

Urban Water Management Plan Guidebook



State of California
California Natural Resources Agency



Department of Water Resources
Division of Regional Assistance
Water Use Efficiency Branch
Resilience and Efficiency Section

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Disclaimer

This 2025 Urban Water Management Plan Guidebook (Guidebook) was prepared by the California Department of Water Resources (DWR) to aid urban water suppliers (Suppliers) who must comply with the requirements of California Water Code Division 6, *Conservation, Development, and Utilization of State Water Resources*, [Part 2.55, Sustainable Water Use And Demand Reduction](#) (also known as the Water Conservation Act of 2009, or SB X7-7) and [Part 2.6, Urban Water Management Planning](#) (also known as the Urban Water Management Planning Act).

Suppliers subject to these requirements are solely responsible for compliance with these requirements, and may use this Guidebook if they choose.

DWR has voluntarily opted to provide this Guidebook to make complying with the California Water Code simpler for Suppliers, and to help them create a useful planning document.

For assistance interpreting the content of this Guidebook, please contact DWR Water Use Efficiency staff at UWMPhelp@water.ca.gov.

Preface

The 2025 Urban Water Management Plan Guidebook (Guidebook) is offered to help urban water suppliers (Suppliers) prepare their Urban Water Management Plan (UWMP) in a way that is consistent with the UWMP legal requirements. The Guidebook also provides guidance for preparing an enhanced planning document that may be useful to Suppliers, other resource planners, or policy and decision makers.

This Guidebook has been revised from the 2020 Urban Water Management Plan Guidebook with minor updates and clarifications to guidance.

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We thank everyone who offered their time and expertise to develop this Guidebook.

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Acronyms and Abbreviations

Abbreviation	Description
AMI	advanced meter infrastructure
AMR	automatic meter reading
AWWA	American Water Works Association
CCR	California Code of Regulations
CDEC	California Data Exchange Center
CEQA	California Environmental Quality Act
CII	commercial, industrial and institutional
CIMIS	California Irrigation Management Information System
CVP	Central Valley Project
Delta	Sacramento–San Joaquin River Delta
DIM	dedicated irrigation meter(s)
DMM	demand management measure(s)
DPR	direct potable reuse
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
eAR	Electronic Annual Reporting
ERP	Emergency Response Plan
GPCD	gallons per-capita per day
GPMD	gallons per mile of main per day
GPSCD	gallons per service connection per day
GSA	Groundwater Sustainability Agency(ies)
GSP	Groundwater Sustainability Plan(s)
Guidebook	Urban Water Management Plan Guidebook
IPR	indirect potable reuse
IRWM	Integrated Regional Water Management
NAICS	North American Industry Classification System

Abbreviation	Description
NOAA	National Oceanographic and Atmospheric Agency
NPDES	National Pollutant Discharge Elimination System
PWS	public water system(s)
PWSID	public water system identification number
R-GPCD	residential gallons per-capita per day
RHNA	regional housing needs assessment
RUWMP	Regional Urban Water Management Plan
SDWIS	Safe Drinking Water Information System
SGMA	Sustainable Groundwater Management Act
State Water Board	State Water Resources Control Board
Supplier	urban water supplier
SWP	State Water Project
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
UWUO	urban water-use objective
VAR	Volumetric Annual Report of Wastewater and Recycled Water
WDR	waste discharge requirements
WRR	water recycling requirements
WSCP	Water Shortage Contingency Plan
WSRA	Water Service Reliability Assessment

1 Urban Water Management Plan Introduction and Overview

In 1983, the State of California Legislature (Legislature) enacted the Urban Water Management Planning Act (UWMP Act). The UWMP Act requires an urban water supplier (Supplier) providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet annually to adopt an Urban Water Management Plan (UWMP) every five years, demonstrating water supply reliability in normal, single dry, and multiple dry water years. The UWMP Act also requires the California Department of Water Resources (DWR) to report to the Legislature on the status of UWMPs. Appendix A contains copies of the UWMP Act and other sections of the California Water Code relevant to UWMPs. Appendix B shows revisions to the UWMP Act and to Water Code. There have been no requirement changes since 2020; only definitions have been added or updated.

Each chapter in this Guidebook includes an introductory section to describe the purpose and importance of covering the topic (Importance), how to focus on the essentials required (Focus), how to enhance covering the topic using recommended and best practices (Enhancements), and, if any, updates since the 2020 UWMPs (Updates Since 2020).

Associated Microsoft Excel workbooks and other tools are also provided to help Suppliers prepare information for electronic submittal through DWR's [Water Use and Efficiency Data Portal](#) (WUEdata portal). This Guidebook often references these tools and workbooks, and details them in the Guidebook's appendices.

Importance

A UWMP is the legal and technical water management foundation for Suppliers throughout California. A well-constructed UWMP can save Suppliers time and money, and it provides the Supplier's staff, the public, and elected officials with an understanding of past, current, and future water conditions and management. The UWMP integrates local and regional land-use planning, regional water supply, infrastructure, and demand management projects, as well as statewide issues of concern like climate change and regulatory revisions. In short, the UWMP gathers, characterizes, and synthesizes water-related information from numerous sources into a plan with local, regional, and statewide practical utility.

Thoughtful urban water management planning provides an opportunity for a Supplier to integrate supplies and use in a balanced and methodical planning platform that addresses short-term and long-term water-planning conditions.

In so doing, a Supplier will:

- Assess changes in natural hydrology, climate, and groundwater conditions
- Anticipate the implications of regional, State, and federal regulations
- Understand supply conditions and water-use variability
- Identify regional constraints on, or opportunities for, shared water resources
- Integrate local land-use changes, development, plans, and population growth
- Prepare for water shortages and unforeseen calamities
- Anticipate infrastructure improvements
- Recognize project funding needs and opportunities

A UWMP provides a Supplier with a reliable water management action plan that can be confidently referred to as conditions change and as management decisions are made. Importantly, UWMPs prepared throughout California provide DWR, the State Water Resources Control Board (State Water Board), and the Legislature with a picture of statewide water reliability. For these reasons, it is important that UWMPs are thoughtfully prepared.

Focus

Preparing a UWMP requires addressing these water-planning fundamentals:

- Preparing a detailed look at current and future water use, including assessing available baseline data and examining long-term planning documents like municipalities' General Plans and Specific Plans.
- Analyzing potable and non-potable water supplies, including reviewing water rights and contracts, assessing water deliveries, ascertaining restrictions on water availability under certain regulatory and hydrological conditions, and other opportunities or limitations explained in documentation for each water supply.
- Analyzing water supply reliability by integrating the water-use analyses with the water supply analyses to provide a water service reliability picture under normal conditions, single dry-year conditions, and five consecutive dry years through at least 2045.
- Preparing a realistic Drought Risk Assessment (DRA) by including integrated water supplies and projected water use in a hypothetical five-year drought condition.
- Developing an effective Water Shortage Contingency Plan (WSCP) that specifies opportunities to reduce demand and augment supplies under numerous, and even unpredictable, water shortage conditions.

A UWMP that meets statutory reporting requirements will also reflect short-term and long-term land-use planning assumptions and goals, account for specific plan and infill development projects over the course of the UWMP planning period, and it

will allow the Supplier to handle the dynamic nature of water supplies and demands through sound water shortage contingency planning.

Synthesizing the linkages between land-use planning, water supply planning, and regional or statewide issues such as climate change, can make a Supplier's UWMP a valuable water management and planning tool to guide the Supplier's governing body and managers. The UWMP also helps inform the State and the Supplier's customers about its water management practices.

If a UWMP's fundamentals are accurate, then other management actions may also become apparent, such as:

- Effectiveness of water shortage contingency planning
- Necessary infrastructure improvements or emergency interties with neighboring Suppliers
- Trends in water reliability conclusions related to climate change or regulatory conditions
- Opportunities to obtain funding for water management projects

Enhancements

Suppliers can choose to go beyond legislative requirements by adding additional detail to better characterize conditions to improve their water reliability assessments, DRAs, and use of the UWMP for addressing local, regional, and statewide water planning and management issues. This may also include the incorporation of planning considerations, in the case of emergency supply interruptions, as well as improved alignment with other municipal or regional planning documents. Some UWMP enhancements to consider are described below.

Use Smaller Time-Steps for Assessing Supplies, Demands, and Reliability.

Existing law requires UWMPs to assess annual water supplies, demands, and reliability for current and future conditions through a 20-year planning horizon, but it does not specify the interval for creating those assessments.

Water supplies and water use can experience high variability when viewed on a smaller time-step (e.g., monthly, bimonthly, seasonal) compared to annual totals. This means that there may be water management issues that are not apparent when reporting just the required annual totals. Because of this potential variability, where feasible, Suppliers are strongly encouraged to use a smaller time-step (more granularity) when describing water use and supply, and in evaluating water supply reliability and drought risk. DWR offers an optional monthly Planning Tool in Appendix L to assist Suppliers in analyzing water supply and use on a monthly basis.

Additionally, the required 20-year UWMP planning horizon results in a gap between the five-year UWMP cycles that limits the UWMPs utility for land-use planning actions and California Environmental Quality Act (CEQA) compliance during those gap years (2021–2025). Expanding the UWMP planning horizon to 25-years can bridge this gap. This would allow for 2021–2025 projects and analyses to still have 20 years of UWMP assessments to work with.

Incorporate Planning for Meeting Urban Water-Use Objectives

Retail Suppliers with an annual actual water use above or expected to be above their annual urban water-use objective (UWUO) may choose to consider incorporating in their UWMP additional demand management measures (DMMs) and increased use of recycled water (both potable and non-potable) to meet their UWUO by the 2027 reporting year. Actions taken to meet the objective may also affect overall demand forecasting.

Analyze and Describe Potential Cultural Changes in Use Patterns

Changes in cultural use patterns may alter urban water-use patterns and affect current and future water conservation accounting and analysis. Current water data may reflect a temporary or long-term change in water use and could affect evaluation of near- and long-term management considerations. As such, each Supplier is encouraged to consider adding a description of any such changes and potential effects in its UWMP.

Demonstrate Sustainable Growth and Economic Strength Interdependencies

Economic strength can be fostered by urban infill developments, commercial developments, or new residential developments; however, these all require secure water supply sources, without which the venture is at risk.

Implementation of sustainable growth strategies can strengthen supply reliability by contributing to development of new water supplies and recycled water, fixed leaks, retrofit of water inefficient structures and devices, and development with water conservation at the forefront. This sustainable growth, in turn, can enable economic returns that reduce impacts of water affordability and allow for existing customers to afford implementation and maintenance of water-efficient solutions, whereas a declining economy may experience more water affordability impacts and may not have the resources to implement or maintain water-efficient infrastructure.

To this extent, a UWMP can document supply and demand strategies to support sustainable growth planning, as well as how implemented sustainable growth strategies have reduced demands and/or improved supply reliability.

This section may also include an analysis of how the Supplier is mitigating potential affordability impacts.

Include a Discussion of Water Supply for Low Income Housing

The Water Code requires that Suppliers include projected water use needed for lower-income households, as identified in housing elements for a city or county. The UWMP can provide additional information on the method(s) used to determine these water use needs including reference to the Regional Housing Needs Assessment (RHNA). Refer to Chapter 4 and Appendix K for guidance.

Evaluate Water Assets and Infrastructure Opportunities

The UWMP is an ideal platform for considering additional opportunities to manage water assets to enhance a Supplier's long-term water reliability and other management objectives.

