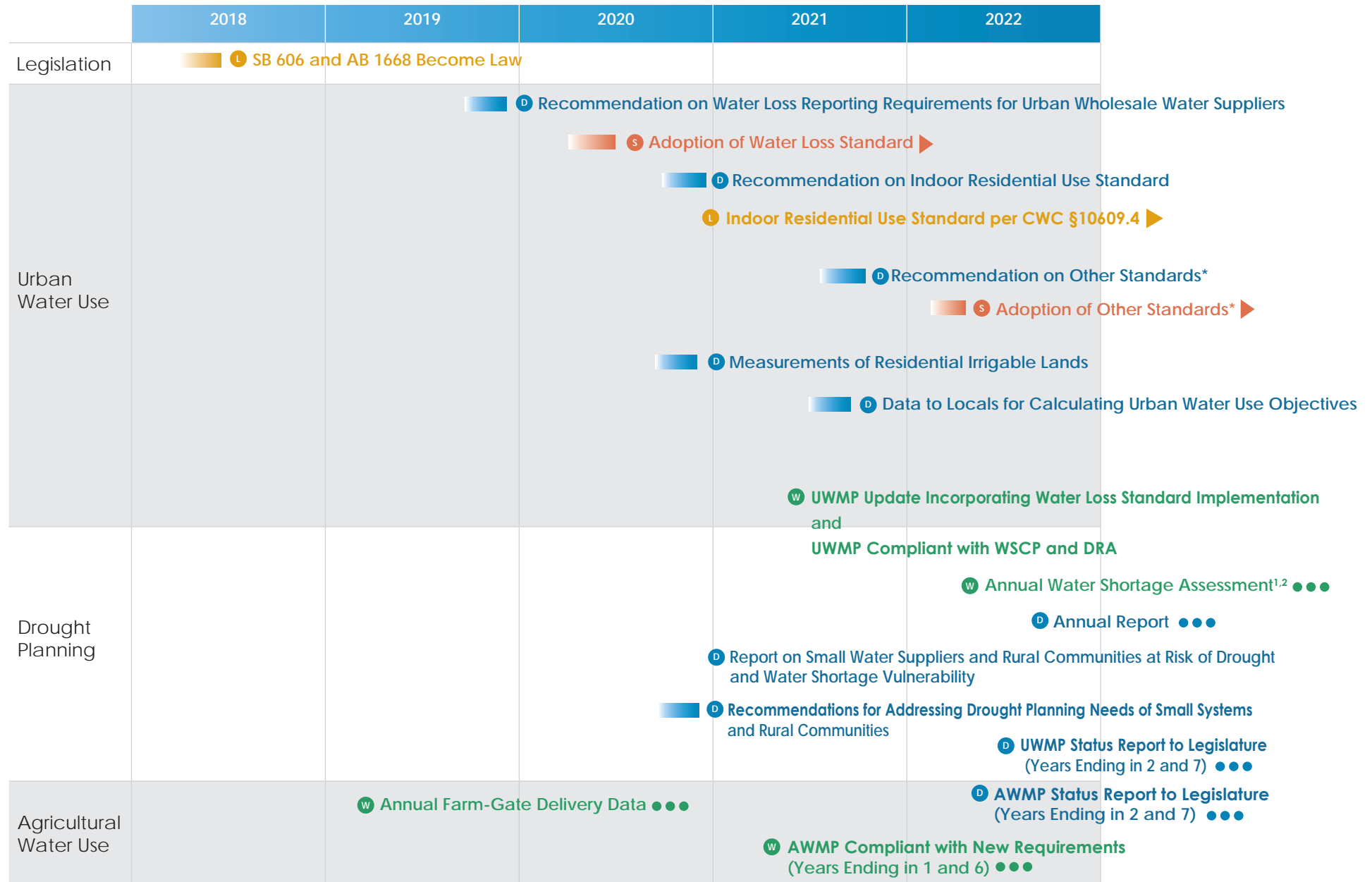
SB 606 and AB 1668 provide new and expanded authorities and requirements for long-term water conservation. A high-level schedule of major milestones established in SB 606 and AB 1668 is presented on the following pages. **Appendix A** includes additional details on the mandated schedule, requirements, milestones, and corresponding roles and responsibilities.

Appendix B includes a list of major State agency tasks to meet the new requirements associated with implementing SB 606 and AB 1668. **Appendix C** includes a list of major water supplier tasks to meet the new requirements associated with implementing SB 606 and AB 1668.

DWR and the State Water Board continue to implement existing requirements under SB X7-7 and SB 555. To satisfy SB 606 and AB 1668, DWR, in coordination with the State Water Board, is formulating a work and communication plan for developing datasets, information, guidance, and recommendations that are required by the legislation over the next few years. This work and communication will include (1) broad stakeholder engagement, (2) enhancement of DWR and the State Water Board's organizational capacities to accommodate the expanded scopes and responsibilities related to both technical and as-needed compliance assistance, and (3) collaboration and coordination with other State agencies for implementing the 2018 legislation.

SB 606 and AB 1668 include requirements for public access to data and their use, as well as related studies, reports, and investigations. Both DWR and the State Water Board currently provide public access to data and information and will continue to do so.

High-Level Schedule of Major Milestones Established in SB 606 and AB 1668



NOTE:

¹ For urban water suppliers that receive imported water, the due date is June 1 or 14 days after final allocation from State Water Project or U.S. Department of the Interior, Bureau of Reclamation, whichever is later. The inclusion of 2022 as the starting year is to match the availability of WSCPs that are to be adopted by urban water suppliers.

² DWR encourages urban water suppliers to conduct such assessments prior to 2022 and submit their information to DWR.

