



# MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

Primer of 2018 Legislation on Water Conservation and Drought Planning

PREPARED BY



California Department  
of Water Resources

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## KEY DEFINITIONS

The following key definitions are listed below for easy reference. Additional terms that are relevant to the 2018 legislation and its implementation are introduced in the document where appropriate.

<b>agricultural water supplier</b>	<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.	<b>urban retail water supplier</b>	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.
	<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.	<b>urban water use efficiency standards</b>	The standards effective through CWC §10609.4 (indoor residential use) or adoption by State Water Board (outdoor residential, water loss, and CII outdoor irrigation of landscape areas with dedicated meters) pursuant to CWC §10609.2.
<b>drought risk assessment</b>	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).	<b>urban water use objective</b>	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.
<b>irrigable land</b>	Irrigable area includes irrigated landscapes and areas that are typically irrigated but were not irrigated when the measurements were taken.	<b>urban wholesale water supplier</b>	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.
<b>irrigated land</b>	The outdoor residential area that is landscaped with an irrigation system.	<b>water loss</b>	The total of apparent losses and real losses in an urban retail 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 portable water storage tanks, up to the point of customer consumption.
<b>performance measures</b>	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 include process water.	<b>water shortage contingency plan</b>	A document that incorporates the provisions detailed in CWC §10632(a) and is subsequently adopted by an urban retail water supplier.
<b>potable reuse</b>	Direct potable reuse, indirect potable reuse for groundwater recharge, and reservoir water augmentation, as defined in CWC §13561.	<b>water supply and demand assessment</b>	A method that looks at current year and one or more dry year water supplies and demands for determining water shortage risks, as described in CWC §10632.1.
<b>process water</b>	Water used by industrial water users for producing a product or product content or water used for research and development.		
<b>recycled water</b>	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.		

## 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	SB	Senate Bill
CEC	California Energy Commission	SGMA	Sustainable Groundwater Management Act
CII	commercial, industrial, and institutional	State Water Board	State Water Resources Control Board
CPUC	California Public Utilities Commission	UWMP	Urban Water Management Plan
CWC	California Water Code	WSCP	Water Shortage Contingency Plan
DRA	Drought Risk Assessment		

## USEFUL LINKS

- Senate Bill 606, as chaptered: [http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB606](http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB606)
- Senate Bill 606, comparison to chapter version: [http://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill\\_id=201720180SB606](http://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill_id=201720180SB606)
- Assembly Bill 1668, as chaptered: [http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180AB1668](http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1668)
- Assembly Bill 1668, comparison to chaptered version: [http://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill\\_id=201720180AB1668](http://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill_id=201720180AB1668)
- Senate Bill X7-7, as chaptered: <http://leginfo.legislature.ca.gov/faces/bi11NavClient.xhtml?bi11id=2009201075B7>
- DWR Water Use and Efficiency Program: <https://water.ca.gov/Programs/Water-Use-And-Efficiency>
- State Water Board's Water Conservation Portal: [https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/)

## PHOTOGRAPHY CREDITS

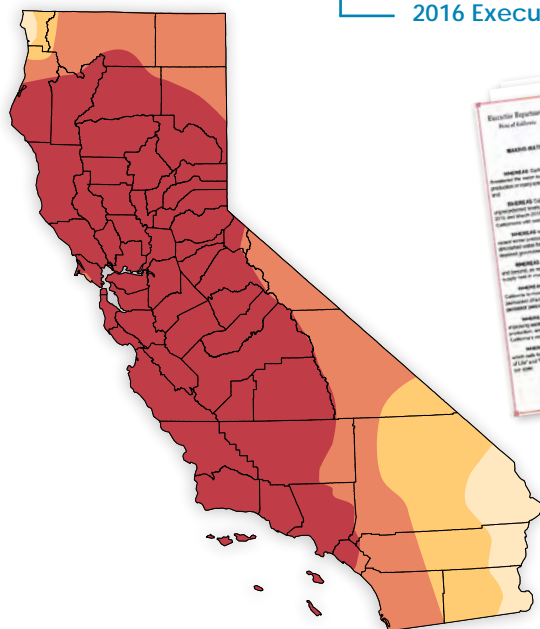
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# Introduction

# 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 and Assembly Bill (AB) 1668 – 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 during the recent drought of 2012 through 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),

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



2018  
Legislation

and California Energy Commission (CEC) in response 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.<sup>1</sup> 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 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 to improve understanding.* During the implementation process, DWR and other State agencies will further develop data, information, guidelines, and other technical assistance to help realize the bills' intended outcomes.

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.

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<sup>1</sup> 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"> <li>• Water budget-based method for quantifying urban water use objectives</li> <li>• Urban retail water use efficiency standards adoption and water use objectives</li> <li>• Urban retail water use objective implementation, reporting, and enforcement</li> <li>• Expanded civil liability for water waste</li> </ul>
Eliminate Water Waste	<ul style="list-style-type: none"> <li>• Affirmation for continued implementation of existing requirements enacted by SB 555 of 2015 for setting urban retail water loss standard, methodology, reporting, and enforcement</li> <li>• Recommendations to Legislature on expanding water loss reporting requirements for urban wholesale water suppliers</li> </ul>
Strengthen Local Drought Resilience	<ul style="list-style-type: none"> <li>• Emergency declaration based on local water shortage</li> <li>• Urban water shortage contingency planning, methodology, reporting, and enforcement</li> <li>• Amendments to existing urban water management reporting and enforcement</li> <li>• Countywide drought and water shortage contingency planning for small water suppliers and rural communities</li> </ul>
Improve Agricultural Water Use Efficiency and Drought Planning	<ul style="list-style-type: none"> <li>• Water budget-based method for quantifying agricultural water use efficiency</li> <li>• Amendments to existing agricultural water delivery reporting and requirements</li> <li>• Drought resiliency and response planning, and requirements for agricultural water use</li> </ul>

A photograph of a garden scene. In the foreground, there is a dense, low-lying green shrub with small red flowers. A black drip irrigation emitter is visible, inserted into the soil near the base of the shrub. To the right, a path of smooth, light-colored stones leads towards a black metal arbor. In the background, a two-story house with light-colored siding and dark window frames is visible. A large, rounded, blue-green shrub stands to the left of the arbor. The sky is clear and blue.

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 2009<sup>2</sup> 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 spelled out in a new CWC chapter (commencing with §10609) related to the urban water use objective and water use reporting, and based on urban water use efficiency standards to be recommended by DWR for consideration in adoption by the State Water Board by 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 and practices for (1) indoor residential use; (2) outdoor residential use; (3) commercial, industrial, and institutional (CII) use; (4) water losses; and (5) appropriate variances reflecting unique uses that can have a material effect on an urban retail water supplier. The Legislature recognizes the substantial diversity of businesses and institutions throughout the state, and data collection associated with CII performance measures may support industry standards and future volumetric approaches, if warranted.

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 Legislature required a thorough review of the progress, outcomes, and effects of near-term implementation before considering additional authority for the State Water Board to update and amend the adopted urban water use efficiency standards after 2022.