The more detailed and reliable the accounting, the better able a Supplier is to gauge how much extra or short water supplies may be in any given situation. This information can allow Suppliers to make sound management decisions regarding asset management and infrastructure planning to help mitigate long-term water management conditions attributable to climate change, regulatory change, and local water quality conditions.

For example, where surplus water conditions exist for a Supplier under certain circumstances, these water assets can be used for alternative purposes like instream flow and habitat enhancement, or crisis-related supplies for neighboring urban purveyors, which stabilize the environment or enhance regional water reliability.

In summary, a UWMP can provide a strong water-planning document for Suppliers. A UWMP can be a robust management document that guides each Supplier's governing decisions, can help the public and elected officials understand the Supplier's water system and risks, can enhance statewide data gathering and analysis, and can address specific water issues unique to each Supplier.

Chapter Sections

This chapter is divided into the following sections:

- 1.1, Updated Guidance for 2025 Urban Water Management Plans
- 1.2, Submittal Tables
- 1.3, Recommended Urban Water Management Plan Organization
- 1.4, Urban Water Management Plans in Relation to Other Efforts
- 1.5, Department of Water Resources' Review Process
- 1.6, Urban Water Management Plans and Grant or Loan Eligibility
- 1.7, Tips for Urban Water Management Plan Preparers

1.1 Updated Guidance for 2025 Urban Water Management Plans

- **Changes in Water Code.** There have been minor changes to the Water Code since 2020 UWMPs were submitted; primarily, several definitions have been added. None of these change UWMP requirements for 2025 UWMPs. The sections of Water Code relevant to UWMPs are attached as Appendix A; revisions are shown in Appendix B. Sections of the Water Code relevant to each UWMP requirement are provided throughout the UWMP Guidebook (Guidebook).
- **Suppliers with Multiple Public Water Systems (PWSs).** For consistency among State agencies, DWR and the State Water Board are using the same criteria to determine when a Supplier with multiple PWSs is considered an Urban Water Supplier subject to UWMP requirements. Refer to Chapter 2, Section 2.1.1 for details.
- **DWR Submittal Tables.** Submittal tables have been updated to reflect the current reporting year, improve accuracy of reporting, and more clearly identify information required by Water Code and optional information.
- **Water Loss Standard Reporting.** There has been no change to the Water Code regarding water loss standard reporting since 2020 UWMPs were submitted. However, the existing Water Code requires Suppliers to demonstrate compliance with the 2028 Water Loss Standard. The Water Loss Standards were not available when the 2020 UWMPs were being submitted but are now available for 2025 UWMPs. Therefore, guidance has been added about how Suppliers can now report progress toward compliance with their Water Loss Standard in 2025 UWMPs. Refer to Submittal Table 4-6 and related guidance in Chapter 4.
- **Direct Potable Reuse.** The State Water Board has adopted regulations for the use of direct potable reuse (DPR) since 2020 UWMP reporting. To allow for reporting of DPR, minor changes have been made to supply and demand tables. Refer to guidance in Chapters 4 and 6.
- **Lower-Income Housing.** While projections for lower-income housing were required in 2020 UWMPs, additional guidance has been provided for optional reporting of the method used to project water use for lower-income housing. This optional guidance incorporates RHNA into projected land and water uses. Refer to Chapter 4 and Appendix K for more information.
- **Reporting Groundwater Recharge and Other Water Storage.** In previous years, the guidance for reporting water placed into storage did not differentiate between long-term storage (i.e., water placed into storage one year but extracted in a future year) and short-term storage (i.e., water that is placed into storage and extracted the same year). When a Supplier reports water placed into storage and then reports it was retrieved in the same year (short-term storage) it can cause a double counting error. Additional guidance

recommending that Suppliers do not report water into and out of short-term storage is provided in Chapter 4 and Chapter 6.

1.2 Submittal Tables

Water Code Section 10644

(a)(2) The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

Submittal Tables are shown in their relevant chapters here, and are presented in Appendix E. Microsoft Excel versions of these tables are also available for download from the [Water Use and Efficiency Data Portal](#) (WUEdata portal); scroll down to the “Urban Water Management Plans” section and click the “Resources” button to access these files.

Submittal Tables with an “R” in their title are for Retail Supplier use. Submittal Tables with a “W” in their title are for Wholesale Supplier use. Where no “R” or “W” appears in the title of a Submittal Table, they may be used by both Retail and Wholesale Suppliers.

Some Submittal Tables for 2025 UWMPs have been updated for more accurate reporting. Additionally, all 2025 Submittal Tables have been updated to reflect the new time period of the 2025 UWMPs.

1.2.1 Inclusion of Submittal Tables

Inclusion of Submittal Tables in UWMPs expedites DWR review, lets reviewers check if Water Code requirements have been addressed, and verifies that information in the WUEdata database accurately reflects what is found in the adopted UWMP.

If DWR cannot readily find the required information or is unable to verify consistency between WUEdata and the UWMP, DWR will reach out to the Supplier and request the inclusion of the Submittal Tables into the UWMP or identification of where the necessary information can be found in the UWMP. If the Supplier does not include the Submittal Tables in the UWMP or demonstrate to DWR consistency between data in Submittal Tables and data in the UWMP document, the review outcome will be designated as “indeterminate,” (refer to Section 1.5) and all WUEdata Submittal Table data will be flagged as “unsubstantiated.” This may or may not affect regulatory requirements such as the annual UWUO reports that may rely on some UWMP data. This indeterminate status may affect grant and loan eligibility (refer to Sections 1.5 and 1.6). This can be resolved in the future if steps are taken to show DWR where the necessary information resides in the UWMP document.

1.2.2 Optional Planning Tool

An optional Planning Tool (Appendix L) is also provided to help Suppliers develop their Water Service Reliability Assessment (WSRA) and DRA. The tool provides an opportunity to document and analyze monthly water supply and use, which is strongly encouraged because it can identify shortage conditions that may occur in a particular month that may not be seen when analyzing supplies and use on an annual basis. Use of the Planning Tool is optional; inclusion is not required in a UWMP, nor is submittal to DWR required.

1.3 Recommended Urban Water Management Plan Organization

DWR recommends, but does not require, that a Supplier use the organization outlined below to prepare their 2025 UWMP. This Guidebook is organized in the same sequence as the recommended UWMP organization.

- **Chapter 1, Urban Water Management Plan Introduction and Lay Description.** This chapter can be used to provide a discussion on the fundamentals of the UWMP and the required lay description (Lay Description) of the UWMP.
Each UWMP must include a Lay Description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan (Water Code Section 10630.5). This section of the UWMP could be viewed as a go-to synopsis for new staff, new governing members, customers, and the media, and it can ensure a consistent representation of the Supplier's detailed analysis. The Lay Description can be treated like an executive summary of the UWMP, written in clear eighth grade language that summarizes the key information regarding water supplies, water use, water service reliability (including catastrophic potential) and DRA. However, a Supplier may also choose to summarize each chapter up front in a similar manner instead of providing one, all-encompassing Lay Description. DWR recommends that Suppliers clearly label and identify their Lay Description so DWR can check whether that requirement was met.
- **Chapter 2, Urban Water Management Plan Preparation.** This chapter can be used to provide information on the processes used for developing the UWMP, including efforts in coordination and outreach.
- **Chapter 3, Service Area Description.** This chapter can include the required system description. This description may include maps of the service area, an explanation of the service area and climate, detail on their PWS(s), and an overview of the Supplier's organizational structure and history.

- **Chapter 4, Water Use Characterization.** This chapter can include the required description and quantification of current and projected water uses within the Supplier's service area.
- **Chapter 5, SB X7-7 Baselines, 2020 Targets, and 2025 Reporting.** In this chapter, Suppliers can report their 2020 per-capita water conservation target as calculated in their 2015 UWMPs and report progress toward meeting their target in accordance with Water Code requirements.
- **Chapter 6, Normal-Year Water Supply Characterization.** In this chapter, Suppliers can provide their required description and quantification of their current and projected potable and non-potable water supplies. Suppliers are also encouraged to include in this chapter their description of planned sources of supplies and each supply's management in correlation with other identified supplies.
- **Chapter 7, Water Service Reliability and Drought Risk Assessment.** This chapter can be used by Suppliers to provide their required water service reliability description through at least a 20-year planning horizon. This description must be provided for a normal year, single dry year, and a five-consecutive-year drought. This chapter also includes the DRA.
- **Chapter 8, Water Shortage Contingency Plan.** In this chapter, Suppliers can provide their required structured plan for dealing with water shortages, incorporating standardized action levels, along with implementation actions in the event of a catastrophic supply interruption.
- **Chapter 9, Demand Management Measures.** Suppliers use this chapter to provide their required description of the nature and extent of their efforts to reduce water use using specific DMMs as well as any other actions taken by the Supplier to promote conservation and to reduce demand for their water supply.
- **Chapter 10, Urban Water Management Plan Adoption, Submittal, and Implementation.** Suppliers may use this chapter to describe and document the steps taken to make its UWMP publicly available, as well as the steps taken to adopt and submit its UWMP in accordance with the Water Code. This chapter can also describe the Supplier's plan to implement the UWMP.
- **Appendices.** Each Supplier may have information that is best appended to the 2025 UWMP, to support and further clarify information included in the main chapters. Providing additional information as appendices strengthens the plan and offers a complete and well-supported planning document.

1.4 Urban Water Management Plans in Relation to Other Efforts

A UWMP is prepared by local Suppliers that have the in-depth and practical knowledge of their water systems. The information contained in each Supplier's UWMP reflects the operations of its system in the context of the Supplier's

customers, supplies, and service area. This local planning and preparation remains the fundamental focus of the UWMP.

In addition to the local Supplier focus, the UWMP requires coordination with other planning agencies and is most effective when integrated with other planning efforts. Land-use planning agencies, such as cities and counties, prepare General Plans and Specific Plans that affect a Supplier's analysis provided in its UWMP, and vice versa. Moreover, Water Master Plans, facilities' plans, Recycled Water Master Plans, Integrated Regional Water Management (IRWM) Plans, Regional Climate Action Plans, Groundwater Sustainability Plans (GSPs), Assembly Bill (AB) 3030 Groundwater Management Plans, local or regional Hazard Mitigation Plans, State Water Project Delivery Capability Reports, and others need to be synthesized with a Supplier's UWMP to ensure a holistic planning process.

Such a regional, cross-sector planning process can help the Supplier better meet requirements, maintain consistency with other processes, and create stronger water management and insight overall for regions throughout the state. As such, DWR strongly encourages Suppliers to use other planning processes and documents when developing their UWMPs, consulting with other planning agencies during the preparation of the UWMP and providing the final UWMP to other planning agencies to consider, furthering those agencies' planning objectives.

1.4.1 Specific Considerations

Other related analysis and information may also be included in the UWMP to support requirements outside of the UWMP Act but rely on information provided in UWMPs. Two such considerations are identified below.

1.4.1.1 Demonstration of Consistency with the Delta Plan for Participants in Covered Actions

DWR recommends that all Suppliers that anticipate participating in or receiving water supply from a proposed project that is considered a "covered action" under the [Delta Plan](#) provide information in their UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (as codified in 23 California Code of Regulations [CCR] Section 5003). Included in this is, for example, a multiyear water transfer; conveyance facility; or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento–San Joaquin River Delta (Delta). To conduct this assessment, Suppliers will make use of their characterization of past, current, and projected future supplies and uses, as prepared for the UWMP.

Detailed guidance for demonstrating reduced reliance on the Delta is provided in Appendix C and an example template and sample data are offered as an Excel workbook to help those who follow the approach demonstrated in Appendix C. The template of tables and example data can be downloaded from the “UWMP Resources” on the WUEdata portal. DWR does not review this analysis as part of the UWMP approval process; therefore, this information is recommended to be included as an appendix or other attachment submitted with the Supplier’s UWMP.