2023	2024	2025	2026	2027
	<p>L Legislative Analyst's Review of Urban Water Use Efficiency Implementation</p> <p>W Annual Report on Urban Water Use Objective and Actual Use ●●●</p> <p>W UWMP Supplement with Demand Management to Meet 2027 Water Use Objective</p>		<p>L Hearing on Urban Water Use Efficiency Implementation</p> <p>W UWMP Compliant with New Requirements (Years Ending in 1 and 6) ●●●</p>	

LEAD ENTITY LEGEND

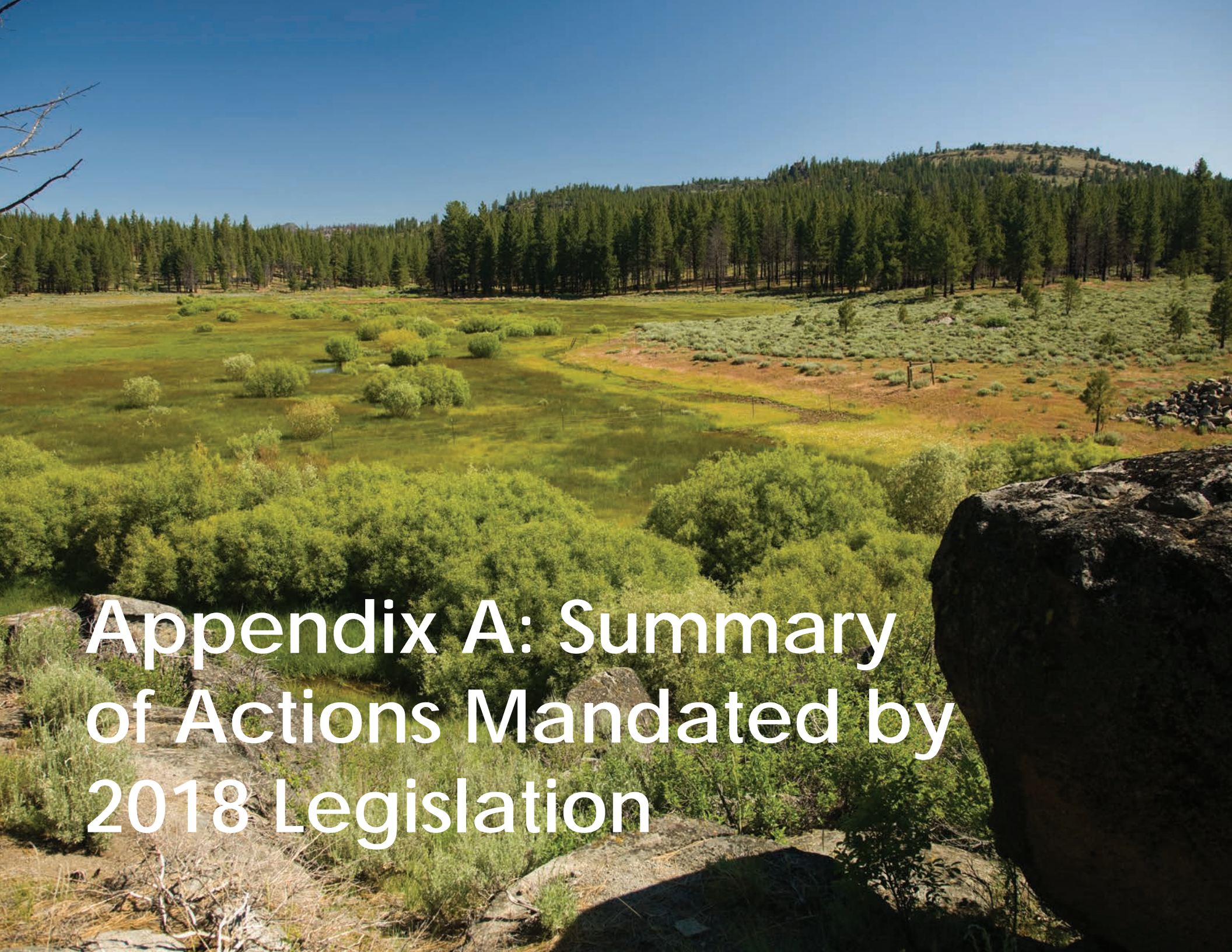
- L** Legislature
- D** DWR
- S** State Water Board
- W** Water Supplier

ACTIVITY LEGEND

- Coordination and Engagement (Length not to scale)
- Action/Submittal/Product
- Continued Implementation
- Repeated Requirements

NOTE:

- * Other standards means:
- Outdoor residential use standard
 - Standard for CII outdoor landscape area with dedicated irrigation meters
 - Performance measures for CII water use
 - Appropriate variances
 - Guidelines and methodologies for calculating urban water use objectives



Appendix A: Summary of Actions Mandated by 2018 Legislation

Appendix A Summary of Actions Mandated by 2018 Legislation

The following table identifies actions and entities with roles that are specified in Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman). The California Department of Water Resources (DWR) and State Water Resources Control Board (State Water Board) recognize that stakeholder engagement, participation, coordination, and collaboration will be needed for development and implementation of mandated actions. The 2018 legislation includes many actions without a specific due date and some are sequentially dependent. The actions in this table are sorted chronologically with sequentially-dependent actions grouped together. The legislation also requires broad stakeholder and public participation during implementation. However, this table only includes “PP” (public participation) where those stakeholder interactions are explicitly called out in the legislation.

- **L** = Lead agency; Lead agency is responsible for implementing action.
- **CR** = Coordinating agency; Lead agency will coordinate with this particular agency to implement action.
- **CS** = Consulting agency; Lead agency will consult with this particular agency to implement action.
- **PP** = Public participation; Lead agency will solicit broad public and stakeholder participation throughout implementation.

Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/Public
USE WATER MORE WISELY									
Jan 1, 2021	DWR, in coordination with the State Water Board, shall conduct the necessary studies and investigations to develop recommendations to the Legislature on standards for indoor residential use that include benefit and impact assessments for applying such standards. The studies and investigations shall be conducted with input from a broad group of stakeholders.	10609.4(b)	L	CR				PP	None.
Jan 1, 2021	DWR shall report the results of the studies and investigations on indoor residential water use to each house of the Legislature. DWR and the State Water Board may jointly recommend a new standard for indoor residential water use to the Legislature.	10609.4(b)	L	L	PP			PP	None.
Jan 1, 2021	DWR shall provide urban retail water suppliers with data regarding the area of residential irrigable lands with sufficient validation for accuracy for implementation of the residential outdoor standards.	10609.6(b); 10609(c)	L						None.

Due Date	Action	CWC Section	Role of Entity						Related Existing Authorities and Requirements
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier	Stakeholders/ Public	
Oct 1, 2021	DWR, in coordination with the State Water Board, shall conduct necessary studies and investigations to develop recommendations for standards for outdoor residential water use that incorporate the MWELO. The standards shall apply to residential irrigable lands and include provisions for residential water features.	10609.6; 10609.9	L	CR					None.
Oct 1, 2021	DWR, in coordination with the State Water Board, shall conduct necessary studies and investigations to develop recommendations for standards for outdoor irrigation of landscape areas with dedicated irrigation meters or other means of calculating outdoor irrigation use in connection with CII water use for adoption by the State Water Board. The standards shall incorporate the MWELO principles and exclude commercial agricultural use.	10609.8; 10609.9	L	CR					Section 10608.20(a)(2)(C)
Oct 1, 2021	DWR, in coordination with the State Water Board, shall conduct necessary studies and investigations on performance measures for CII water use. DWR, in coordination with the State Water Board, shall conduct broad public participation from stakeholders on the following: CII water use classification system, minimum size thresholds for converting mixed CII meters to dedicated irrigation meters, technologies that can be used in lieu of required dedicated irrigation meters, and CII water use best management practices.	10609.10(a) and (b)	L	CR				PP	Section 10608.20(a)(2)(C)
Oct 1, 2021	DWR, in coordination with the State Water Board, shall recommend performance measures for CII water use that includes a CII water use classification system for significant water uses, the thresholds for requirement of a dedicated irrigation meter, and best management practices.	10609.10(a)	L	CR				PP	Section 10608.20(a)(2)(C)

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Due Date	Action	CWC Section	Role of Entity						Related Existing Authorities and Requirements
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier	Stakeholders/Public	
Jun 30, 2022	State Water Board, in coordination with DWR, shall adopt CII water use performance measures.	10609.10(d)(1)	CR	L					Section 10608.20(a)(2)(C)
After Jun 30, 2022 ¹	Urban retail water suppliers shall implement the CII performance measures adopted by the State Water Board.	10609.10(d)(2)				L			Section 10608.20(a)(2)(C)
Oct 1, 2021	DWR, in coordination with the State Water Board, shall develop appropriate variances for unique uses that can have a material effect on an urban retail water supplier's urban water use objective and the corresponding thresholds of significance for each recommended variance.	10609.14	L	CR					None.
Not Specified	State Water Board, in coordination with DWR, shall adopt by regulation variances recommended by DWR.	10609.2(e)	CR	L					None.
Not Specified	State Water Board shall post on its website a list of urban retail water suppliers with approved variances, the specific variance or variances approved for each urban retail water supplier, and the data supporting approvals of each variance.	10609.14(e)		L					None.
Not Specified	Urban retail water agencies shall request and receive approval by the State Water Board prior to including any specific variances in calculating an urban retail water agency's water use objective.	10609.14(d)		L		L			None.

NOTE:

¹ Action will be implemented after performance measures for CII water use are adopted by the State Water Board. Pursuant to Section 10609.10(d)(1), the State Water Board shall adopt performance measures for CII water use on or before June 30, 2022.

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/Public
Not Specified	DWR and the State Water Board shall publicly publish the urban water use reporting requirements commonly required by both agencies and implement actions for improved data publication and public accessibility, including the following: how each agency can integrate various datasets in a publicly accessible location, and identify and implement priority actions.	10609.15	L	L					Section 10608.52(a)
Oct 1, 2021	DWR, in coordination with the State Water Board, shall develop guidelines and methodologies that identify how an urban retail water supplier calculates its urban water use objective.	10609.16	L	CR					None.
Not Specified	DWR shall provide, or otherwise identify, data related to unique local conditions to support the calculation of an urban water use objective.	10609(b)(2)(C)	L						None.
Not Specified	State Water Board, in coordination with DWR, shall adopt by regulation guidelines and methodologies recommended by DWR pertaining to the calculation of an urban retail water supplier's urban water use objective.	10609.2(e)	CR	L					None.
Nov 1, 2023, and annually thereafter	Each urban retail water supplier shall calculate its urban water use objective no later than November 1, 2023 and November 1 each year thereafter.	10609.20				L			None.
May 30, 2022	State Water Board, in coordination with DWR, shall identify the proposed standards for 1) outdoor residential water use, and 2) outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use for public comments. State Water Board, in coordination with DWR, shall consider the proposed standards' potential effects on local wastewater management, developed and natural parklands, and urban tree health.	10609.2(b)(3) and (c)	CR	L				PP	None.