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) public access to data. All 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** represents efficient water use recommended by DWR, that subsequently becomes effective through CWC §10609.4 **AB** (indoor residential use only), or adoption by State Water Board pursuant to CWC §10609.2 **AB** (outdoor residential, water loss, and CII outdoor irrigation of landscape areas with dedicated meters).



An **urban water use objective** is an estimate of aggregated 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**).

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<sup>2</sup> Also known as SB X7-7; commencing with CWC §10608.

## URBAN WATER USE EFFICIENCY STANDARDS AND WATER USE OBJECTIVE

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

Further, 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 [AB](#)).

All new authorities and requirements for urban water use objectives are enforceable after 2022, and 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 Action of 2009<sup>3</sup>. AB 1668 requires that implementation of the new authorities and requirements result in supplier conservation exceeding current statewide targets<sup>3</sup> (CWC §10609.2(d) [AB](#)). The following provides details on the legislated requirements for developing and adopting water use efficiency standards, applications of the adopted 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 develop recommendations to the Legislature on 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

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<sup>3</sup> 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 described in CWC §10609.4(a) <sup>(AB)</sup>. DWR will develop these recommendations in coordination with the State Water Board and collaboratively with stakeholders (CWC §10609.4(b) <sup>(AB)</sup>).

- 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:
  - 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<sup>4</sup> (CWC §10609.6 <sup>(AB)</sup>).
  - Standards for CII outdoor irrigation of landscape areas with dedicated irrigation meters or other means of measurement, and shall incorporate principles of the Model Water Efficient Landscape Ordinance (CWC §10609.8 <sup>(AB)</sup>).
  - 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 <sup>(AB)</sup>).
  - Guidelines and methodologies that identify how an urban retail water supplier calculates its urban water use objective (CWC §10609.16 <sup>(AB)</sup>).
- 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 <sup>(AB)</sup>).
- Requires the State Water Board to adopt appropriate variances, guidelines, and methodologies for calculating urban water use objectives (CWC §10609.2(e) <sup>(AB)</sup>).
- 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 §10608.34<sup>5</sup> (CWC §10609.12 <sup>(AB)</sup>). See **ELIMINATE WATER WASTE** for additional related requirements.



*Different from other water use efficiency standards, SB 606 and AB 1668 require DWR to develop recommendations to the Legislature on standards for indoor residential use. On the **aggregate water supplier level**, effective standards will follow provisions in CWC §10609.4(a) <sup>(AB)</sup>:*

- 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 model water efficient landscape ordinance 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 <sup>(AB)</sup>):*

- 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

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

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 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 the inclusion of identified 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

AB 1668 establishes a method to estimate the aggregate amount of water an urban retail water supplier would have delivered 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)**)<sup>6</sup>:

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. The urban retail water supplier will then be in a better position to help reduce water use in excess of that needed to accomplish its intended water use objective.

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 flexibility<sup>7</sup> in promoting and implementing water conservation measures in its own service area. This emphasis also

<sup>5</sup> Enacted by SB 555 of 2015.

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

<sup>7</sup> 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.

means that urban water use efficiency requirements are applicable on the water supplier level and not on the individual water user 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 save water.

To maintain consistency with State policy encouraging potable reuse<sup>8</sup>, 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 water users and landscape areas with dedicated irrigation meters in connection with CII water use. The Legislature capped the bonus incentive at 15 percent of the urban retail water supplier's urban water use objective if the applicable potable reuse water was produced at an existing facility, and/or at 10 percent for a new 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) **AB**). 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 entitled "Water Use Best Management Practices,"<sup>9</sup> 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**).



*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**).*

<sup>8</sup> Potable reuse includes direct and indirect reuse, as defined in CWC §13561.

<sup>9</sup> 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>

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 §10609.6(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 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.



## 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 §10609.6(c) **AB**).
- 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) **AB**).
- 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**).

## REPORTING REQUIREMENTS

To support implementing water urban use efficiency standards and meeting urban water use objectives, SB 606 and AB 1668 include schedule and content provisions for the most critical reporting requirement – the annual water use report. The bills also include 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.