1.4.1.2 Permitting for Ocean Desalination Projects

The Water Code requires that Suppliers describe opportunities for development of desalinated water, including desalination of ocean water. For those Suppliers that are considering an ocean desalination project, the Seawater Desalination Interagency Group recommends in the [*Seawater Desalination Siting and Streamlining Report to Expedite Permitting*](#) that the UWMP demonstrate the need for the project and that the proposed project is properly sized. Should an ocean desalination project move forward, permitting agencies may rely upon the information given in the UWMP to demonstrate need for the facility.

Additional guidance for Suppliers considering an ocean desalination facility is provided in Chapter 6, Section 6.2.7.2.

DWR does not review this analysis as part of the UWMP approval process; therefore, this information is recommended to be included as an appendix or other attachment submitted with the Supplier’s UWMP.

1.5 Department of Water Resources’ Review Process

Upon submittal by Suppliers, DWR will review UWMPs to ensure that plans address Water Code requirements. Suppliers that do not address Water Code requirements in their UWMP are not eligible for water-related grants or loans from the State (refer to Section 1.6).

Following DWR’s review of a UWMP, Suppliers will be notified of the results of the review via a formal review letter. These review letters are available to the public on DWR’s WUEdata portal. In cases where DWR finds that a UWMP does not properly address item(s) in the Water Code, DWR will reach out to the Supplier to discuss needed corrections and correction procedures. UWMP review letter types are listed below.

- **UWMP Addresses Water Code Requirements.** Supplier is notified that DWR’s review has determined that the submitted UWMP addresses the requirements of the Water Code and has met the eligibility requirements for grants and loans under Water Code Section 10608.56.

- **UWMP Addresses Water Code Requirements with Recommendations.** Supplier is notified that the submitted UWMP has addressed the Water Code requirements and has met the eligibility requirements for grants and loans under Water Code Section 10608.56, but DWR will provide recommendations for portions that could use slight adjustment in the next round of UWMPs.
- **UWMP Advisory Letter.** Supplier is notified that the submitted UWMP did not address all Water Code requirements or that it cannot be determined whether all requirements have been addressed. A UWMP Advisory Letter provides a period of time for the Supplier to submit an amended UWMP that addresses the deficiencies or necessary information documenting the requirements were addressed. Once the amended UWMP or documentation is reviewed and found to address all requirements, DWR issues a letter of “Requirements Addressed.” If the Supplier does not submit an amended UWMP or required documentation, DWR will issue a letter of Requirements Not Addressed’ or “Indeterminate.”
- **UWMP Does Not Address Water Code Requirements.** Supplier is notified that DWR’s review has determined that the UWMP has not addressed all the requirements of the Water Code. This letter is issued if no response has been received to a UWMP Advisory Letter.
- **Indeterminate.** Supplier is notified that, during DWR’s review, it could not be determined whether the submitted UWMP has addressed the Water Code’s UWMP requirements. This may occur when Submittal Tables are completed and submitted but substantiation and required information cannot be located in the adopted UWMP. This letter is issued if no response has been received to a UWMP Advisory Letter.

1.6 Urban Water Management Plans and Grant or Loan Eligibility

For a Supplier to be eligible for any water grant or loan administered by DWR, the Supplier must have a current UWMP on file that has been determined by DWR to address the requirements of the Water Code. A current UWMP must also be maintained by the Supplier throughout the term of any grant or loan administered by DWR. A UWMP may also be required to be eligible for other State funding, depending on the conditions that are specified in the funding guidelines. Suppliers are encouraged to seek guidance on the specifics of any State funding source from the respective funding agencies. The following sections of the Water Code are pertinent to Suppliers considering pursuit of grants or loans.

Water Code Section 10608.56

- (a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

- (c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.
- (e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.
- (f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

Water Code Section 10656

An urban water supplier is not eligible for a water grant or loan awarded or administered by the state unless the urban water supplier complies with this part.

23 CCR Section 596.1

- (b)(2) “disadvantaged community” means a community with a median household income that is less than 80 percent of the statewide annual median household income.

1.7 Tips for Urban Water Management Plan Preparers

In addition to the UWMP guidance, descriptive outline, and suggested elements provided above, there are helpful tips that Suppliers can follow when developing UWMP documents. These tips include:

- **Use Previous UWMPs and Regional UWMPs.** Although the 2025 UWMP is considered an update to a Supplier's previous UWMP, the 2025 UWMP should be an independent document. Suppliers should ensure that information carried forward from a previous UWMP is current. Suppliers should also seek to coordinate relevant information with Regional UWMPs (RUWMPs) or Wholesale Supplier UWMPs, where applicable. Summaries of this information, with citations or references to a RUWMP or Wholesale Supplier UWMP, are acceptable to maintain the UWMP's flow and readability. Where appropriate, portions of another plan may be incorporated as an attachment or appendix to the Supplier's 2025 UWMP.
- **Follow the Notification and Adoption Processes for UWMP Development and Adoption.** The 2025 UWMP notification and adoption processes are detailed in Chapter 10. Consider when the governing body meets and how long in advance people are notified of this process to schedule notifications and hearings accordingly. Although there are specific provisions about notifying local agencies after a draft plan has been prepared, the Legislature encourages the active involvement of diverse social, cultural, and economic elements of the population prior to and during preparation of both the UWMP and WSCP. In this way, the 2025 UWMP is understood by interested parties before the adoption processes commence.
- **State if a Requirement Does Not Apply to a Supplier in the UWMP.** There are portions of the UWMP statutory requirements that simply do not apply to some Suppliers. For instance, where a Supplier is asked to describe and quantify a supply of recycled water, but that Supplier does not have access to a supply of recycled water, then the Supplier may state that fact, input "0" into the relevant tables, move on to the next section. However, a Supplier should not dismiss a portion of the UWMP statutory requirements without thoughtfully considering the application of each portion as it applies to the Supplier's water service area. In cases where the Supplier determines that the requirement is not applicable, DWR recommends that the Supplier include a note in the narrative of the UWMP that the section is not applicable and why. This notice will assist preparers of future UWMPs and the DWR staff in reviewing the UWMP.
- **Explain Unique Situations.** Each Supplier may have unique situations that require further explanation beyond the statutory criteria or suggestions in this Guidebook. DWR recommends that the Supplier clarifies these unique situations via detailed information in the 2025 UWMP, or by attaching an explanatory appendix to the 2025 UWMP with a summary of the information. Referencing meaningful materials for the Supplier's unique situation may also facilitate the Supplier's analysis and management actions.

- **Include Narratives, Graphics, and Maps.** Narrative descriptions, graphics, and maps included in the 2025 UWMP help explain complicated facts and data that might otherwise be embedded in tables and spreadsheets. The addition of materials that provide a reader with added means to look at quantitative information may better inform the reader of a Supplier's water service reliability situation and associated management actions.
- **Use Summaries and Cross References.** As appropriate, Suppliers are encouraged to summarize detailed information from other documents and provide cross references in the 2025 UWMP rather than restating copious data that may add to document length or complexity. To avoid plagiarism and guide the reader, summaries should cite any source documents, and cross references may cite other chapters, sections, or appendices in a Supplier's UWMP.
- **Provide Accurate Information.** Ensure the accuracy of the information provided in the UWMP because other required reports to the State of California, such as the urban water use objective annual report, may automatically pull data from the UWMP to populate the reporting template.
- **Use the Checklist.** A checklist of specific UWMP requirements is included in Appendix F. The Supplier is asked to complete this checklist and enter the page number where the required element is addressed, to assist in DWR's review of the submitted 2025 UWMP.
- **Use the Guidebook Appendices.** This Guidebook's appendices provide detailed information and specific recommendations for addressing important elements of the UWMP laws. For example, Appendix I provides recommendations for considering climate change conditions, Appendix K provides a suggested methodology for estimating future water use, Appendix M provides details to support recycled water characterization and tables, and Appendix O describes methods for providing energy reporting information and optional energy intensity calculations. Each appendix of this Guidebook provides helpful information for addressing complex water-planning issues. The appendices may also be useful in navigating the Guidebook.

2 Urban Water Management Plan Preparation

This chapter provides information about how to develop a UWMP, including efforts in coordination and outreach. This chapter also details the importance of plan preparation, the merits of including enhanced material in a UWMP, and it provides specific guidance for preparing the document.

Importance

Preparing the UWMP in a transparent manner that is accessible for interested parties is important for good water resources governance. By including public involvement opportunities, featuring adequate notifications, and public hearings, it allows interested parties and the public to submit comments and suggest revisions to the Supplier's plan for water reliability and future investments in local water purveying.

Focus

The Water Code specifies the required content of UWMPs as well as requirements for the process of preparing and adopting a UWMP.

This chapter provides guidance on determining whether or not a Supplier is required to prepare a UWMP, the various levels of regional coordination that a Supplier may employ, and how Suppliers can document consistency with plan preparation requirements.

The chapter also includes guidance and tables for two pieces of information to apply consistently throughout the UWMP: the use of a fiscal or calendar year, and the specific units of measure used by the Supplier to report water volumes.

Enhancements

It is recommended, but not required, that a Supplier enhance their UWMP preparation through additional outreach and coordination with other local or regional entities or by providing longer review times than statutory requirements specify. This extended public engagement could allow for improved and more thorough feedback on different components of the plan. Additionally, DWR recommends, but does not require, that coordination efforts be documented and reported as part of the UWMP, including coordination with Groundwater Sustainability Agencies (GSAs).

Updates Since 2020

There have been no updates to the Water Code related to this chapter.

Chapter Sections

This chapter is divided into the following sections:

- 2.1, Basis for Preparing a Plan
- 2.2, Individual or Regional Plans
- 2.3, Fiscal or Calendar Year and Units of Measure
- 2.4, Coordination and Outreach
- 2.5, Submittal Tables

2.1 Basis for Preparing a Plan

Water Code Section 10617

“Urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

Water Code Section 10608.12

- (t) “Urban retail water supplier” means 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.
- (w) “Urban wholesale water supplier” means 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.

Water Code Section 10620

- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

Water Code Section 10621

- (a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

All Suppliers

In accordance with Water Code, urban water Suppliers with 3,000 or more customers or those supplying 3,000 or more acre-feet of water per year, are required to prepare an UWMP every five years. For purposes of a UWMP, DWR recommends taking an approach consistent with State Water Board practice, where the term “customer” in the definition of an urban water supplier (i.e., Supplier) refers to the number of service connections.

If a Supplier is under this threshold for the UWMP reporting year, but meets this threshold before the next reporting cycle, the Supplier is required to adopt an UWMP within one year after meeting the reporting threshold.

If not already included in an overall summary, provide a Lay Description of the basis for preparing a plan.

2.1.1 Suppliers With Both Wholesale and Retail Sales

If a Supplier has both wholesale and retail sales, they should review the criteria in the Water Code Sections above and the guidance below to determine which criteria apply (wholesale and/or retail). Reporting requirements and guidance for both types of agencies are included in the paragraphs below.