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/Public
Not Specified	State Water Board shall hold at least one public meeting before taking any action on any standard/variance recommended by DWR.	10609.18		L				PP	None.
Jun 30, 2022	State Water Board, in coordination with DWR, shall adopt urban water use standards, performance measures (CII only), and related methodology and guidance.	10609.2(a) and (b); 10609.10(d)(1); 10609.16	CR	L					Section 10608.20(a)(2)(C)
Not Specified	DWR may adopt regulations regarding definitions of water, water use, and reporting periods. DWR shall solicit broad public participation to develop the definitions.	10657	L					PP	None.
Nov 1, 2023, and annually thereafter	Urban water suppliers shall submit annual reports to DWR by November 1, 2023 and by November 1 of each year thereafter on urban water use objectives, actual urban water use, implementation of CII water use performance measures, and progress towards urban water use objective.	10609.24(a)				L			None.
Nov 1, 2023, and annually thereafter	DWR shall post annual urban water use reports and information received from urban retail water suppliers.	10609.24(b)	L						None.
On or after Nov 1, 2023	State Water Board may issue an informational order on water production, water use, and water conservation to urban retail water suppliers not meeting their water use objective in order to identify technical assistance needs.	10609.26(a)(1); 10609.24(c)		L					None.
Jan 1, 2024	Urban water suppliers shall adopt and submit to DWR a supplement to their adopted 2020 UWMPs on implementation of demand management measures to achieve their urban water use objective.	10621(f)(2); 10631(e)(1)(B)				L			None.

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/ Public
On or after Nov 1, 2024	State Water Board may issue a written warning notice to urban retail water suppliers not meeting their water use objective.	10609.26(b)		L					None.
On or after Nov 1, 2025	State Water Board may issue a conservation order to urban retail water suppliers not meeting their water use objective. The order may consist of referral to DWR for technical assistance, requirements for education and outreach, requirements for local enforcement, and other efforts to assist urban retail water suppliers in meeting their water use objective.	10609.26(c)		L					None.
On or around Jan 10, 2024	Legislative Analyst shall provide a report to both houses of the Legislature and the public a report evaluating the implementation of the water use efficiency standards and water use reporting. DWR and the State Water Board shall provide the necessary data to the Legislative Analyst for the report.	10609.30	CR	CR	L				None.
Jan 1, 2026	DWR Director and State Water Board Chairperson shall appear before the appropriate policy committees of both houses of the Legislature and report on implementation of the urban water use standards and water use reporting requirements.	10609.32	L	L					None.
Jan 1, 2027	Urban retail water suppliers shall achieve urban water use objectives by Jan 1, 2027.	10631(e)(1)(B)				L			None.

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/ Public
ELIMINATE WATER WASTE									
Jan 1, 2020	DWR, in coordination with the State Water Board, shall conduct studies and investigations and make recommendation to Legislature on the feasibility of developing and enacting water loss reporting requirements for urban wholesale water suppliers. DWR, in coordination with the State Water Board, shall solicit broad stakeholder participation.	10608.35	L	CR				PP	Section 10608.34
Jun 30, 2022	Standards for volume of water loss adopted by State Water Board, in coordination with DWR, pursuant to CWC §10608.34, are used for calculation of urban water use objective.	10609.2(a)	CR	L					Section 10608.34
Jul 1, 2021, and each update thereafter	Urban retail water suppliers shall include in their UWMPs information on whether the supplier met its distribution loss standards.	10631(d)(3)(C)				L			Section 10631
STRENGTHEN LOCAL DROUGHT RESILIENCE									
July 1, 2021, and every five years thereafter	Urban water suppliers shall update, adopt, and submit to DWR UWMPs by July 1 in years ending in six and one. If regulated by the California Public Utilities Commission, most recent plan and WSCP to be included in supplier's general rate case filings. UWMPs must include a drought risk assessment for water service area.	10621(a); 10621(c); 10635(b); 10642				L		PP	Section 106.21(a); Section 10631
Jan 1, 2024	Urban water suppliers shall adopt and submit to DWR a supplement to the adopted 2020 UWMPs on water demand management measures to be implemented and compliance.	10621(f)(2)				L			None

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/ Public
Jun 1, 2022 ² , and annually thereafter	Urban water suppliers shall conduct annual water supply and demand assessment by June 1 of each year and submit annual water shortage assessment report to DWR. If receiving water from the State Water Project or the Bureau of Reclamation, urban water suppliers shall submit annual water supply and demand assessment within 14 days of receiving its final allocations, or by June 1 of each year, whichever is later.	10632.1				L			None.
Jan 1, 2020	DWR, in consultation with the State Water Board, shall identify small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability. DWR, in consultation with the State Water Board, shall notify counties/ groundwater sustainability agencies and make information available to the public on its website.	10609.42(a)	L	CS				CS	None.
Not Specified	Urban water suppliers shall include WSCP in UWMPs. Urban water suppliers may work with others participating in area-wide, regional, watershed, or basin-wide UWMP, AWMP, or groundwater sustainability plan development.	10620(d)(2); 10632(a)				L			Section 10632

NOTE:

² The inclusion of 2022 as the starting year is to match the availability of WSCPs that are to be adopted by urban water suppliers. DWR encourages urban water suppliers to conduct such assessments prior to 2022 and submit their information to DWR.