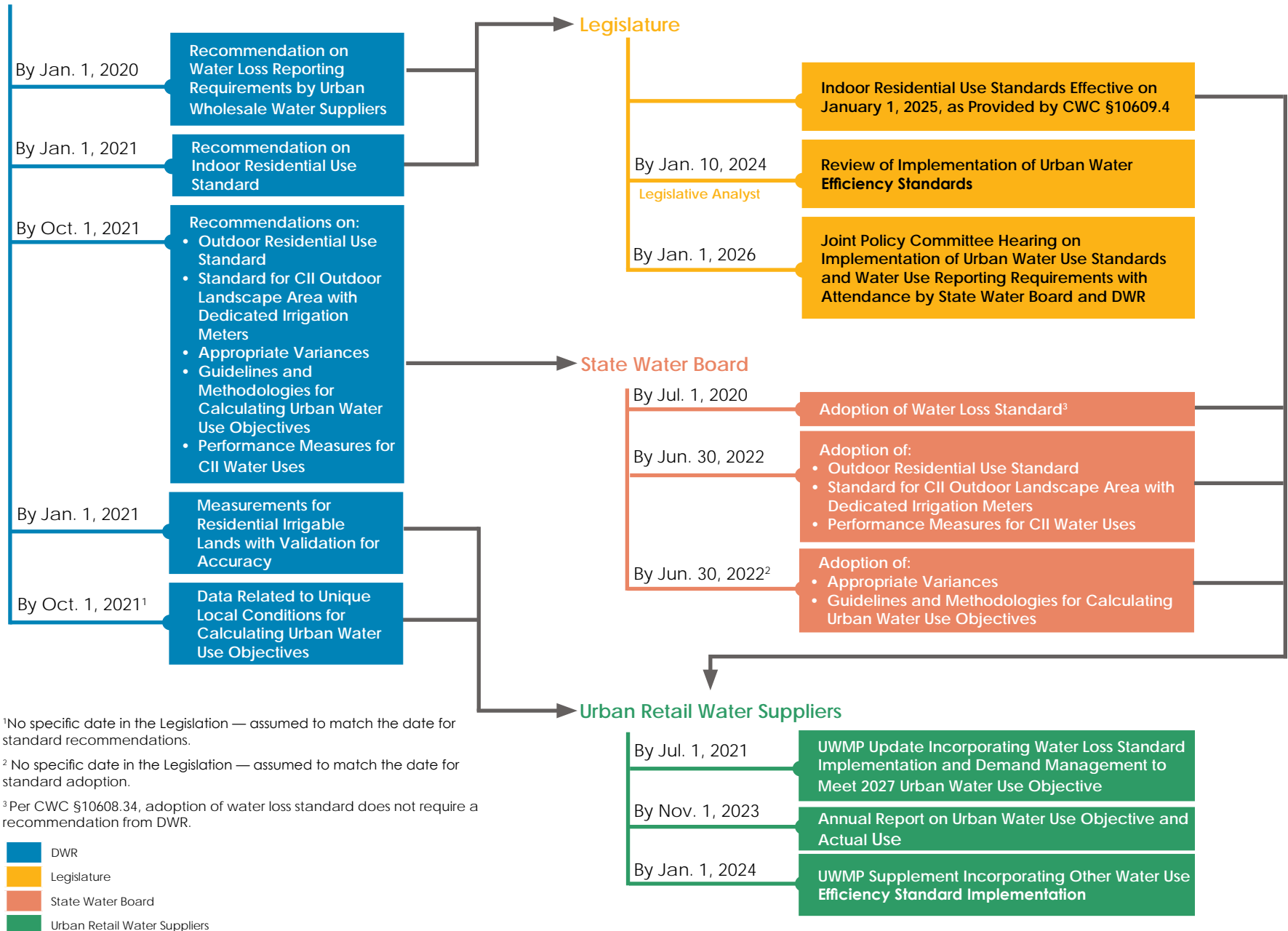
### Annual Water Use Report

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

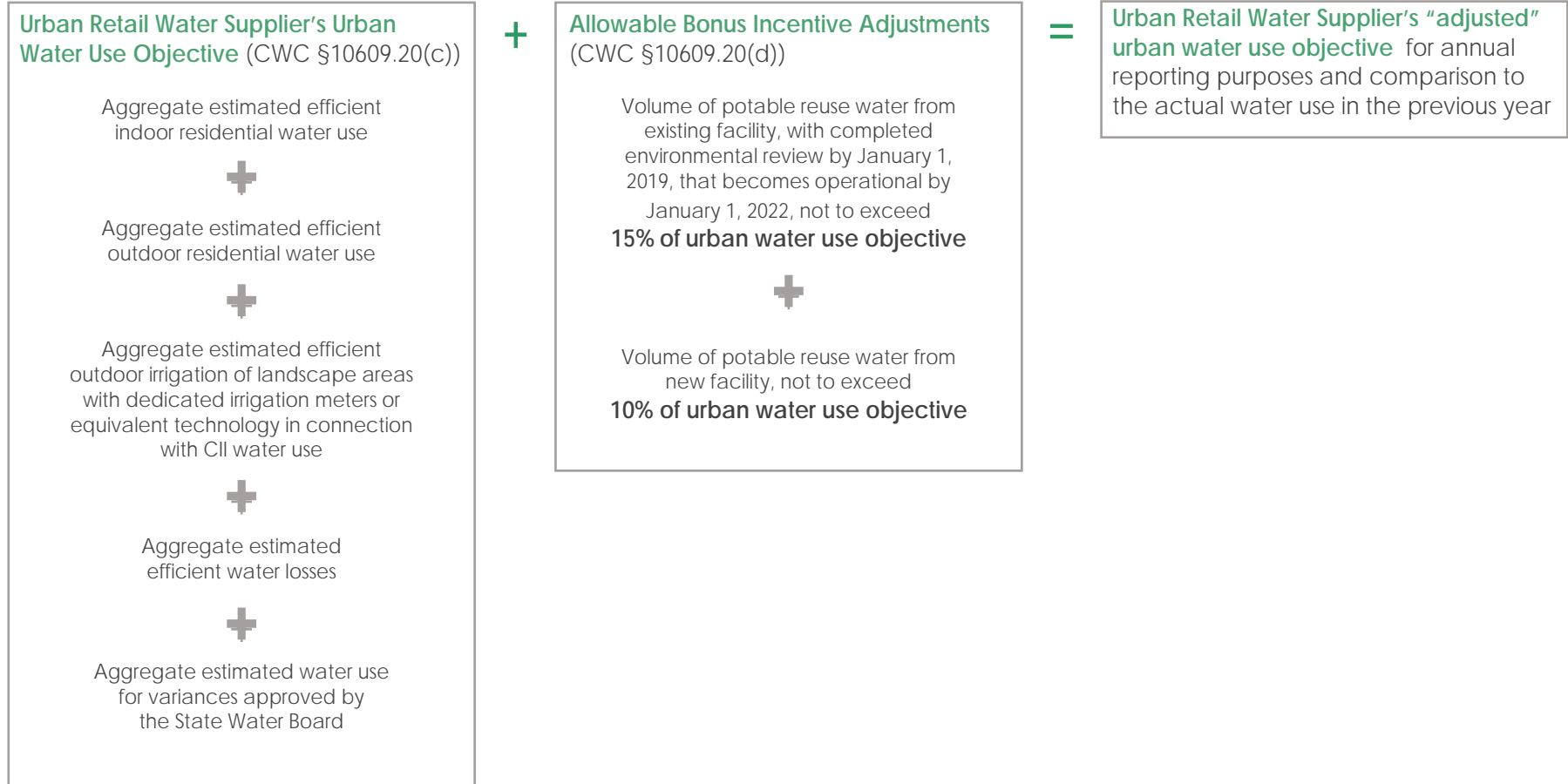
- Calculate its urban water use objective including estimated indoor residential water use, outdoor residential water use, outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use, water losses, and water use in accordance with variances, as appropriate (CWC §10609.20 **SB**).
- 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 Requirements

## DWR



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



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

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 <sup>(SB)</sup>).
- 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) <sup>(SB)</sup>).
- Allows calculation of an urban water use objective using either data provided 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) <sup>(SB)</sup>).

## 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) <sup>(SB)</sup>).

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 amendments to UWMP requirements that a water supplier should consider in streamlining its efforts to comply with all requirements for UWMP preparation, adoption, and submittal.



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) <sup>(SB)</sup>).



Reporting requirements and enforcement for urban water use are always on the water supplier level for all aggregated water uses (CWC §10609(a) <sup>(AB)</sup>) and not on the individual household or user 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 water waste, provide progressive authority for the State Water Board's enforcement of annual water use reporting, and specifically identify the right for urban retail water suppliers to dispute the State Water Board's 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<sup>SB</sup>).

AB 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

AB 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<sup>SB</sup>).
- Allows for specific State Water Board enforcement actions on a legislatively-defined time table, see the figure on page 17 (CWC §10609.26<sup>SB</sup>).

### 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)<sup>SB</sup>).
- 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)<sup>SB</sup>).

- Extends existing rights to challenge State Water Board decisions, 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:

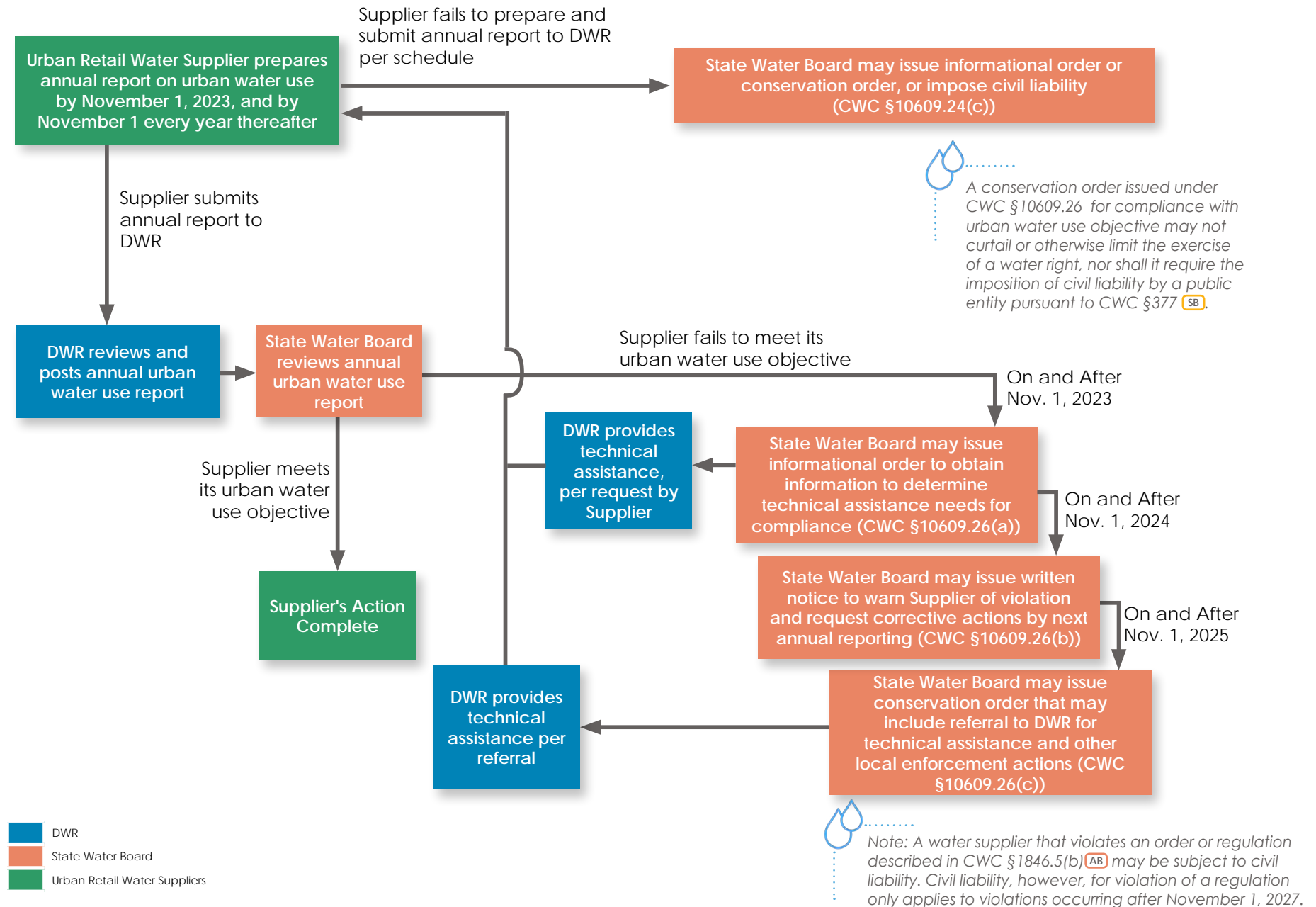
- Clarifies the need for a separate authorization from the Legislature for the State Water Board to update and amend the adopted urban water use efficiency standards after 2022 (CWC §10609.36(b) **SB**).
- Requires the Legislative Analyst, by January 10, 2024, to conduct a review of implementation of 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**).

## PUBLIC ACCESS TO DATA

SB 606 and AB 1668 include additional requirements for public access to data and their use. 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





## Milestone Schedule: Use Water More Wisely

2020	<p>Jan 1 – DWR updates model water-efficient landscape ordinance and submits to Building Standards Commission for consideration.</p> <p>Dec 31 – Urban water use targets cumulatively result in a 20-percent reduction from the baseline daily per capita water use.</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>Jan 10 – Legislative Analyst reports to Legislature and public on evaluation of implementation of water use efficiency standards and water use reporting.</p> <p>Nov 1 – Urban water suppliers submit annual water use report to DWR.</p> <p>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.</p>
2021	<p>Jan 1 – DWR/State Water Board submit recommendation on indoor residential water use standard to Legislature.</p> <p>Jan 1 – DWR provides residential irrigable land areas to urban water retailers.</p> <p>Jul. 1 – Urban water suppliers submit UWMPs to DWR within 30 days of adoption.</p> <p>Oct 1 – DWR recommends standards for outdoor residential use, landscape irrigation, and unique urban water use variances.</p> <p>Oct 1 – DWR develops guidelines and methodologies for calculating urban water use objectives.</p> <p>Oct 1 – DWR recommends performance measures for CII water use.</p>	2025	<p>Jul 1 forward – State Water Board may issue conservation order to urban retail water supplier.</p> <p>Nov 1 – Urban water suppliers submit annual water use report to DWR.</p>
2022	<p>May 30 – State Water Board identifies long-term standards for efficient use of water and proposed standards' effects.</p> <p>Jun 30 – State Water Board adopts long-term standards for efficient use of water and related methodology and guidance</p> <p>Jun 30 – State Water Board adopts performance measures for CII water use.</p> <p>Jul 1 – DWR submits UWMPs report to Legislature.</p>	2026	<p>Jan 1 – DWR updates model water-efficient landscape ordinance and submits to Building Standards Commission for consideration.</p> <p>Jul 1 – Urban water suppliers submit UWMPs to DWR within 30 days of adoption.</p> <p>Nov 1 – Urban water suppliers submit annual water use report to DWR.</p>
2023	<p>Jan 1 – DWR updates model water-efficient landscape ordinance and submits to Building Standards Commission for consideration.</p> <p>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.</p> <p>Nov 1 forward -- State Water Board may issue informational order to urban retail water supplier.</p>	2027	<p>Jan 1 – Urban water suppliers achieve water use objective.</p> <p>Jul 1 – DWR submits UWMPs report to Legislature.</p> <p>Nov 1 – Urban water suppliers submit annual water use report to DWR.</p>

*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

To eliminate water waste, the 2017 Framework included a recommendation to continue implementing CWC §10608.34 (enacted by SB 555 of 2015) to minimize urban retail water loss. The 2017 Framework concluded that no additional authorities were needed for these actions, and SB 606 and AB 1668 require one new study by DWR and a directive for continued implementation of existing 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 existing schedule requirement for water loss standard adoption in 2020 will automatically satisfy the AB 1668 schedule requirement for the State Water Board to adopt long-term urban retail water use efficiency standards and performance measures (CII only) 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](#)).



#### 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	July 1 – Water Suppliers adopt their 2020 UWMPs and show if they have met adopted water loss standard.
2022	June 30 – State Water Board adopts long-term standards for volume of water loss (satisfied by meeting existing requirement for adopting water loss standard in 2020).

*No change in implementation schedule and milestones as defined in CWC §10608.34 and subsequent regulations adopted by DWR.*



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. 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.<sup>10</sup>

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 recommendations to the Governor and Legislature for improving drought contingency planning for those areas by January 2020.

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.

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<sup>10</sup> The annual water supply and demand assessment is the basis for the urban water supplier's annual water shortage assessment report. The legislation uses different wording for the assessment and report title.



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) <sup>(SB)</sup> and §10635 <sup>(SB)</sup>).



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 without triggering additional reporting requirements (CWC §10635(b) <sup>(SB)</sup>).

## 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 <sup>(SB)</sup>).
- 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) <sup>(SB)</sup>).

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) <sup>(SB)</sup>), consistent with the UWMP requirement (CWC §10620(a) <sup>(SB)</sup>).

## 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 6 and 1, incorporating updated and new information from the 5 years preceding the plan update (CWC §10621(a) <sup>(SB)</sup>). 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 <sup>(SB)</sup>).
  - If groundwater is identified as an existing or planned source of water supply, 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) <sup>(SB)</sup>).