- **Both Wholesale and Retail Supplier.** If a Supplier meets the definition of both an urban wholesale and urban retail water supplier, as found in Water Code Section 10608.12 (t) and (w), it is considered both a Wholesale and a Retail Supplier. Such a Supplier must address the Water Code Section requirements that apply to both wholesale and retail suppliers. Agencies that are both Retail Suppliers and Wholesale Suppliers will report their data using both retail and wholesale tables.
- **(Exclusively or Primarily) Retail Supplier.** If a Supplier meets the definition of an urban retail water supplier as found in Water Code Section 10608.12 (t), it is considered a Retail Supplier. Such a Supplier may also provide water on a wholesale basis, for example, sales to other agencies, but the wholesale volume is below the reporting threshold for the agency to be considered a Wholesale Supplier. This small volume of wholesale use will be reported in the Retail Supplier’s Submittal Tables 4-1 R and 4-2 R as “Sales/Transfers/Exchanges to Other Suppliers.”

- **(Exclusively or Primarily) Wholesale Supplier.** If an urban water supplier meets the definition of an urban wholesale water supplier as found in Water Code Section 10608.12 (w), it is considered a Wholesale Supplier. Such a Supplier may also provide water on a retail basis, but the retail volume is below the reporting threshold for the agency to be considered a Retail Supplier. This small volume of retail use may be reported as “retail demand” in the Wholesale Supplier’s Optional Submittal Tables 4-1 W and 4-2 W.

2.1.2 Public Water Systems

California Health and Safety Code 116275

- (h) “Public Water System” means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

All Suppliers

PWSs are the distribution systems that provide drinking water for human consumption. All PWSs are given a unique PWS Identification Number (PWSID). These systems are regulated by the State Water Board’s Division of Drinking Water.

The California Health and Safety Code defines a PWS as described above.

Retail Only

PWS data, reported by water purveyors to the State Water Board, are used to determine whether or not a water purveyor is a Retail Supplier (that is, it has reached the UWMP reporting threshold of 3,000 or more connections or 3,000 acre-feet of provided water). The following describes how to determine if the threshold is met for water purveyors with one PWS or multiple PWSs.

- **Single PWS.** For water purveyors with one PWS, if that system exceeds the threshold, they are considered a Retail Supplier.
- **Multiple PWSs.** For consistency with other State regulations, those water purveyors with multiple PWSs, which together meet the above thresholds under the following conditions, are considered a Retail Supplier:

23 CCR Section 980(ddd):

- (1) If the supplier owns and operates at least one public water system that has provided an average annual total of 3,000 AF of water or more for municipal purposes for the previous two years, or has

served an annual average of 3,000 or more municipal service connections (i.e., residential [single or multifamily], commercial, institutional, industrial, or landscape irrigation) for the previous two years.

- (2) Multiple public water systems that are owned and operated by the same supplier are, together, considered an urban retail water supplier provided they:
 - (A) Individually serve 200 connections or more;
 - (B) Collectively, meet the criteria in paragraph (1); and
 - (C) Meet one or more of the criteria below:
 - (i) The systems are permanently interconnected;
 - (ii) The service area boundaries are adjacent;
 - (iii) The supplier is using the system's data, such as population or landscape area, to calculate its urban water use objective pursuant to Water Code Section 10609.20.

Refer to the Public Water System ID-DWR ID ([PWSID-DWRID](#)) [Crosswalk](#) for a list of Retail Suppliers and associated PWSs being used by both the State Water Board and DWR. If this list is in error according to the criteria identified above, please contact orpp-waterconservation@waterboards.ca.gov to correct it.

- **Suppliers Serving Multiple Service Areas/PWSs Above the Threshold.** Many Suppliers in California have more than one PWS that meets the requirements of 23 CCR Section 980(ddd). Such Suppliers may determine regional groupings and reporting for these systems based on internal planning requirements, geographic distribution, and similarities between systems.
In accordance with Water Code requirement to "Describe the service area of the supplier..." per Water Code Section 10631(a), Suppliers will specify which of the PWSIDs are covered within the UWMP in Submittal Table 2-1 R. Without a listing of all PWSs contained within a particular UWMP, readers and data users will expect to see a plan and analysis that includes all of the PWSs a Supplier is responsible for in the single UWMP.
- **RUWMPs.** RUWMPs will use multiple versions of Submittal Table 2-1 R; one for each participating Supplier and include the name of the Supplier in the "Notes" section at the bottom of the table.

Wholesale Only

There is no Submittal Table 2-1 for wholesale suppliers. Wholesale Suppliers do not have responsibilities over individual PWSs.

Relevant Submittal Tables for Section 2.5

- Retail Suppliers: Submittal Table 2-1 R
- Wholesale Suppliers: None

2.2 Individual or Regional Plans

All Suppliers

Before developing the UWMP, Suppliers should decide the level of regional coordination that they wish to engage in for the 2025 cycle of urban water management planning. Suppliers may choose:

- **Individual Reporting.** A Supplier develops one or more UWMPs that reports solely on their service area. The individual UWMP addresses all requirements of the Water Code as provided in this UWMP Guidebook. The Supplier notifies and coordinates with appropriate regional agencies and constituents.
- **Regional Reporting.**

Water Code Section 10620(d)(1):

An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation, efficient water use, and improved local drought resilience.

Suppliers may choose to work with other agencies within a region, such as wholesaler(s), other retailers, an IRWM group, or other regional agencies to develop a regional urban water management plan instead of an individual one. An RUWMP reports on the combined regional service area and must still address all the requirements of the Water Code Section. Data submitted for RUWMPs will require duplication of many Submittal Tables for their multiple agencies. Refer to Section 2.2.1 for details on RUWMPs.

2.2.1 Regional Reporting

All Suppliers

Suppliers may choose to address the requirements of the UWMP Act through development and submittal of an RUWMP. This may be an extension of regional planning that is already in place, such as an IRWM Planning. Regional planning can deliver mutually beneficial solutions to all agencies involved by reducing costs for the individual agency, assessing water

resources at the appropriate geographic scale, and allowing for solutions that cross jurisdictional boundaries.

Regional planning provides many benefits, which may include:

- Reduced reliance on imported water
- Improved water asset management
- Distributed program costs
- Wider scope resource assessments
- Cross jurisdictional solutions
- Increased water supply reliability
- Increased regional self-reliance
- Improved water quality
- Improved flood management
- Increased economic stability
- Restored and enhanced ecosystems
- Reduced conflict over resources

The RUWMP must address all the requirements of Water Code that apply to UWMPs. Some elements of the RUWMP, such as each Supplier's supply and use information, must be reported on an individual Supplier-by-Supplier basis within the RUWMP. The need for individual tables will be identified in the element discussion. The Supplier will need to copy the Submittal Tables and note the name of each agency on their data table.

RUWMPs may also address elements common to all Suppliers participating in the RUWMP, such as groundwater management for a common groundwater basin. In such a case, RUWMPs provide an avenue for streamlined reporting.

Each participating Supplier is required to adopt the RUWMP. Submitting each adoption resolution to DWR demonstrates that this requirement was addressed.

If a Supplier participates in an RUWMP and also prepares its own individual UWMP, its governing board must adopt both the regional and individual plans.

For additional guidance on Regional Reporting, refer to Appendix D.

Recommended

Providing the sum of supplies and uses from each Supplier to report the regional supply and use is not required but it may be useful for a regional self-reliance analysis.

Additionally, Suppliers may choose to include a regional WSCP that clearly identifies the actions and regional reliance of all member Suppliers in response to a water shortage could strengthen water shortage planning and mitigation.

Relevant Submittal Tables in Section 2.5

- All Suppliers: Submittal Table 2-2

2.3 Fiscal or Calendar Year and Units of Measure

2.3.1 Fiscal or Calendar Year

All Suppliers

Water Code Section 10608.20

(a)(1) Urban retail water suppliers ... may determine the targets on a fiscal year or calendar year basis.

Suppliers may report water data and assessments on a fiscal year or calendar year basis, but they must clearly state in the UWMP the type of year that is used for reporting. The type of year should remain consistent throughout the UWMP. Suppliers should consider selecting the type of UWMP year based on how they normally report information to meet other requirements to simplify data consolidation and analysis.

While Suppliers may report using either calendar year or fiscal year data in the UWMP, it should be noted that the annual UWUO report (23 CCR Section 965 et seq.) must be reported on a fiscal year basis, which may affect how Suppliers choose to report in their UWMPs.

For Suppliers reporting on a fiscal year basis, the DWR Submittal Tables may have columns labeled with particular years, for example 2025. This signifies the end of each fiscal year. For example, a column labeled for the year 2025 denotes the fiscal year 2024–2025. The UWMP preparer should also identify in Submittal Table 2-3 the start date and month of the Supplier’s fiscal year because these may vary. 2025 UWMPs are required to include the water use and planning data for the entire calendar or fiscal year of 2025 (i.e., fiscal year 2024/2025).

RUWMPs. RUWMPs will use multiple versions of Submittal Table 2-3, one for each participating Supplier with the name of the Supplier added to the “Notes” section at the bottom of the table.

Relevant Submittal Tables in Section 2.5

- All Suppliers: Submittal Table 2-3

2.3.2 Units of Measure

All Suppliers

Suppliers may use various units of measure when reporting water volumes, such as acre-feet, million gallons, or hundred cubic feet, but they must maintain consistency throughout the UWMP.

Submittal Table 2-3 is also used to report the units of measurement that the Supplier will be using to report water volumes throughout the UWMP.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 2-3, one for each participating Supplier with the name of the Supplier added to the “Notes” section at the bottom of the table.

Relevant Submittal Tables in Section 2.5

- All Suppliers: Submittal Table 2-3

2.4 Coordination and Outreach

Water Code Section 10631

- (h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier’s plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision
- (f) An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

2.4.1 Wholesale and Retail Coordination

All Suppliers

When a Supplier relies upon a Wholesale Supplier (referred to as wholesale agency in Water Code above) for a water supply, both Suppliers are required to provide each other with information regarding projected water supply and use, as described below. These projections should be consistent with each Supplier's supply and use projections as reported in the appropriate Submittal Tables found in Chapter 4 and Chapter 6 of this Guidebook.

Retail Only

Retail Suppliers that receive a water supply from one or more wholesalers are required to provide their wholesaler(s) with their projected water use from each source, in five-year increments, for 20 years, or as far as data are available.

Wholesale Only

Wholesale Suppliers are required to provide information to their customer Suppliers, identifying and quantifying water supplies available to those Suppliers from the Wholesaler Suppliers to the extent practicable. This information is to be projected in increments of five years, from 2025 through 2045, and for normal, single, and five consecutive dry years.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 2-4 R or 2-4 W; one for each participating Supplier and include the name of the Supplier in the "Notes" section at the bottom of the table.

Relevant Submittal Tables in Section 2.5

- Retail Suppliers: Submittal Table 2-4 R
- Wholesale Suppliers: Submittal Table 2-4 W

2.4.2 Coordination with Other Agencies and the Community

Water Code Section 10620

(d)(3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

Water Code Section 10642

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan...

All Suppliers

Suppliers must coordinate preparation of their UWMP with other appropriate agencies in the area, to the extent practicable. To demonstrate that they have fulfilled the above Water Code requirements, a description of their outreach and coordination activities with other agencies and the community, as described in Water Code Section 10620(d)(3) and Water Code Section 10642, can be included in this section.

Coordination and outreach are key elements in developing a useful and accurate UWMP.

- Working with neighboring water Suppliers strengthens a region's ability to plan for drought and catastrophic events.
- Coordination with city and county land-use planning agencies can provide information on regional planning, demographics, and expected future development that will impact future water use, supply, and reliability assessments.
- Notification to all interested parties allows those entities to provide information on aspects of the UWMP, to help in creating a more useful plan. It also lets these entities know about the different water management considerations that may affect their own decisions.