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/Public
Jan 1, 2020	DWR, in consultation with the State Water Board, shall propose to the Governor and Legislature development and implementation of countywide drought and WSCPs for small water suppliers and rural communities. DWR, in consultation with the State Water Board, shall recommend how to include countywide drought and WSCPs in county local hazard mitigation plans or other processes. DWR's guidelines, developed in consultation with the State Water Board, shall outline goals of countywide drought and WSCPs and recommend components for the plan.	10609.42 (b)	L	CS				PP	None.
Jul 1, 2022, and every five years thereafter	DWR must include WSCPs in a report on status of UWMP adoption to the Legislature, and submit the report on or before July 1 in years ending in seven and two. DWR, in coordination with the State Water Board, shall provide a copy of the report to each urban retail water supplier concerned. DWR shall also prepare a report and provide data for any Legislative hearings, on request.	10644(c)(1)(a)	L						Section 10231.5
Sept 30, 2022, and annually thereafter	DWR must prepare and submit an annual report to the State Water Board summarizing water supply and demand assessment results, reported water shortage conditions, and regional and statewide analysis of water supply conditions by September 30 of every year.	10644(c)(1)(b)	L						None.

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Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier	
IMPROVE AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING								
Apr 1, 2019, annually thereafter	Agricultural water suppliers shall submit an annual report to DWR summarizing aggregated farm-gate delivery data on a monthly or bimonthly basis organized by basin by April 1 of each year.	531.10(a)(1)					L	Section 531.10.(a)
Annually	DWR shall post all aggregated farm-gate delivery reports on its website in a timely manner.	531.10(a)(3)	L					Section 531.10.(a)
Apr 1, 2021, and every five years thereafter	Agricultural water suppliers shall update AWMPs with newly required content and submit AWMPs to DWR by April 1, 2021. AWMPs shall be updated thereafter in years ending in six and one. Prior to adopting AWMPs, the agricultural water supplier shall make the proposed plan available for public inspection, and shall hold a public hearing on the plan.	10820(a)(2)(A) and (B); 10826.2; 10841					L	Section 18020; Section 10826
Every five years	DWR shall review submitted AWMPs, in coordination with the California Department of Food and Agriculture and the State Water Board, and notify non-compliant suppliers and identify specific deficiencies. The supplier shall have 120 days to remedy an identified deficiency. DWR, in coordination with the State Water Board, shall take action against and penalize suppliers either not submitting a plan or submitting a non-compliant plan and failing in revisiting it.	10820(b)	L	CR				None.

KEY:

L = Lead agency; Lead agency is responsible for implementing action

CR = Coordinating agency; Lead agency will coordinate with this particular agency to implement action

PP = Public participation; Lead agency will solicit broad public and stakeholder participation throughout implementation

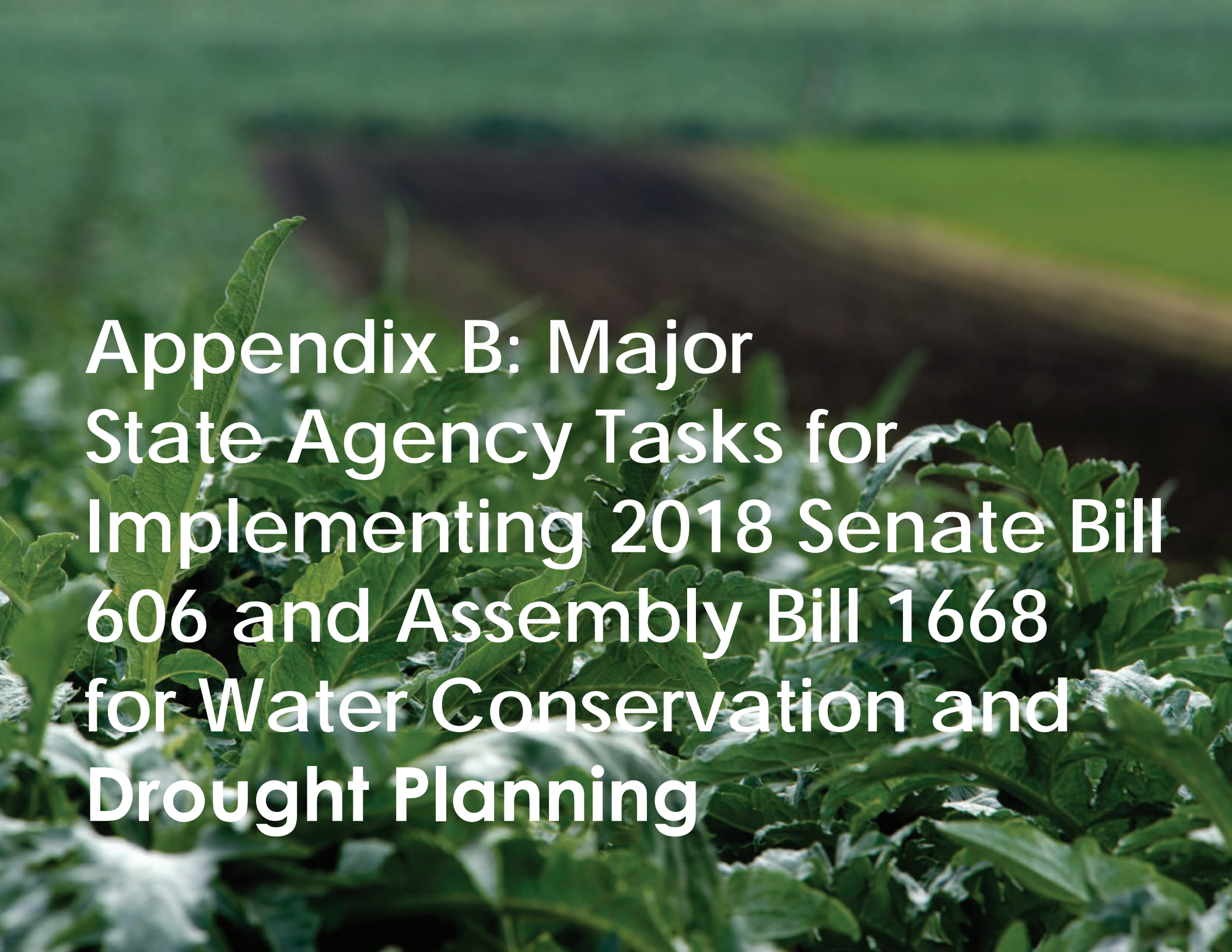
CS = Consulting agency; Lead agency will consult with this particular agency to implement action