- Submit an updated WSCP to DWR within 30 days of its adoption (CWC §10644(b) <sup>(SB)</sup>). 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) <sup>(SB)</sup>). 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 per its WSCP, 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 <sup>(SB)</sup>).

## 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 <sup>(SB)</sup>).
  - 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 <sup>(SB)</sup>).
- 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) <sup>(SB)</sup>).
- State Water Board:
  - Defer to implementation of locally-adopted WSCPs, to the extent practiceable, during a state of emergency<sup>11</sup> based on drought conditions (CWC §10632.3 <sup>(SB)</sup>).



SB 606 specifies WSCP content requirements as the following (CWC §10632 <sup>(SB)</sup>):

- 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
- Compliance, enforcement, appeal, and exemption procedures
- Legal authority
- Financial consequence
- Monitoring and reporting requirements and procedures
- Reevaluation and improvement procedures



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 <sup>(SB)</sup>).

<sup>11</sup> 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 results and reported water shortage conditions in urban water supplier-specific annual water shortage assessment reports, (2) regional and statewide analyses of water supply conditions developed by DWR, and (3) urban water supplier-specific water shortage response actions implemented based on its annual water shortage assessment (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 7 and 2, 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, and that the approach to improving drought planning should be consistent with the WSCPs and DRAs of urban water suppliers, as well as SGMA implementation. 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 conduct studies and investigations 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

2019	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report 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 – Urban water suppliers submit annual water shortage assessment report to DWR.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>
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> <p>Jun 1 – Urban water suppliers submit annual water shortage assessment report to DWR.</p>	2025	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report to DWR.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>
2021	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report to DWR.</p> <p>Jul 1 – 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>	2026	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report to DWR.</p> <p>Jul 1 – 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>
2022	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report 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>	2027	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report 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>
2023	<p>Jun 1 – Urban water suppliers submit annual water shortage assessment report to DWR.</p> <p>Sep 30 – DWR submits annual report to State Water Board.</p>	<p>Note: The annual water supply and demand assessment is the basis for the urban water supplier's annual water shortage assessment report. The legislation uses different wording for the assessment and report title.</p>	



# 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 6 and 1. 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.

## 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:

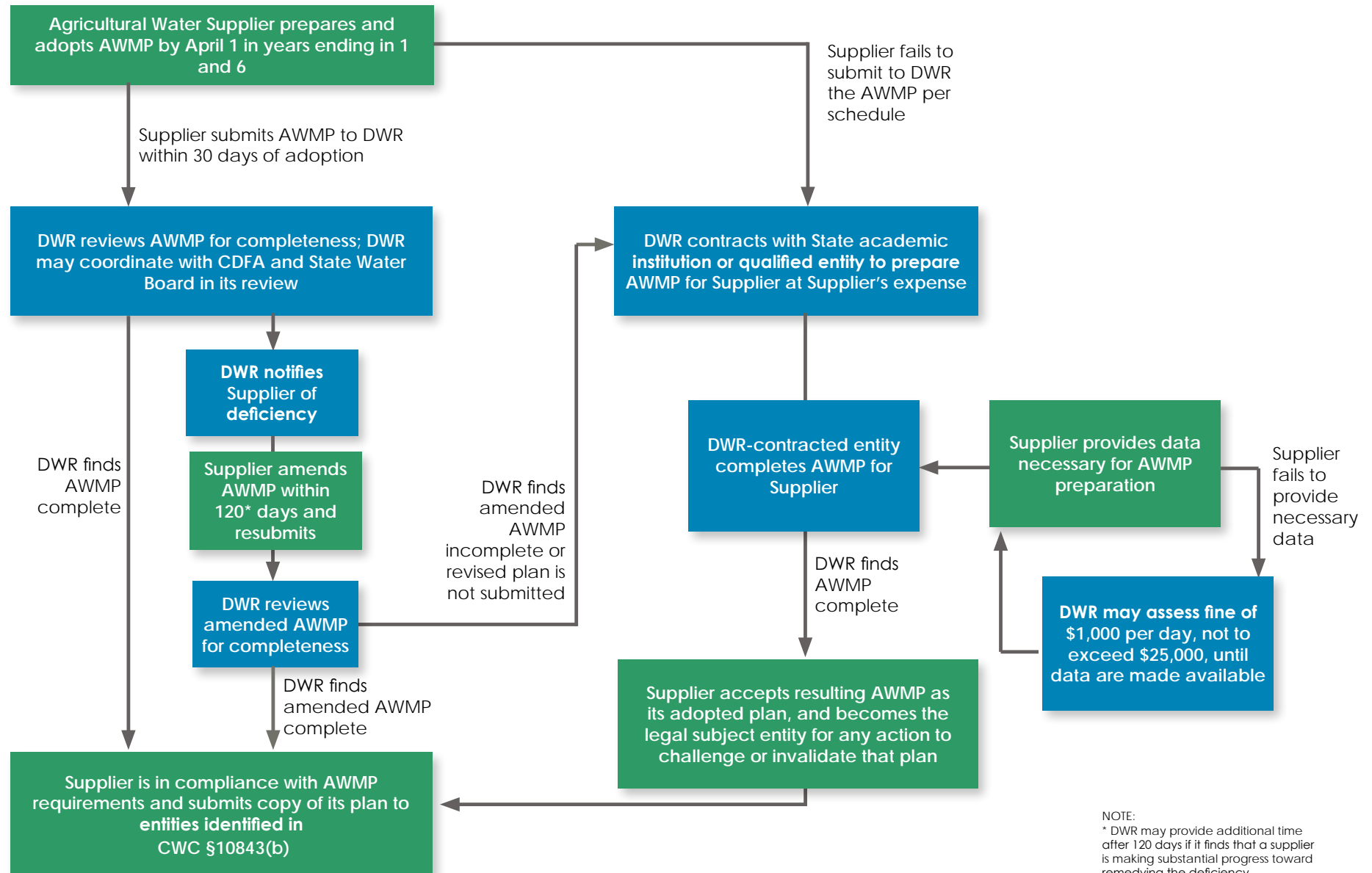
- Use a standardized form specified by DWR to report implemented efficient water management practices as requested by existing law (CWC §10608.48(e) **AB**).
- Adopt its AWMP, by April 1 in years ending in 1 and 6, with additional provisions for submission, review, and enforcement as depicted in the 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 7 and 2 (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 AWMP Preparation and Adoption by Agricultural Water Suppliers, and DWR's Review and Potential Enforcement Actions (CWC §10820 <sup>AB</sup>)



■ DWR  
 ■ Agricultural Water Suppliers

An aerial photograph showing a large-scale wetland restoration project. The foreground and middle ground are filled with a complex network of water-filled channels and earthen berms, creating a series of interconnected ponds and marshes. The water is a calm, greyish-blue, reflecting the overcast sky. The berms are composed of dark, moist soil. In the background, a dense urban landscape is visible, featuring numerous industrial buildings, warehouses, and a prominent cluster of tall skyscrapers in the distance. The sky is a pale, hazy blue with soft, wispy clouds. The overall scene suggests a transition from a developed urban area to a natural, restored wetland environment.