Because UWMP preparation and development can be accomplished in many ways, Suppliers may choose to include a summary of the process they used to prepare the UWMP such as designation of a planning team, holding public meetings, the extent of coordination with other agencies, use of this Guidebook, or the use of assistance from a consulting firm.

Recommended

UWMP preparers are strongly encouraged to solicit participation from other agencies responsible for developing related reports or planning documents such as General Plans, Water Master Plans, Groundwater Management Plans, or PWS reports to ensure consistency in planning and reporting. DWR recommends also developing the WSCP component in collaboration with other Suppliers and governing organizations per Water Code Section 10620(d)(2) (refer to Chapter 8 for details).

The following is a non-comprehensive list of agencies and organizations a Supplier may elect to coordinate with:

- Public agencies
- Cities and counties that are served by the Supplier (required)
- Local wastewater and/or stormwater entities
- Regional boards/agencies
- School districts
- Economic development agencies
- Park districts
- Regional governments (e.g., Council of Governments, Association of Governments, Joint Planning Committees)
- Water management organizations
- Other urban water suppliers
- Water suppliers that share a common source
- IRWM groups
- GSAs and other groundwater management entities
- Watershed groups
- Residential customers
- Large commercial, industrial, and institutional water users
- Homeowners' associations
- Diverse elements of the population
- Building industry
- Indigenous groups
- Chambers of commerce
- Environmental organizations
- Civic organizations

Relevant Submittal Tables in Section 2.5

- Retail Suppliers: Submittal Table 2-4 R
- Wholesale Suppliers: Submittal Table 2-4 W

2.4.3 Notice to Cities and Counties

Water Code Section 10621(b)

Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be

reviewing the plan and considering amendments or changes to the plan.

All Suppliers

Water Code Section 10621(b) requires that Suppliers notify cities and counties to whom they serve water that the UWMP is being updated and reviewed. The Water Code specifies that this must be done at least 60 days prior to the public hearing. These notifications to cities and counties will be reported in Submittal Tables 10-1 R or 10-1 W (refer to Chapter 10, Section 10.2.1).

Notification letters to cities and counties may be addressed to the city manager, county administrator, or to other local appropriate contacts for the water Suppliers' service area.

Recommended

DWR encourages water Suppliers to send this notification at the start of the UWMP process, well in advance of the required 60 days prior to the UWMP public hearing.

Water Code only requires that the city or county be notified of the UWMP update or of the initial preparation for new Suppliers. However, Suppliers are encouraged to include the UWMP revision schedule, contact information of the UWMP preparer, and the location where the UWMP will be available for viewing in their notification sent to the city or county.

2.5 Submittal Tables

Water Code Section 10644

(a)(2) The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

The following tables are the standardized tables for submittal of a Supplier's 2025 UWMP data. These are also part of DWR's electronic reporting system for data input and are used by DWR to evaluate regional and statewide water use information and summarize data for DWR-required Legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier's Submittal Tables in a UWMP document, the review will be designated "indeterminate," and all Submittal Table data will be flagged as "unsubstantiated." This may or may not affect regulatory requirements such as the annual UWUO report,

which may rely on some UWMP data. “Indeterminate” status may affect grant and loan eligibility.

An Excel workbook, “2025 Submittal Tables,” is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the “Urban Water Management Plans” section and click the “Resources” button to download the file. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, where tables are different, each will be displayed. Where essential information is the same, only the Retail Supplier Submittal Table will be displayed.

2.5.1 Submittal Table 2-1: PWSs

Retail Only

The names and numbers of each PWS (drinking water only) that are managed by the Supplier and reported in a UWMP should be provided in Submittal Table 2-1 R. For RUWMPs, Suppliers will use multiple versions of the table, one for each participating Retail Supplier.

Submittal Table 2-1 is offered to provide PWSID number(s) and name(s) as well as the number of municipal connections and volume of water supplied per PWS as of 2025.

Additional rows may be added for additional PWSs.

Submittal Table 2-1. Retail: Public Water Systems

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025
Add additional rows as needed			
Total		0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES: 			

Wholesale Only

There is no Submittal Table 2-1 for Wholesaler Suppliers.

2.5.2 Submittal Table 2-2: Plan Type Identification

All Suppliers

Suppliers will indicate whether the submitted UWMP is an individual or regional plan and if the Supplier is part of an SB X7-7 Regional Alliance in Submittal Table 2.2.

If the Supplier was part of a SB X7-7 Regional Alliance in 2020, report the name of the Regional Alliance. Refer to more on SB X7-7 Regional Alliances in Chapter 5 and Appendix P.

If the plan is a Regional UWMP, Suppliers will also report the name of the RUWMP using the provided drop-down list.

Submittal Table 2-2. Plan Identification

Submittal Table 2-2: Plan Identification		
Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
<input type="checkbox"/>	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		

2.5.3 Submittal Table 2-3: Supplier Identification

All Suppliers

Suppliers will use the checkboxes to indicate whether they are a Retail or Wholesale Supplier (or both by selecting both checkboxes). Refer to Section 2.1.1 for additional guidance on this selection.

Suppliers will then use the checkboxes to indicate whether they will be using calendar years or fiscal years. If using fiscal years, Suppliers will provide the date the fiscal year begins.

Suppliers will use the drop-down list to identify the units of measure that will be used throughout the UWMP. Units used throughout the UWMP must remain consistent with the units indicated in this Submittal Table.

RUWMPs will use multiple versions of Submittal Table 2-3, one for each participating Supplier with the name of the Supplier added to the “Notes” section at the bottom of the table.

Submittal Table 2-3. Supplier Identification

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
<input type="checkbox"/>	Supplier is a wholesale supplier
<input type="checkbox"/>	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
<input type="checkbox"/>	UWMP Tables are in calendar years
<input type="checkbox"/>	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP (Select from the drop down list).	
Unit	<div> <div>AF</div> <div>CCF</div> <div>MG</div> </div>
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES: 	

2.5.4 Submittal Table 2-4: Water Supplier Information Exchange

All Suppliers

RUWMPs will use multiple versions of Submittal Table 2-4, one for each participating Supplier with the name of the Supplier added to the “Notes” section at the bottom of the table.

Retail Only

Retail Suppliers will provide the name(s) of the Wholesale Supplier(s) to whom they provided their projected water use.

Submittal Table 2-4. Retail: Water Supplier Information Exchange

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)	
The retail Supplier has informed the following wholesale supplier(s) of projected water use.	
Wholesale Water Supplier Name	
Add additional rows as needed	
NOTES:	

Wholesale Only

Wholesale Suppliers that have informed more than 10 other Suppliers of water supplies available, may opt to provide a separate list of all informed Suppliers instead of completing Submittal Table 2-4 W. If Suppliers opt for this option, they will provide the page number or location of this list in the indicated field and not complete the rest of the table.

Wholesale Suppliers that have informed 10 or fewer Suppliers of the amount of available water supplies will complete the table.

Submittal Table 2-4. Wholesale: Water Supplier Information Exchange

Submittal Table 2-4 Wholesale: Water Supplier Information Exchange Water Code Section 10631(h)	
<input type="checkbox"/>	Check the box if the Supplier has informed more than 10 other water suppliers of water supplies available. Completion of the table below is optional. If not completed, include a list of the water suppliers that were informed.
	Provide page number for location of the list.
<input type="checkbox"/>	Check the box if the Supplier has informed 10 or fewer other water suppliers of water supplies available. Complete the table below.
Water Supplier Name	
Add additional rows as needed	
NOTES:	

3 Service Area Description

This chapter provides guidance for Suppliers to describe their service areas in accordance with requirements of the Water Code.

Water Code Section 10631.

A plan shall be adopted in accordance with this chapter that shall do all of the following:

- (a) Describe the service area of the supplier, including current and projected population, climate, and other social, economic, and demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.

Importance

A thorough description of a Supplier's water system(s) and service area provides information to the reader and water managers that can help them understand various elements of water supply and use and the geographic context covered by the service area. Documentation of system and service area characteristics also provides a record for the underlying data and information used for each UWMP analysis and accompanying management decisions.

Focus

Chapter 3 provides guidance for describing the Supplier's system, including a description of the service area, climate, projected population, and other factors that might affect water management planning. It also points to additional guidance for uncertainties, such as the potential impacts of climate change.

Enhancements

Including more detailed information than what is required can augment the utility of a UWMP. For example, describing how the UWMP overlaps with other local and regional plans can be useful for land-use decision-making, allowing associated plans to incorporate consideration of water resources and more coordinated efforts. Additional details on the Supplier history, operations, and organization can help staff, managers, and the public understand changes, progress, and how decisions are made.

Updates Since 2020

There have been no updates to the code pertaining to this chapter since 2020.

Chapter Sections

This chapter is divided into the following sections:

- 3.1, General Description
- 3.2, Service Area Boundary Maps
- 3.3, Service Area Climate
- 3.4, Service Area Population and Demographics
- 3.5, Land Uses Within the Service Area
- 3.6, Submittal Tables

3.1 General Description

Water Code Section 10631.

(a) Describe the service area of the supplier ...

All Suppliers

Suppliers must describe their service area. A service area description may include:

- Descriptions of distribution systems' facilities, such as treatment plants, pumps, distribution lines, and operational constraints, which can explain how the system operates, help identify portions that may be vulnerable to risk, target infrastructure improvements, and identify opportunities to improve reliability.
- An overview of the service area's significant water uses. For example, some agencies may have a large commercial, industrial, and institutional (CII) entity that accounts for a significant portion of water use. Others

may have high water use for landscape irrigation due to large residential lots and a particularly arid climate.

- Any unique conditions or situations that might affect water management, either existing or anticipated.

Suppliers with multiple PWSs may describe them as a whole or address each individual PWS, depending on what would work best for their planning and management purposes.

If not already included in an overall summary, provide a Lay Description of the service area.

Recommended

In describing the service area, DWR recommends that the Supplier include any relevant factors that affect their water management planning and that this description is prepared in a manner that provides sufficient information to facilitate the Supplier's management and decision-making processes.

Information on organizational structure, such as the Supplier's history, whether the Supplier is a public or private entity, a description of the Supplier's governance, and a history and description of any consolidations or annexations is also recommended to help inform the public and provide a useful orientation for new management. It may also be useful to include a discussion about why some factors that one might think would affect water management planning were not considered.

Other documents, such as General Plans or Water Master Plans, may provide greater detail on these topics. Rather than repeating detailed information from other plans, Suppliers may summarize the relevant information and provide a reference to the associated documents.

3.2 Service Area Boundary Maps

All Suppliers

Recommended

Though not required, Suppliers are encouraged to include service area boundary maps in their UWMP. Including other maps, such as maps showing distribution system facilities, may enhance understanding of the planning area and how the system operates and further contribute to the description of the service area.

Appropriate maps recommended for inclusion in the UWMP include:

- **Potable Water Service Area.** The boundary encompassing the entire potable water service area of the supplier. This may include multiple PWSs.
- **PWSs.** The boundary containing the distribution system(s) of the Supplier's PWS(s).
- **Raw Water Distribution System.** The boundary containing the raw water distribution system, as applicable. Note that this does not include any recycled water system(s).
- **Recycled Water System.** Refer to Section 6.2.5 in this Guidebook for guidance on mapping a recycled water system.
- **Jurisdictional Boundary.** This boundary includes the potable and non-potable distribution system boundary(ies) and any additional areas that fall within the water Supplier's jurisdiction.
- **Service Area Changes.** If there have been changes to the service area Suppliers are encouraged to submit maps that display these changes.