Due Date	Action	CWC Section	Role of Entity					Related Existing Authorities and Requirements	
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier		Stakeholders/ Public
Apr 30, 2022, and every five years thereafter	DWR shall submit a report on the status of AWMP adoption to the Legislature due April 30, 2022 and thereafter in the years ended in seven and two. DWR shall provide a copy of the report to each agricultural water supplier concerned, and shall also prepare reports and provide data for legislative hearings on request.	10845(a)	L						Section 10845(a)

KEY:

- AWMP** = Agricultural Water Management Plan
- Bureau of Reclamation** = U.S. Department of the Interior, Bureau of Reclamation
- CII** = commercial, industrial, and institutional
- CR** = Coordinating agency: Lead agency will coordinate with this particular agency to implement action
- CS** = Consulting agency: Lead agency will consult with this particular agency to implement action
- CWC** = California Water Code
- DWR** = California Department of Water Resources

- L** = Lead agency; Lead agency is responsible for implementing action
- Legislature** = California State Legislature
- MWELO** = Model Water Efficient Landscape Ordinance
- PP** = Public participation: Lead agency will solicit broad public and stakeholder participation throughout implementation
- State Water Board** = State Water Resources Control Board
- UWMP** = Urban Water Management Plan
- WSCP** = Water Shortage Contingency Plan



**Appendix B: Major
State Agency Tasks for
Implementing 2018 Senate Bill
606 and Assembly Bill 1668
for Water Conservation and
Drought Planning**

Appendix B Major State Agency Tasks for Implementing 2018 Senate Bill 606 and Assembly Bill 1668 for Water Conservation and Drought Planning

The California Department of Water Resources (DWR) and State Water Resources Control Board (State Water Board) have compiled a list of major tasks with deliverables and products to meet the new requirements associated with implementing Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman) (see Table B-1). Table B-1 only includes deadlines that are specified in the legislation. In other instances, “TBD” is listed. Table B-2 presents the State Water Board’s actions related to compliance and enforcement and drought planning.

DWR and the State Water Board will solicit input and feedback from stakeholders during task execution through the formation and conduct of advisory groups as well as other public venues. More information on these groups and venues will be available during implementation.

In chronological order by topic, the major tasks for DWR and the State Water Board, include:

Table B-1. SB 606 and AB 1668 Major Tasks ¹ for DWR and State Water Board				
Task #	Description	Deadline	Agency(ies)	CWC Section
Urban Water Use and Drought Planning				
1	May adopt regulation on monthly report relating to water production, water use or water conservation.	No date specified; After Jan 1, 2019	State Water Board	10609.28 ^(SB)
2	Streamline water suppliers’ data reporting and make submitted data publicly available and accessible.	No date specified; begin data review and analysis Jul 2019	State Water Board and DWR	10609.15 ^(AB)
3	Recommend to Legislature feasibility of extending water loss reporting requirements to urban wholesale water suppliers.	Jan 1, 2020	DWR in coordination with State Water Board	10608.35(a) ^(SB)
4	Adopt water loss standard for urban retail water suppliers.	Jul 1, 2020	State Water Board	10631(d)(3)(C) ^(SB) ; 10609.2 ^(AB)
5	Update UWMP Guidebook and Templates for new water shortage contingency planning, drought risk assessment, and other requirements (e.g., water loss standard implementation if not updated previously).	No date specified; TBD, prior to Jul 2021	DWR	10632 ^(SB) ; 10631(d)(3) ^(SB)

NOTES:

¹ The list of major tasks includes tasks with major deliverables and products required by the new legislation, and other tasks deemed by DWR and the State Water Board necessary to implement the legislation. The detailed requirements on coordination with other state and local government agencies and stakeholders are not elaborated in the list but will be incorporated in task execution.

**Table B-1. SB 606 and AB 1668
Major Tasks¹ for DWR and State Water Board**

Task #	Description	Deadline	Agency(ies)	CWC Section
Urban Water Use and Drought Planning (Continued)				
6	Recommend to Legislature indoor residential water use efficiency standards based on indoor residential water use study.	Jan 1, 2021	DWR in coordination with State Water Board	10609.4(b)(1) AB
7	Provide residential irrigable landscape area measurement to urban retail water suppliers.	Jan 1, 2021	DWR	10609.6(b) AB
8	Provide data regarding unique local conditions to support calculation of urban water use objective, including CIMIS dataset improvement and population data.	No date specified; TBD, prior to Oct 1, 2021, to match date for recommending standards	DWR	10609(b)(2)(c) AB
9	Develop and recommend to State Water Board outdoor residential water use efficiency standards.	Oct 1, 2021	DWR in coordination with State Water Board	10609.6(a)(1) AB
10	Develop and recommend to State Water Board CII water use standard for outdoor irrigation of landscapes with dedicated meters.	Oct 1, 2021	DWR in coordination with State Water Board	10609.8(a) AB
11	Develop and recommend to State Water Board on CII performance measures.	Oct 1, 2021	DWR in coordination with State Water Board	10609.10(a) AB
12	Develop and recommend to State Water Board on variances.	Oct 1, 2021	DWR in coordination with State Water Board	10609.14(a) AB
13	Develop and recommend to State Water Board guidelines and methodologies for water use objective calculation.	Oct 1, 2021	DWR in coordination with State Water Board	10609.16 AB
14	Identify potential effects of standards on wastewater management, parklands, and urban tree health.	May 30, 2022	State Water Board	10609.2(c) AB
15	Develop guidelines, forms, and web portal for annual water supply and demand assessment report.	No date specified; TBD, prior to Jun 1, 2022	DWR	10632.1 SB
16	Adopt water use efficiency standards for outdoor residential water use and outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use and CII water use performance measures ² .	Jun 30, 2022	State Water Board in coordination with DWR	10609.2 AB ; 10609.10(d) AB