# Implementation Schedule

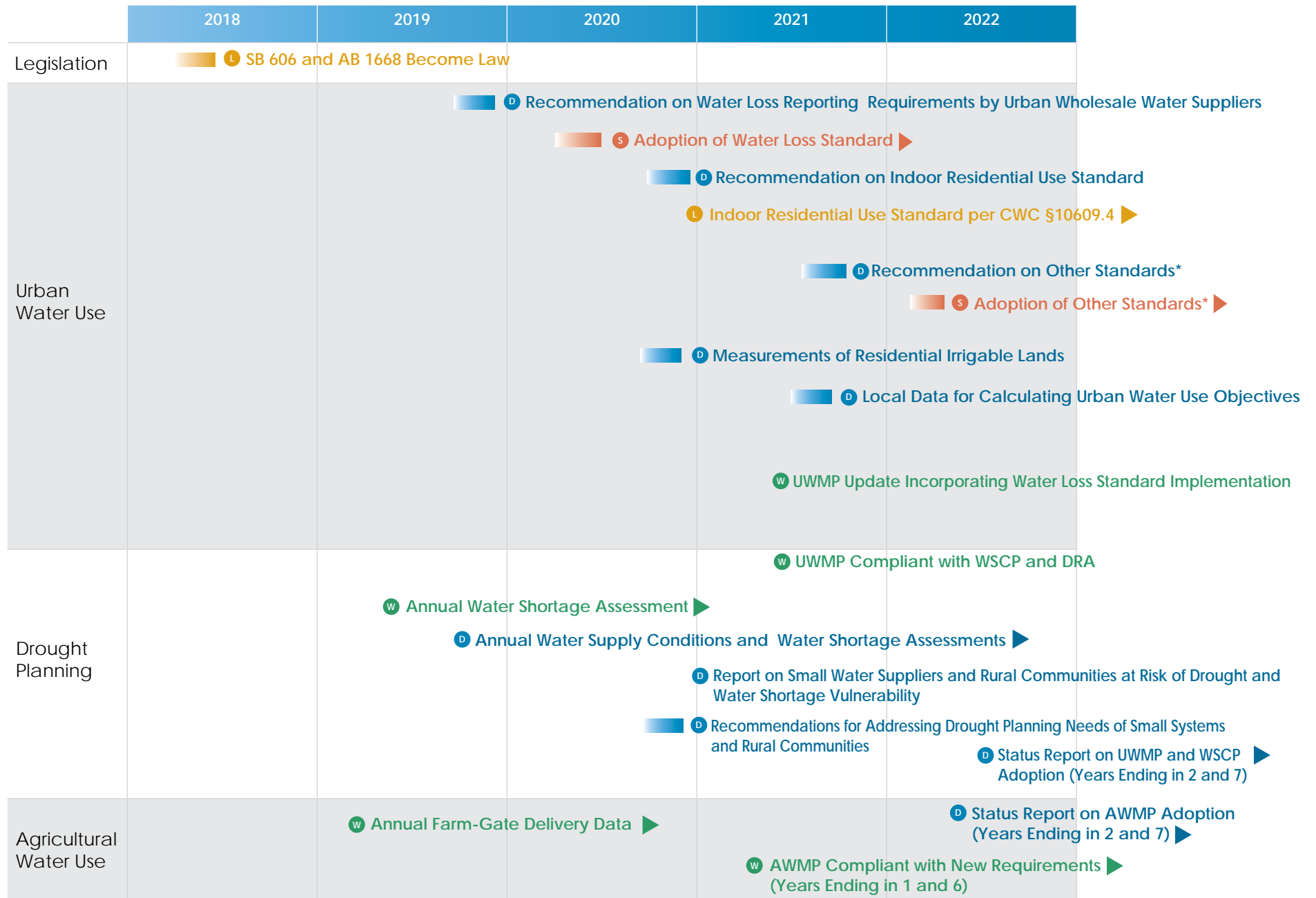
## 06 Implementation Schedule

SB 606 and AB 1668 provide new and expanded authorities and requirements for the long-term water conservation framework. 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.

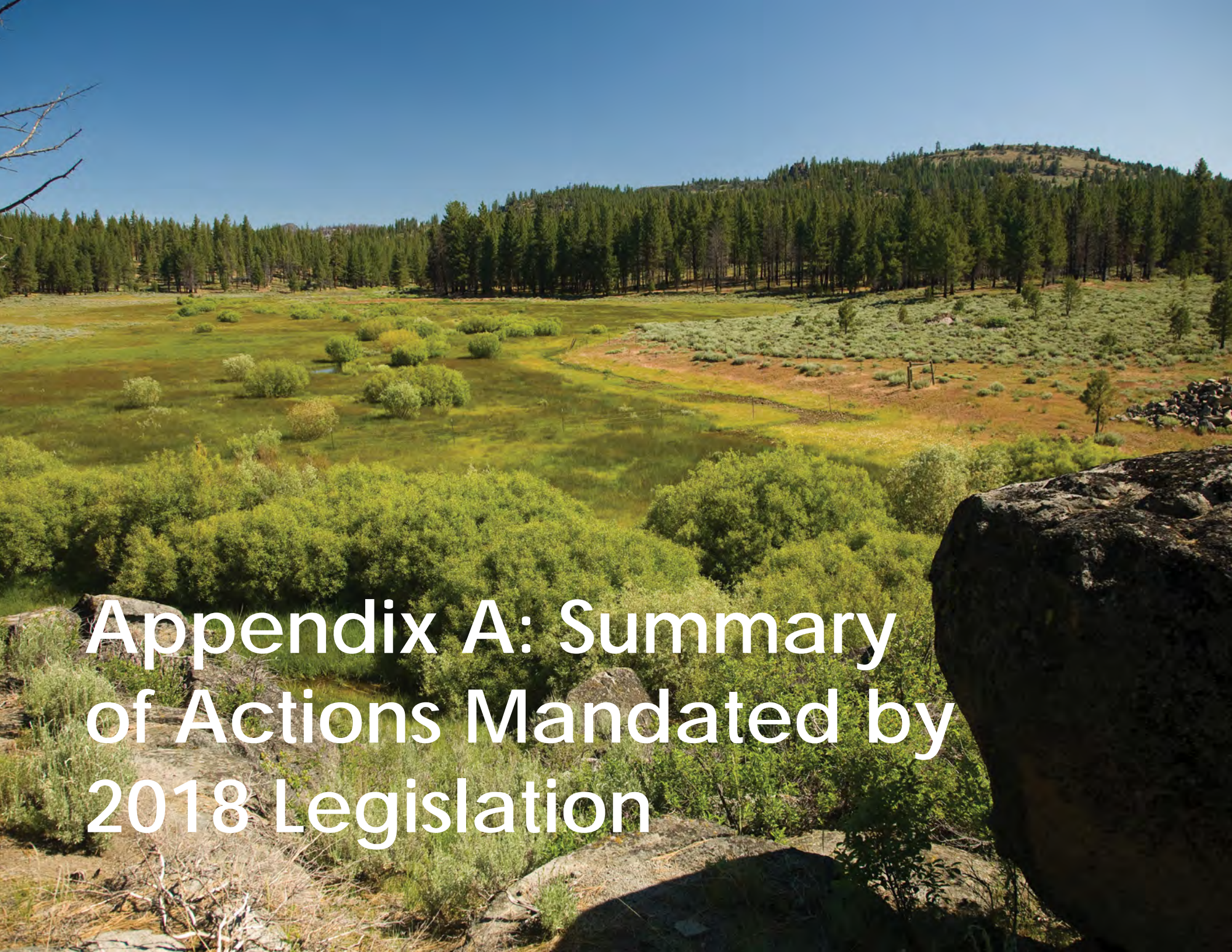
DWR continues to assist with implementation of existing requirements under SB X7-7 and SB 555. To satisfy SB 606 and AB 1668, DWR, in coordination with the State Water Board, is formulating a work and communication plan for developing datasets, information, guidance, and recommendations that are required by the legislation over the next few years. This work and communication will include (1) consideration of 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.