Electronic maps of all service areas organized by PWSID are available from the State Water Board and can be downloaded from the [California State Geoportal](#) for inclusion in a UWMP. These maps are available in multiple mapping formats such as KML, shapefile, and geodatabase.

Alternatively, a preparer may use Google Earth, Google Maps, or other tools for drawing a boundary. Other resources to obtain electronic maps include a Local Agency Formation Commission, a local Council of Governments, a regional Wholesale Supplier, a private consulting service, or a university within the region. If an electronic, geospatial map layer (such as an shp or KML file) of the service area map is submitted, Suppliers are encouraged to include the following metadata:

- Map projection
- Contact information for the person that created the map
- Start and end dates for which the map is valid
- Constraints or other notes to share
- Attribute table definitions
- Digitizing base (e.g., U.S. Geological Survey [USGS] 7.5-minute quadrangle, or 1-meter resolution 2010 digital aerial photograph)

3.3 Service Area Climate

Water Code Section 10631(a)

Describe the service area of the supplier, including ... "climate..."

Water Code Section 10630.

It is the intention of the Legislature, in enacting this part, to permit levels of water management planning ... while accounting for impacts from climate change.

All Suppliers

Suppliers are required to provide information on the area's climate. A description of the current climate could include average reference evapotranspiration, temperature, and precipitation patterns, which can be used to inform outdoor water-use characteristics and may be used for other water use and supply characterizations.

A discussion of the effects of climate change on water use, supplies, and reliability may already be addressed in Chapter 4, Chapter 6, and Chapter 7 of the UWMP; however, it may be relevant to summarize in this section the anticipated expected climate changes or scenarios used in Chapters 4, 6, and 7.

Suppliers may report climate information in a narrative format, tabular format (no Submittal Table is provided for this), or a combination of both.

If there is more than one PWS in a UWMP or RUWMP, or if the service area is large with different climate areas, the UWMP preparer may report the different climates separately, or may provide climate information that averages the climatic conditions of the entire area.

Climate information can be obtained from several sources, including the following:

- [California Irrigation Management Information System](#) (CIMIS)
- Western Regional Climate Information Center
- Weather stations in the service area
- National Oceanographic and Atmospheric Agency (NOAA)

Recommended

DWR recommends that Suppliers review the guidance offered in Appendix I for different approaches to considering climate change in the UWMP service area(s). Completion of the IRWM Climate Change Vulnerability Assessment found in Appendix I is also recommended.

Suppliers can also include a discussion of any planned actions to address noted vulnerabilities that are identified through the assessment of climate change.

3.4 Service Area Population and Demographics

3.4.1 Service Area Population

Water Code Section 10631(a)

Describe the service area of the supplier, including current and projected population ...The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

All Suppliers

Water Code does not require a specific methodology for projecting future populations, but it does require that the estimates of future population be based upon data from state, regional, or local service agency population projections.

Suppliers are required to report their current and projected service area populations in their UWMP. Submittal Tables 3-1 R and 3-1 W are used to report this information.

When projecting populations, Suppliers may consider describing the proportion of the service area that is already built-out versus the proportion that remains to be developed or redeveloped. This description is particularly useful for Suppliers that are fully built-out and expect a very low rate of population growth.

Source(s) of population projection data and any qualifications on their use or accuracy can be described in both the narrative sections as well as in the Submittal Table's notes section. If the Supplier does not use population projections directly from a standard source (e.g., a General Plan, or the local Council of Governments), but instead develops its own projections, the narrative should include a description of how these projections were developed, especially when including seasonal populations.

Recommended

It is advised that Suppliers ensure that current service area population is consistent with residential population reported in the Safe Drinking Water Information System (SDWIS) plus seasonal population (less than six months residency). If populations need to be corrected in SDWIS, please contact the State Water Board's Division of Drinking Water local district office.

If there are significant non-residential populations, such as seasonal populations based on vacation, agricultural, institutional, or commercial economies, provide a brief narrative describing this element of the population and how the Supplier's population estimates incorporated this element.

RUWMPs

RUWMPs will use multiple versions of Submittal Table 3-1 R and 3-1 W; one for each participating Supplier and include the name of the Supplier in the "Notes" section at the bottom of the table.

Relevant Submittal Tables for Section 3.6

- Retail Suppliers: Submittal Table 3-1 R
- Wholesale Suppliers: Submittal Table 3-1 W

3.4.2 Other Social, Economic, and Demographic Factors

Water Code Section 10631

- (a) Describe the service area of the supplier, including... other social, economic and demographic factors affecting the supplier's water management planning.

All Suppliers

Include a description of social, economic, and demographic factors that may affect water management and planning. Some factors that Suppliers may choose to consider include income and poverty levels, amount of unemployment, major languages spoken or cultural clusters, education levels, general health status and age distribution of population served/population densities, economic viability and types of non-residential uses, redevelopment and special tax districts, types and proportions of housing, age of buildings, and others.

For example:

- Population density differences in the service area, which may be assessed by a comparison of the number of single-family homes to multi-family homes, or large lots versus small lots, can help explain unusually high or low water use and where or what type of actions may be appropriate.
- Two or more major languages spoken in the service area may indicate the presence of different cultures with different water-use patterns or needs.
- Income and poverty levels may provide an indication of the ability to implement certain types of water conservation programs such as rebate programs.

- Economic viability may indicate potential to support programs for improved water supply reliability.
- Age of housing may affect saturation of water-efficient fixtures and appliances, with new houses and buildings built to new water conservation codes and older houses and buildings retaining older, less water-conserving features.

Recommended

Tracking or anticipating changes in the factors that may affect water management and planning could contribute to improved water use projections, supply reliability constraints, and identification of more effective water-use efficiency and conservation programs. DWR recommends that Suppliers develop a strategy to anticipate how their identified factors may change, which ones are not currently a consideration but may be a future consideration, and develop a strategy for how Suppliers may want to track or monitor for changes and effects.

3.5 Land Uses Within the Service Area

Water Code Section 10631(a)

...The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities...

All Suppliers

Suppliers must describe both the current and projected land uses in the current and anticipated service area(s) that affect or will affect their water management planning. Because different water-use sectors have different per-capita water usage, it would be useful to understand how the service area land use is changing.

Supplier are also required to coordinate with local and regional land-use authorities to identify the most appropriate land-use information to use. Coordination with both the regional and local land use authorities can help Suppliers identify the most appropriate land-use projections to use in their analyses because this coordination informs Suppliers about General Plan or Specific Plan near-and long-term land-use estimates and subsequent planned water resources use.

Coordination with more localized land-use authorities (e.g., a city planning department) may provide more detailed information about what is anticipated and when, based on development project applications, redevelopment initiatives, or other information available to the local land-use authority. This could allow Suppliers to develop more refined growth and development scenarios that better estimate changes in different water-use sectors over time, covering such topics as:

- Determining whether growth is expected to be primarily residential or commercial
- Anticipating the need to respond to a lower-income RHNA
- Planning for water demands in an area if new residential developments are multi-family or single-family
- Determining what new landscape area is anticipated

Various planning agencies, such as Association of Governments, may also provide demographic forecasts based on land use and coordination with regional and local land-use authorities. Information provided by these entities may be useful in characterizing the Supplier's projected population, demographics, and land uses, depending on the relative size of the Supplier compared to the planning agency, granularity of their reporting and analysis, and forecast time-steps. If electing to use this data, Suppliers will have to decide if the information provided is sufficient to characterize their current and projected service area land use for the five-year intervals specified, or if further coordination is reasonable.

Recommended

DWR recommends that Suppliers describe their coordination activities, the land-use authorities contacted, and information received in this section.

Consider including a narrative description of the proportion of the area that is already built-out versus areas of future development. This will provide a clearer understanding of the extent of land use in the Supplier's service area and where changes can be expected.

Reporting on how the land-use information may have been used for their current and projected water supply, use, and reliability analyses in this section would be useful. Additionally, to be consistent and provide a sound basis for analysis, it is recommended to include land-use information for at least 20 years in the future using the same 5 years intervals required for population projections and supply reliability assessments.

3.6 Submittal Tables

Water Code Section 10644

- (a)(2) The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

The following tables are the standardized tables for submittal of a Supplier's 2025 UWMP. These are also part of DWR's electronic reporting system for data input and are used by DWR to evaluate regional and statewide water-use information and summarize data for DWR-required legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier's Submittal Tables in a UWMP document, the review will be designated "indeterminate," and all Submittal Table data will be flagged as "unsubstantiated." This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. "Indeterminate" status may affect grant and loan eligibility.

An Excel workbook, "2025 Submittal Tables," is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the "Urban Water Management Plans" section and click the "Resources" button to download the file. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, where tables are different, each will be displayed. Where essential information is the same, only the Retail Supplier Submittal Table will be displayed.

3.6.1 Submittal Table 3-1: Population—Current and Projected

All Suppliers

Suppliers will use Submittal Table 3-1 to report their current and projected service area populations for 2025 (fiscal year or calendar year) through at least 2045, and optionally through 2050, in 5-year intervals.

There is a retail and wholesale Submittal Table 3-1 but since their content is the same, only the retail table is shown here.

RUWMPs will use multiple versions of Submittal Table 3-1 R and 3-1 W; one for each participating Supplier and include the name of the Supplier in the "Notes" section at the bottom of the table.

Submittal Table 3-1 Retail: Population—Current and Projected

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
NOTES:						

4 Water Use Characterization

This chapter provides guidance for describing and quantifying the Supplier's past, current, and future water-use projections through at least the year 2045, to the extent that records are available, for the 2025 UWMPs.

A thorough characterization and analysis should provide a realistic prediction of future water use based upon a Supplier's past and current water use, combined with considerations of anticipated growth, new regulations, changing climate conditions, and trends in customer water-use behaviors. Examining each water-use sector for a variety of factors, then aggregating the information into a comprehensive projection of customer water use can become the foundation for integration with the Supplier's water supplies (refer to Chapter 6) to assess long-term water service reliability (refer to Chapter 7).

Importance

Accurately tracking and reporting past and current customer water use allows a Supplier to properly analyze use of its water supplies, conduct good resource planning, evaluate conservation programs and needs, and appropriately plan for infrastructure investments. Ultimately, information in this section will inform the Retail Supplier's WSRA and DRA (refer to Chapter 7). Additionally, accurately reported water use data facilitates the State of California's aggregation of information, which is used to assess statewide urban water use and water use trends.

Many planning agencies—whether local, regional, or statewide—rely upon Suppliers' water use reports and water-use projections to ascertain water use and supply trends on a larger scale.

Assessments of future growth and related water use, done in coordination with local or regional land-use authorities, provide essential information to assure that water-use projections reflect anticipated future populations and land uses, reflect potential effects of a changing climate, and may provide additional information on changing water-use ethics throughout the customer community. Suppliers are required to coordinate with local or regional land-use authorities as part of their water-use projections to help improve the representation of future land-use plans in the UWMP projections.

Focus

A Supplier's water-use analysis should focus on precisely calculating water use for different water-use sectors and under varying conditions. Water uses vary depending upon geographical context, type of housing or

commercial/industrial development, and hydrological conditions in any given year. After sorting and scrubbing the data, examining the Supplier's actual data over several time periods and from various sources and then drawing conclusions from that valuable data will allow a Supplier to provide an accurate picture of the water use in its service area. Moreover, future use projections will be rooted in historical statistics, lending credence to the forecast.