NOTES:

¹ The list of major tasks includes tasks with major deliverables and products required by the new legislation, and other tasks deemed by DWR and the State Water Board necessary to implement the legislation. The detailed requirements on coordination with other state and local government agencies and stakeholders are not elaborated in the list but will be incorporated in task execution.

² The standard for a water loss volume will be adopted in 2020 (see task #4).

**Table B-1. SB 606 and AB 1668
Major Tasks¹ for DWR and State Water Board**

Task #	Description	Deadline	Agency(ies)	CWC Section
Urban Water Use and Drought Planning (Continued)				
17	Adopt guidelines and methodologies for water use objective calculation, and variances ³ .	No date specified; TBD, prior to Jun 30, 2022, to match standard adoption and allow sufficient time for water suppliers to prepare their annual report by Nov 1, 2023	State Water Board	10609.2 AB
18	Prepare and submit to Legislature a report summarizing status of UWMP adoption.	Jul 1, 2022	DWR	10644(c)(1)(C) SB
19	Submit report to State Water Board on results of urban annual water supply and demand assessments and DWR analysis of regional and statewide water supply conditions.	Annually on Sep 30; starting 2022	DWR	10644(c)(1)(B) SB
20	Provide data to the Legislative Analyst Office for developing the review on implementation of urban water use efficiency standards for submitting to the Legislature .	No date specified; TBD, prior to Jan 10, 2024, in advance of Legislative Analyst report to Legislature	State Water Board and DWR	10609.30 SB
21	Chairperson of the State Water Board and Director of DWR Report on the implementation of the water use efficiency standards and water use reporting to the Legislature in the hearing before the appropriate policy committees of both houses.	On or around Jan 1, 2026	State Water Board and DWR	10609.32 SB
Small Water Systems and Rural Communities				
22	Develop report on small water suppliers and rural communities at risk of drought and water shortage vulnerability with website publication and notification to corresponding counties and groundwater sustainability agencies.	Jan 1, 2020	DWR in consultation with State Water Board and other relevant state agencies and local government and stakeholders	10609.42(a) AB
23	Recommend to Governor and Legislature for addressing drought planning needs of small water systems and rural communities.	Jan 1, 2020	DWR in consultation with State Water Board	10609.42(b) AB

NOTES:

¹ The list of major tasks includes tasks with major deliverables and products required by the new legislation, and other tasks deemed by DWR and the State Water Board necessary to implement the legislation. The detailed requirements on coordination with other state and local government agencies and stakeholders are not elaborated in the list but will be incorporated in task execution.

³ State Water Board may continue to adopt additional acceptable variances afterward, if warranted.

**Table B-1. SB 606 and AB 1668
Major Tasks¹ for DWR and State Water Board**

Task #	Description	Deadline	Agency(ies)	CWC Section
Agricultural Water Use				
24	Develop agricultural farm-gate delivery data submittal guidelines for annual report.	No date specified; TBD, prior to Apr 1, 2019, reporting deadline	DWR	531.10(a)(1) AB
25	Develop tools and resources to assist agricultural water suppliers in developing and quantifying components necessary to develop water budgets.	No date specified; TBD, prior to Apr 2021 reporting deadline	DWR	10826(c) AB
26	Develop tools to help agricultural water suppliers quantify efficiency of agricultural water use within their service areas.	No date specified; TBD, prior to Apr 2021 reporting deadline	DWR	10826(h) AB
27	Develop standardized reporting form for implementation of efficient water management practices and online submittal tool.	No date specified; TBD, prior to Apr 2021 reporting deadline	DWR	10608.48(e) AB
28	Update AWMP Guidebook.	No date specified; TBD, prior to Apr 2021 reporting deadline	DWR	10820(a)(2) AB
29	Prepare and submit to the Legislature a report on implementation of agricultural efficient water management practices.	Dec 31, 2021	DWR in consultation with State Water Board	10608.48(g) AB
30	Prepare and submit to Legislature a report summarizing status of AWMPs adopted.	Apr 30, 2022	DWR	10845(a) AB

NOTES:

¹ The list of major tasks includes tasks with major deliverables and products required by the new legislation, and other tasks deemed by DWR and the State Water Board necessary to implement the legislation. The detailed requirements on coordination with other state and local government agencies and stakeholders are not elaborated in the list but will be incorporated in task execution.