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







# Appendix A: Summary of Actions Mandated by 2018 Legislation

# Appendix A Summary of Actions Mandated by 2018 Legislation

In the following table, entities are shown with specific roles that are stated in Senate Bill 606 and Assembly Bill 1668.

- **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 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 shall conduct necessary studies and investigations to develop recommendations for standards for outdoor residential water use that incorporate the Model Water Efficient Landscape Ordinance. 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 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 Model Water Efficient Landscape Ordinance principles and exclude commercial agricultural use.	10609.8; 10609.9	L	CR					Section 10608.20(a)(2)(C)
Oct 1, 2021	DWR shall conduct necessary studies and investigations on performance measures for CII water use. DWR 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 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 <sup>1</sup>	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 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 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.

<sup>1</sup> 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 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 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.
Annually, starting Nov 1, 2023	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 shall identify the potential effects of the long-term standards for the efficient use of water on local wastewater management, developed and natural parkland, and urban tree health. State Water Board shall allow for public comment on the potential effects.	10609.2(c)	CR	L				PP	None.
Jun 30, 2022	State Water Board shall identify long-term standards for the efficient use of water, in coordination with DWR.	10609.2(a)	CR	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	
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 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.
Annually, on and after Nov 1, 2023	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.
Annually, on and after Nov 1, 2023	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 supplierd not meeting their water use objective in order to identify technical assistance needs.	10609.26(a)(1); 10609.24(c)		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	
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.
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 January 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 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 shall solicit broad stakeholder participation.	10608.35	L	CR				PP	Section 10608.34
Jul 1, 2020	State Water Board shall adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses.	10608.34(i)		L					None.
May 30, 2022	State Water Board shall identify the proposed standards for 1) outdoor residential water use, 2) outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use, and 3) a volume for water loss for public comments. State Water Board shall consider the proposed standards' potential effects on local wastewater management, developed and natural parklands, and urban tree health.	10609.2(b)(3); 10609.2(c)	CR	L				PP	Section 10608.34
Jun 30, 2022	State Water Board shall adopt long-term standards for 1) outdoor residential water use, 2) outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use, and 3) a volume for water loss.	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

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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	
STRENGTHEN LOCAL DROUGHT RESILIENCE									
Every five years	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
Annually	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 shall identify small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability. DWR shall notify counties/ groundwater sustainability agencies and make information available to the public on its website.	10609.42(a)	L	CS				CS	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	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
Jan 1, 2020	DWR shall propose to the Governor and Legislature development and implementation of countywide drought and WSCPs for small water suppliers and rural communities. DWR shall recommend how to include countywide drought and WSCPs in county local hazard mitigation plans or other processes. DWR's guidelines shall outline goals of countywide drought and WSCPs and recommend components for the plan.	10609.42 (b)	L	CS				PP	None.
Every five years	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 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
Annually	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	Stakeholders/ Public	
IMPROVE AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING									
Annually	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)
Every five years, starting Apr 1, 2021	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 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.

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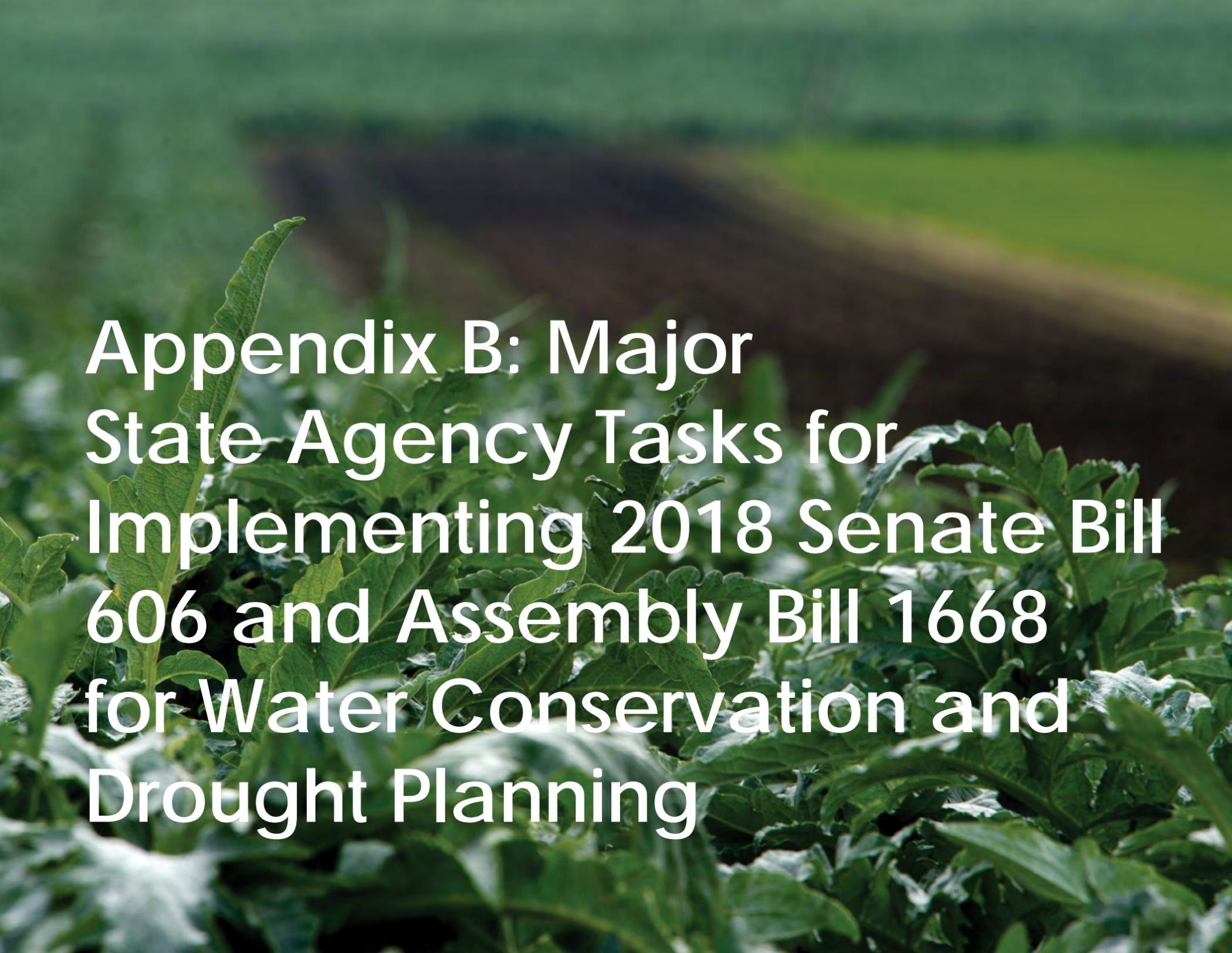
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Due Date	Action	CWC Section	Role of Entity						Related Existing Authorities and Requirements
			DWR	State Water Board	Legislative Analyst	Urban Retail Water Supplier	Agricultural Water Supplier	Stakeholders/Public	
Every five years, starting Apr 30, 2022	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  
**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 and Assembly Bill (AB) 1668 (see Table B-1). Table B-2 presents the State Water Board's actions related to compliance and enforcement.