For instance, rather than translating expected population increases into a linear increase in all water-use sectors, the Supplier's analysis could consider historic rates of new service connections within each sector so as to understand the rate of anticipated growth, assess trends in new housing products being offered within the broader region (e.g., large homes on small lots, which have lower landscape water use), and understand how new residents will affect the need for non-residential services and commensurate water use (e.g., new retail or new job center). An examination of each water-use sector may also reveal that some sectors will decrease with urban growth (e.g., agriculture customers using potable supplies may be displaced by new residential customer use).

Methodical data analysis by each Supplier allows planning agencies to better rely on reported data and projections. Furthermore, Retail Suppliers and Wholesale Suppliers rely upon each other for important decisions that hinge on accurate use analyses. Wholesale Suppliers are ultimately reliant on Retail Suppliers for customer water-use information. The Wholesale Supplier's customers are the Retail Suppliers, while the Retail Suppliers serve the end-use customers that occupy and operate different residential and non-residential land uses.

Essentials

This chapter focuses on detailing past, current, and projected water use for Suppliers. Though much of the focus is for Retail Suppliers, the guidance is also relevant for most Wholesale Suppliers to assist in meeting the UWMP Act's legal requirements.

If not already included in an overall summary, provide a Lay Description of the Supplier's water use.

Enhancements

An enhanced retail-customer water use analysis would include analyzing subdivisions within each general water use sector to understand unique conditions and trends (e.g., ages and lot sizes of residential housing or large-lot versus strip mall commercial establishments). This can be accomplished by evaluating specific subsets of customer meter data to understand

variances between similar land-use types, variations in use across the months, and trends in total use. This may be particularly important in consideration of prolonged drought. Furthermore, a Supplier can compare water-use estimates with neighboring Suppliers with similar conditions, to evaluate if their use is similar, or if additional factors could be considered (e.g., rates or demographics).

Many Suppliers have multiple State-licensed PWSs that have unique distribution systems and customer classes spread throughout the Suppliers' defined service area. These different distribution systems may have limited access to only certain Supplier-managed water supplies that may not physically be able to move between distribution systems. In these cases, it may be useful to characterize each PWS separately to assure the water service reliability analysis does not inadvertently comingle supplies that are only accessible to a particular PWS (refer to Chapter 7).

Appendix K, Estimating Future Water Savings from Adopted Codes, Standards, Ordinances, or Transportation and Land-Use Plans. This appendix provides an optional approach for projecting future water uses for both existing customers and future customers based on recent trends, new codes and ordinances, land-use changes, and other water-use impacting factors as required by Water Code Section 10631(d)(4)(A). Appendix K helps Suppliers to calculate anticipated conservation savings for its existing customers, as well as predict uses for new customers.

Appendix K also provides a method that can be used to reflect the outcome of required coordination with local or regional land-use authorities by allowing unique land-use classifications to be separately considered, as appropriate, to reflect varied water-use factors (e.g., residential lot density or anticipated occupancy). The methodology described in Appendix K can be summarized into the more general water-use sectors typically used for reporting to the State Water Board's Division of Drinking Water in Electronic Annual Reporting (eAR) forms.

Additionally, Appendix K provides guidance on accounting of projected water use for lower-income households with a consideration of RHNA.

Appendix L, Optional Planning Tool. Suppliers can use the Optional Planning Tool to assess water use and supplies in time increments smaller than one year. This could inform Suppliers of potential shortages and surpluses at particular points within the year that would not be seen if an only an annual analysis is conducted. The Optional Planning Tool also compares the supply and use in the specified time increments to be populated into Tables 7-5 R or 7-5 W, the DRA.

The Optional Planning Tool consists of three parts: Water Use, Water Supplies, and DRA. Suppliers are encouraged to use the tool's Water-Use Worksheet when considering water uses in the UWMP.

Updates Since 2020

There are no new statutory requirements for UWMPs; however, the 2025 Guidebook has been updated as follows:

- Submittal Tables 4-1 (2025 Use) and 4-2 (Projected Use) will now include the volume of recycled water used in the service area, although it may be aggregated with other water sources and optionally identified as "Potable" or "Non-Potable." Identifying and quantifying each specific recycled water use in the service area is required by other sections of the Water Code as described in Chapter 6 and reported in Submittal Table 6-4.
- Progress Toward Meeting the Water Loss Performance Standard guidance added. Pursuant to Water Code Section 10631(d)(3)(C), Retail Suppliers are required to provide data demonstrating whether the Retail Supplier met its State Water Board Water Loss Performance Standard in 23 CCR Section 980 et seq. for each applicable PWS. Submittal Table 4-6 R allows for reporting on progress toward meeting the Water Loss Performance Standard. Refer to Section 4.3.2.

Provide Optional Submittal Tables 4-1 W and 4-2 W for Wholesale Suppliers.

Chapter Sections

This chapter is divided into the following sections:

- 4.1, Non-Potable Versus Potable Water Use
- 4.2, Past, Current, and Projected Water Use by Sector
- 4.3, Distribution System Water Loss
- 4.4, Submittal Tables

4.1 Non-Potable Versus Potable Water Use

The Water Code requires a description and quantification of water uses (potable and non-potable) in the service area. Submittal Tables 4-1 R, 4-2 R and Optional Submittal Tables 4-1 W and 4-2 W provide for the reporting of this information. In these tables, Suppliers may report an aggregate of potable and non-potable uses or, optionally, these can be reported separately.

Information from this chapter and Chapter 6 will be used to prepare the reliability assessments in Chapter 7. In many cases, potable and non-potable (including recycled water) water supplies cannot be used interchangeably. Therefore, to ensure that reliability assessments do not comingle water supplies that cannot be practically or legally comingled, this Guidebook suggests (but does not require) characterizing water-use data into two distinct categories: one for potable water use and the other for non-potable water use via the optional drop-down list in Submittal Tables 4-1 R, 4-1 W, 4-2 R and 4-2 W.

Potable water uses are served by the Supplier's potable water sources (sources that comply with Title 22 Drinking Water Standards). Non-potable water uses are served by the Supplier's non-potable water sources such as tertiary treated recycled water, remediated groundwater, or even untreated surface or groundwater supplies that do not meet potable water standards (i.e., may have contaminants not meeting maximum contaminant levels or Notification/Response Levels). In most circumstances, where a Supplier can separately account for water uses served by non-potable supplies, the non-potable water use is served from a water distribution system that is separate from the Supplier's potable water distribution system. In these instances, Suppliers are encouraged to separately represent non-potable water uses to facilitate analysis.

Suppliers electing to separately report potable and non-potable water use and supply should consider:

- Uses are Not Static.** Suppliers that choose to report potable and non-potable uses separately should be mindful that water use may shift from one to the other. If, for instance, potable water was historically used to meet a landscape irrigation use, then was converted to a non-potable system (e.g., recycled water), the current and projected water use may need to shift to the non-potable water service reliability analysis (refer to Chapter 7). Suppliers may also report or make note of potential non-potable water uses to understand where potable water savings may be achieved. However, while a significant amount of use in a Supplier's service area may conceptually qualify as a potential non-potable use, it may be practically difficult to deliver a non-potable supply to meet the identified potential non-potable use (e.g., it may be cost prohibitive to serve all urban park irrigation systems with recycled water). Suppliers are encouraged to use caution when categorizing whether a certain projected water use can theoretically be met by a non-potable supply, especially in cases where that supply is a planned future water supply. Refer to Chapter 6 for guidance on describing planned future water supplies.

- **Indirect Potable Reuse (IPR).**

Classification of IPR. Non-potable recycled water placed into an environmental buffer (e.g., groundwater aquifers and surface water reservoirs) and later extracted and treated by the Supplier for potable water uses is considered IPR.

Sending IPR to short-term storage. Suppliers may place IPR water into ground or surface storage and retrieve that water use in the same year. This may cause a double counting error if reporting both the use for groundwater recharge/surface reservoir storage and the resultant end use (e.g., commercial, residential). Please refer to the special instructions in Sections 4.2.1.8 and 4.2.2.5 that provide guidance to avoid double counting when sending IPR water to ground or surface storage.

Refer to Appendix M for more discussion on IPR.

- **DPR.**

Classification of DPR. Recycled water treated to potable water quality standards, in accordance with 22 CCR Sections 64669 et seq. and directly delivered to customers through the Supplier's distribution system. DPR is recycled water that does not comingle with a source water reservoir from which water is then extracted and subsequently treated.

- **Recycled Water Reporting.** Recycled water delivered in the service area is reported in two places.

In Submittal Tables 4-1 R, 4-1 W, 4-2 R and 4-2 W, Suppliers will report all current and projected water deliveries, including the aggregated delivery of recycled water, which may optionally be identified as such.

In Submittal Table 6-4 R or 6-4 W, Suppliers will identify and quantify each specific current and projected recycled water use within the service area. Reporting for Submittal Tables 6-4 R and 6-4 W is addressed in Chapter 6.

- **Consistency.** Should a Supplier choose to characterize potable and non-potable uses, they should be consistent when identifying the supplies available to meet potable and non-potable uses when describing past, current, and projected water uses and supplies.

For instance, if a Supplier anticipates having 5,000 acre-feet of recycled water available as a supply, spread equally from month to month, it should recognize that this non-potable supply would be limited to meeting only non-potable uses. If projected non-potable uses for the recycled water are less than 5,000 acre-feet (e.g., projected winter irrigation use may be zero), the recycled water should not be commingled with potable supplies for purposes of assessing water service reliability. Because the non-potable use may be minimal in certain months compared to the non-potable supply, the extra non-potable supply should not inadvertently be

identified as a supply that is available to meet potable use. Potential comingling can result in an incorrect WSRA during reliability assessments in Chapter 7.

- **Appendix L.** Suppliers are encouraged to refer to Appendix L for the Optional Planning Tool. The tool is used to assess water availability in time increments less than one year. Suppliers that choose to separate potable from non-potable uses and supplies in their analysis may duplicate the tool, one version for potable and one version for non-potable.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-1 R
- Wholesale Suppliers: Optional Submittal Table 4-1 W

4.2 Past, Current, and Projected Water Use by Sector

Water Code Section 10635.

(a) Every urban water Supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

Water Code Section 10631(d)

(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following...

(2). The water use projections shall be in the same five-year increments described in subdivision (a).

(4)(A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following: (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections. (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

Retail Only

Retail Suppliers must quantify past, current, and projected water uses, to the extent records are available. Additionally, Retail Suppliers are required to provide these quantities for all their water-use sectors and, at a minimum, each of the 10 water-use sectors identified in Water Code Section 10631(d) and described in Section 4.2.1. These quantifications will be reported in Submittal Tables 4-1 R and 4-2 R.

- Water use reporting in these tables may aggregate potable and non-potable deliveries or may separate reporting of these two water types.
- Recycled water uses will either be potable or non-potable depending on the level of treatment and identifying this water as recycled is optional. Specific reporting of recycled water uses is addressed in Chapter 6.

Retail Suppliers must include actual water use for 2025 and projected water use in five-year increments for a period of at least 20 years, and ideally to the year 2050 based on information that is reasonably available at the time the 2025 UWMP is prepared. Accurate and thorough water use information in this chapter will help the WSRA performed pursuant to Water Code Section 10635 (refer to Chapter 7).

Retail Suppliers may reference any documents used to show historical water use, calculate current water use, and estimate projected water use. The Optional Planning Tool Use Worksheet has been provided to facilitate Retail Suppliers' projections of future uses (refer to Appendix L).

Retail Suppliers that are also Wholesale Suppliers must complete and submit both Retail and Wholesale Submittal Tables and report as both in their UWMP.

Wholesale Only

Water Code Section 10631(d) does not require Wholesale Suppliers to report quantities of past, current, or projected water uses by sector in their UWMP; thus, Submittal Tables 4-1 W and 4-2 W are optional tables.