KEY:

AB = Assembly Bill
AWMP = Agricultural Water Management Plan
CII = commercial, industrial, and institutional
CIMIS = California Irrigation Management Information System
CWC = California Water Code
DWR = California Department of Water Resources
Legislature = California State Legislature

SB = Senate Bill
State Water Board = State Water Resources Control Board
TBD = To Be Determined
UWMP = Urban Water Management Plan
AB = AB 1668
SB = SB 606

**Table B-2. Compliance and Enforcement Actions for State Water Board to Implement
Water Conservation Provisions in SB 606 and AB 1668**

Item #	Description	Deadline	CWC Section
1	Provide progressive enforcement: May issue informational orders.	On or after Nov 1, 2023	10609.26(a)(1) SB
2	Provide progressive enforcement: May issue written notices.	On or after Nov 1, 2024	10609.26(b) SB
3	Provide progressive enforcement: May issue conservation orders.	On or after Nov 1, 2025	10609.26(c)(1) SB
4	Provide progressive enforcement: May impose civil liability (fine) for a violation of regulation.	After Nov 1, 2027	1846.5(b)(2) AB

KEY:

AB = Assembly Bill
CWC = California Water Code
DWR = California Department of Water Resources
SB = Senate Bill









State Water Board = State Water Resources Control Board
AB = AB 1668
SB = SB 606



**Appendix C: Major
Water Supplier Tasks for
Implementing 2018 Senate Bill
606 and Assembly Bill 1668
for Water Conservation and
Drought Planning**

Appendix C Major Water Supplier Tasks for Implementing 2018 Senate Bill 606 and Assembly Bill 1668 for Water Conservation and Drought Planning

The California Department of Water Resources (DWR) and State Water Resources Control Board (State Water Board) have compiled a list of major tasks for urban and agricultural water suppliers to meet new requirements associated with implementing Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman). These major tasks are as mandated in the 2018 legislation. Table C-1 presents the major tasks for urban retail water suppliers. Table C-2 presents the major tasks for urban wholesale water suppliers. Table C-3 presents the tasks for agricultural water suppliers. All tasks are presented in chronological order.

Table C-1. SB 606 and AB 1668 Major Tasks for Urban Retail Water Suppliers			
Task #	Description	Deadline	CWC Section
1	Update and adopt UWMP and submit to DWR. If regulated by CPUC, include most recent plan in general rate case filings.	Jul 1, 2021, and every five years thereafter	10621(a)  ; 10621(c) 
2	Prepare and adopt WSCP and DRA as part of UWMP ¹ . If regulated by CPUC, include WSCP in general rate case filings.	Jul 1, 2021, and every five years thereafter	10621(c)  ; 10632(a)  ; 10635(b) 
3	Prepare and submit to DWR annual water shortage assessment report ² .	Jun 1, 2022, and annually thereafter ³	10632.1 
4	Submit annual report to DWR on urban water use objectives, actual urban water use, implementation of CII water use performance measures, and progress towards urban water use objective.	Nov 1, 2023, and annually thereafter	10609.24(a) 
5	Adopt and submit to DWR supplement to adopted 2020 UWMP on implementation of demand management measures to achieve their urban water use objective.	Jan 1, 2024	10621(f)(2) 

NOTES:

¹ If an urban water supplier revises its WSCP, the supplier must submit a copy of the revised WSCP to DWR not later than 30 days after adoption (CWC § 10644(b)).

² For urban water suppliers that receive imported water, the due date is June 1 or 14 days after final allocation from State Water Project or Bureau of Reclamation, whichever is later. The inclusion of 2022 as the starting year is to match the availability of WSCPs that are to be adopted by urban water suppliers. DWR encourages urban water suppliers to conduct such assessments prior to 2022 and submit their information to DWR.

³ The annual water supply and demand assessment is the basis for the urban water supplier's annual water shortage assessment report.

KEY:

CII = Commercial, industrial, and institutional
CPUC = California Public Utilities Commission
DRA = Drought Risk Assessment

DWR = California Department of Water Resources
UWMP = Urban Water Management Plan
WSCP = Water Shortage Contingency Plan

**Table C-2. SB 606 and AB 1668
Major Tasks for Urban Wholesale Water Suppliers**

Task #	Description	Deadline	CWC Section
1	Update and adopt UWMP, and submit to DWR. If regulated by CPUC, include most recent plan in general rate case filings.	Jul 1, 2021, and every five years thereafter	10621(a) ^{SB} ; 10621(c) ^{SB}
2	Prepare and adopt WSCP and DRA as part of UWMP ¹ . If regulated by CPUC, include WSCP in general rate case filings.	Jul 1, 2021, and every five years thereafter	10621(c) ^{SB} ; 10632(a) ^{SB} ; 10635(b) ^{SB} ; 10640(a) ^{SB}
3	Prepare and submit to DWR annual water shortage assessment report ² .	Annually on Jun 1; starting 2022 ³	10632.1 ^{SB}

NOTES:

¹ If an urban water supplier revises its WSCP, the supplier must submit a copy of the revised WSCP to DWR not later than 30 days after adoption (CWC § 10644(b)).

² For urban water suppliers that receive imported water, the due date is June 1 or 14 days after final allocation from State Water Project or Bureau of Reclamation, whichever is later. The inclusion of 2022 as the starting year is to match the availability of WSCPs that are to be adopted by urban water suppliers. DWR encourages urban water suppliers to conduct such assessments prior to 2022 and submit their information to DWR.

³ The annual water supply and demand assessment is the basis for the urban water supplier's annual water shortage assessment report.

KEY:

CPUC = California Public Utilities Commission

DRA = Drought Risk Assessment

DWR = California Department of Water Resources

UWMP = Urban Water Management Plan

WSCP = Water Shortage Contingency Plan

**Table C-3. SB 606 and AB 1668
Major Tasks for Agricultural Water Suppliers**

Task #	Description	Deadline	CWC Section
1	Submit annual report to DWR summarizing aggregated farm-gate delivery data on a monthly or bimonthly basis organized by basin.	Apr 1, 2019, and annually thereafter	531.10(a) ^{AB}
2	Update AWMP with newly required content, including development of drought plan, and submit to DWR.	Apr 1, 2021, and every five years thereafter	10820(a)(2)(A) and (B) ^{AB}

KEY:

AWMP = Agricultural Water Management Plan

DWR = California Department of Water Resources



California Department of Water Resources



State Water Resources Control Board