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 <sup>1</sup> for DWR and State Water Board				
Task #	Description	Deadline	Agency(ies)	CWC Section
<b>Urban Water Use</b>				
1	Adopt regulation on monthly report relating to water production, water use or water conservation	After January 1, 2019	State Water Board	10609.28 <span>SB</span>
2	Develop guidelines, forms, and web portal for annual water supply and demand assessment report	In advance of report deadline of June 1, 2019	DWR	10632.1 <span>SB</span>
3	Streamline water suppliers' data reporting and make submitted data publicly available and accessible	No deadline provided; begin data review and analysis July 2019	State Water Board and DWR	10609.15 <span>AB</span>
4	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 September 1; starting 2019	DWR	10644(c)(1)(B) <span>SB</span>
5	Recommend to Legislature feasibility of extending water loss reporting requirements to urban wholesale water suppliers	January 1, 2020	DWR in coordination with State Water Board	10608.35(a) <span>SB</span>
6	Adopt water loss standard for urban retail water suppliers	July 1, 2020	State Water Board	10631(d)(3)(C) <span>SB</span> ; 10609.2 <span>AB</span>
7	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)	Fall 2020 (sufficient time prior to July 2021 reporting deadline)	DWR	10632 <span>SB</span> ; 10631(d)(3) <span>SB</span>

**Table B-1. SB 606 and AB 1668  
Major Tasks<sup>1</sup> for DWR and State Water Board**

Task #	Description	Deadline	Agency(ies)	CWC Section
<b>Urban Water Use (Continued)</b>				
8	Recommend to Legislature indoor residential water use efficiency standards based on indoor residential water use study	January 1, 2021	DWR in coordination with State Water Board	10609.4(b)(1) <span>AB</span>
9	Provide residential irrigable landscape area measurement to urban retail water suppliers	January 1, 2021	DWR	10609.6(b) <span>AB</span>
10	Provide data regarding unique local conditions to support calculation of urban water use objective, including CIMIS dataset improvement and population data	No date specified; by October 1, 2021, to match date for recommending standards	DWR	10609(b)(2)(c) <span>AB</span>
11	Develop and recommend to State Water Board outdoor residential water use efficiency standards	October 1, 2021	DWR in coordination with State Water Board	10609.6(a)(1) <span>AB</span>
12	Develop and recommend to State Water Board CII water use standard for outdoor irrigation of landscapes with dedicated meters	October 1, 2021	DWR in coordination with State Water Board	10609.8(a) <span>AB</span>
13	Develop and recommend to State Water Board on CII performance measures	October 1, 2021	DWR in coordination with State Water Board	10609.10(a) <span>AB</span>
14	Develop and recommend to State Water Board on variances	October 1, 2021	DWR in coordination with State Water Board	10609.14(a) <span>AB</span>
15	Develop and recommend to State Water Board guidelines and methodologies for water use objective calculation	October 1, 2021	DWR in coordination with State Water Board	10609.16 <span>AB</span>
16	Identify potential effects of standards on wastewater management, parklands, and urban tree health	May 30, 2022	State Water Board	10609.2(c) <span>AB</span>
17	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 <sup>2</sup>	June 30, 2022	State Water Board in coordination with DWR	10609.2 <span>AB</span> ; 10609.10(d) <span>AB</span>

**Table B-1. SB 606 and AB 1668  
Major Tasks<sup>1</sup> for DWR and State Water Board**

Task #	Description	Deadline	Agency(ies)	CWC Section
<b>Urban Water Use (Continued)</b>				
18	Adopt guidelines and methodologies for water use objective calculation, and variances <sup>3</sup>	No date specified; presumed by June 30, 2022 to match standard adoption and allow sufficient time for water suppliers to prepare their annual report by November 1, 2023	State Water Board	10609.2 <span>AB</span>
19	Prepare and submit to Legislature a report summarizing status of UWMP adoption	July 1, 2022	DWR	10644(c)(1)(C) <span>SB</span>
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; in advance of Legislative Analyst reporting deadline of January 10, 2024	State Water Board and DWR	10609.30 <span>SB</span>
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 January 1, 2026	State Water Board and DWR	10609.32 <span>SB</span>
<b>Small Water Systems and Rural Communities</b>				
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	January 1, 2020	DWR in consultation with State Water Board and other relevant state agencies and local government and stakeholders	10609.42(a) <span>AB</span>
23	Recommend to Governor and Legislature for addressing drought planning needs of small water systems and rural communities	January 1, 2020	DWR in consultation with State Water Board	10609.42(b) <span>AB</span>

**Table B-1. SB 606 and AB 1668**  
**Major Tasks<sup>1</sup> for DWR and State Water Board**

Task #	Description	Deadline	Agency(ies)	CWC Section
<b>Agricultural Water Use</b>				
24	Develop agricultural farm-gate delivery data submittal guidelines for annual report	In advance of report deadline of April 1, 2019	DWR	531.10(a)(1) <span>AB</span>
25	Develop tools and resources to assist agricultural water suppliers in developing and quantifying components necessary to develop water budgets	Fall 2020 (sufficient time prior to April 2021 reporting deadline.)	DWR	10826(c) <span>AB</span>
26	Develop tools to help agricultural water suppliers quantify efficiency of agricultural water use within their service areas	Fall 2020 (sufficient time prior to April 2021 reporting deadline)	DWR	10826(h) <span>AB</span>
27	Develop standardized reporting form for implementation of efficient water management practices and online submittal tool	Fall 2020 (sufficient time prior to April 2021 reporting deadline)	DWR	10608.48(e) <span>AB</span>
28	Update AWMP Guidebook	Fall 2020 (sufficient time prior to April 2021 reporting deadline)	DWR	10820(a)(2) <span>AB</span>
29	Prepare and submit to the Legislature a report on implementation of agricultural efficient water management practices	December 31, 2021	DWR in consultation with State Water Board	10608.48(g) <span>AB</span>
30	Prepare and submit to Legislature a report summarizing status of AWMPs adopted	April 30, 2022	DWR	10845(a) <span>AB</span>

**NOTES:**

1. The list of major tasks include 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 was adopted in 2020 (see task #6).
3. State Water Board may continue to adopt additional acceptable variances afterward, if warranted.

**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  
**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 2018 Senate Bill 606 and Assembly Bill 1668**

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

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



California Department of Water Resources