However, Water Code Section 10635 does require Wholesale Suppliers to report overall projected uses as part of their water service reliability analysis. This requirement is addressed in Chapter 7. Additionally, Wholesale Suppliers are required by Water Code Section 10633 to report potential and projected recycled water use. This requirement is addressed in Chapter 6.

Wholesale Suppliers that are also Retail Suppliers must complete and submit both Retail and Wholesale Submittal Tables and report as both in their UWMP.

Recommended

Retail Suppliers are encouraged to use as many water-use sectors as are applicable to provide a better understanding of its water use. Sections 4.2.1 and 4.2.2 provide a description of water sectors.

Retail Suppliers are encouraged to include a narrative description of how water uses are calculated and how water use projections are estimated.

Relevant Submittal Tables in Section 4.4:

- Retail Suppliers: Submittal Table 4-1 R
- Wholesale Suppliers: Optional Submittal Table 4-1 W

4.2.1 Water-Use Sectors Listed in Water Code

Water Code Section 10631(d)

- (1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following:
 - (A) Single-family residential.
 - (B) Multifamily.
 - (C) Commercial.
 - (D) Industrial.

- (E) Institutional and governmental.
- (F) Landscape.
- (G) Sales to other agencies.
- (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
- (I) Agricultural.
- (J) Distribution system water loss.

Water Code Section 10633 also requires additional, specific reporting on recycled water use in the service area. This reporting is not discussed in this chapter but is detailed in Chapter 6.

Retail Only

Retail Suppliers must report on water use by sector. At a minimum, to the extent records are available they must report on the sectors identified in Water Code Section 10631(d)(1). For purposes of the 2025 UWMPs, the following definitions are suggested for the required water sectors listed in the Water Code.

Additional sectors or subdivisions of these sectors can be included in the Submittal Tables to allow Retail Suppliers to reflect unique conditions that may apply to certain sectors or subsectors not listed here. For example, a Retail Supplier may not have separate billing categories for commercial and institutional use. In this case, the Retail Supplier may use the “Other” category and describe that it is the combined commercial plus institutional use.

Often water use can be reported using the same water-use sectors reported by the Retail Supplier in reporting to the State Water Board’s Division of Drinking Water’s eAR.

Wholesale Only

Wholesale Suppliers are not required to report water uses by sector.

Recommended

If a sector is not applicable or no records are available, DWR recommends that the Retail Supplier address this situation in their text description. This ensures that plan readers and data users are aware of why the Retail Supplier did not report values for these sectors.

4.2.1.1 Single-Family Residential

A single-family dwelling unit. A lot with a free-standing building containing one dwelling unit that may include a detached secondary dwelling. This is a retail use.

4.2.1.2 Multi-Family

Multiple dwelling units contained within one building or several buildings within one complex. This is a retail use.

4.2.1.3 Commercial

A water user that provides or distributes a product or service. This is a retail use. (Water Code Section 10608.12[e]).

4.2.1.4 Industrial

A water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System (NAICS) code Sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development. Water Code Section 10608.12(i). Visit the [NAICS website](#). This is a retail use.

For gross water use calculations, some retail suppliers may consider excluding industrial water use (23 CCR Sections 596.1 through 596.5). For more information on this please see Appendix J.

4.2.1.5 Institutional (and Governmental)

A water user dedicated to public service. This type of user includes, among other users, higher-education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions. Water Code Section 10608.12(j). This is a retail use.

4.2.1.6 Landscape

Water connections that supply water solely for landscape irrigation. Such landscapes may be associated with single-family residential, multi-family residential, commercial, industrial, or institutional/governmental sites, but are considered a separate water-use sector if the connection is solely for landscape irrigation. This is a retail use.

4.2.1.7 Sales to Other Agencies (Including Exchanges and Transfers)

These are water sales made to another agency (referred to here as “Supplier”). Projected sales may be based on projected use provided by the receiving water Supplier. There is inherent uncertainty in future projections, therefore, any projected sales reported in the UWMP are for planning purposes only and are not considered a commitment on the part of the seller. This is a wholesale use.

Water Suppliers will determine whether their uses are considered sales, transfers, or exchanges; reporting in the UWMPs will reflect the Suppliers’ determination of these water uses.

Some Retail Suppliers may also supply wholesale uses. If a Retail Supplier’s wholesale use does not exceed 3,000 acre-feet per year, the Retail Supplier is not considered a Wholesale Supplier and they are not required to complete the Submittal Tables for a Wholesale Supplier. This small volume of wholesale use would be reported in the Supplier’s retail Submittal Tables 4-1 R and 4-2 R as Sales/Transfers/Exchanges to other agencies. If the wholesale volume is over 3000 acre-feet per year, the Supplier is considered both a Wholesale Supplier and a Retail Supplier and is required to complete the Submittal Tables for both Wholesale Suppliers and Retail Suppliers.

Note that DWR has modified the name of this sector to include “Exchanges/Transfers” as these may be considered functionally equivalent to “sales to other agencies.” Suppliers will determine whether their uses are considered sales, transfers, or exchanges; reporting in the UWMPs will reflect the Suppliers’ determination of these water uses. Refer to Sections 4.2.2.1 and 4.2.2.2.

4.2.1.8 Conjunctive Use, Groundwater Recharge, Saline Intrusion Barriers

Conjunctive Use. A management strategy where surface water is managed in conjunction with an underground aquifer. For purposes of the UWMP, conjunctive use is seen as a management strategy rather than as a water use. Conjunctive use is not listed in the drop-down menu. DWR recommends that any conjunctive use reporting should be done via narrative.

Groundwater Recharge. The managed and intentional replenishment of natural groundwater supplies using man-made conveyances such as infiltration basins or injection wells. Water used for groundwater banking or storage may also be reported using this sector. This may be either a

wholesale or retail use. If the injection is for saline water intrusion, report as saline water intrusion barrier.

Important Note on Groundwater Recharge Reporting

Short-Term Storage: If all, or a portion of, the water placed into groundwater is subsequently pumped out of the basin in the same year, this is considered “pass-through” storage and reporting this as a groundwater recharge use may lead to a double counting of water uses because of the subsequent retrieval and delivery of that same water in the same year to customers. DWR does not recommend reporting short term storage as a supply sent to storage in Submittal Tables 4-1 R, 4-1 W, 4-2 R, and 4-2 W. DWR recommends reporting the end use of this water, such as “Single Family” or “Commercial.”

Long-Term Storage: Water used for groundwater recharge, but not retrieved in the same year, could be considered actual groundwater recharge and reported as such in 2025 UWMPs. DWR recommends reporting water sent to long term storage as a use in Submittal Tables 4-1 R, 4-1 W, 4-2 R, and 4-2 W.

Saline Water Intrusion Barriers. Injection of water into a freshwater aquifer to prevent the intrusion of saltwater. This may be either a wholesale or retail use.

4.2.1.9 Agricultural

Water used for commercial agricultural practices including irrigation and other agronomic uses. Note that water used for processing agricultural products (e.g., food, beverage, or textile manufacturing) may be considered industrial process water, rather than an agricultural water use. Industrial process water may be excluded from gross water use for SB X7-7 calculations (refer to Chapter 5 and Appendices P and J). To be classified as industrial process water, the water use must fall under Sector 31, 32, or 33 of NAICS code (search the 2017 [NAICS Manual](#) for additional information). This may be either a wholesale or retail use.

4.2.1.10 Distribution System Losses

Reporting distribution system losses is required by the Water Code and should be consistent with the reported water loss reported pursuant to 23 CCR Section 638.1 et seq. This is a retail use. There are additional reporting requirements for water loss reporting, including annual water loss reporting and the water loss standard. Refer to Section 4.3 for guidance on this additional reporting.

4.2.2 Optional Water-Use Sectors in Addition to Those Listed in Water Code

The water-use sectors described below are not specifically listed in, nor required by the Water Code. These sectors may help some Suppliers, especially a Wholesale Supplier, account for the entirety of their water uses. Water use in these sectors can be reported as appropriate and as records are available.

4.2.2.1 Exchanges (Optional)

DWR has included “Exchanges” into the “Use Type” drop-down list as “Sales/Transfers/Exchanges.” Suppliers will make a determination as to whether water sent to another Supplier is a sale, transfer, or exchange. This is a wholesale use.

Water exchanges are typically water delivered by one water user to another water user, with the receiving water user returning the water at a specified time, or when the conditions of the parties’ agreement are met. Water exchanges can be strictly a return of water on a basis agreed upon by the participants or can include payment and the return of water. The water returned may or may not be an *even* exchange. Water can be returned on a one-for-one basis or by another arrangement (e.g., for each acre-foot of water received, two are returned).

4.2.2.2 Transfers (Optional)

DWR has included “Transfers” in the “Use Type” drop-down list as “Sales/Transfers/Exchanges.” Suppliers will make a determination as to whether water sent to another Supplier is a sale, transfer, or exchange. This is a wholesale use.

Water Code defines a water transfer as a temporary or long-term change in the point of diversion, place of use, or purpose of use due to a transfer, sale, lease, or exchange of water or water rights. Transfers can be between neighboring Suppliers or across the state, provided there is a means to convey or store the water. A water transfer can be a temporary or permanent sale of water or a water right by the water right holder, a lease of the right to use water from the water right holder, or a sale or lease of a contractual right to water supply. Water transfers can also take the form of long-term contracts for the purpose of improving long-term supply reliability.

Some Retail Suppliers transfer water to other Suppliers. This is considered a wholesale use.

4.2.2.3 Wetlands or Wildlife Habitat (Optional)

Water used for a managed environmental use to improve an environmental condition. This may be a wholesale or retail use.

4.2.2.4 Other (Optional)

Any water use that is not adequately described by the water sectors defined above or water uses that are not separately classified. Retail Suppliers are required to report water use by sector to the extent that records are available. Retail Suppliers that do not have a billing and tracking system that uses the Water Code identified sector classifications may also use the “Other” category and describe the use in the description field and text.

Some examples include:

- Combined commercial, industrial, and institutional into one sector called CII. “CII water use” is defined in Water Code Section 10608.12(d). In this case, the Supplier may use the “Other” category and describe that it is the combined commercial plus institutional use.
- Combined single-family and multi-family sectors defined as “residential.” In this case, the Supplier may use the “Other” category and describe that it is the combined single-family and multi-family sectors.
- Unbilled, authorized consumption, such as water used for firefighting, line flushing, or other unbilled uses. In this case, the Supplier may use the “Other” category and describe that it is the unbilled uses.

4.2.2.5 Surface Water Storage (Optional)

The planned placement of water into a surface water reservoir. Water Code does not require that Suppliers report water placed into surface storage, therefore, Suppliers are not required to report surface water storage in their UWMP.

Note on Surface Water Storage Reporting

Reporting water sent to surface storage is **not** required by the Water Code.

Short-term Storage: If all, or a portion of, the water placed into surface storage is subsequently pumped out of the basin in the same year, this is considered “pass-through” storage and reporting this as a surface storage use may lead to a double counting of water uses because of the subsequent retrieval and delivery of that same water in the same year to customers. DWR does not recommend reporting short term storage as a supply sent to storage. DWR recommends reporting the end use of this water, such as “Single Family” or “Commercial.”

Long-Term Storage: Water used for surface water storage, but not retrieved in the same year, could be considered actual surface water storage and optionally reported in 2025 UWMPs as surface storage.

4.2.3 Past Water Use

Water Code Section 10631(d)

- (1) For an urban retail water supplier, quantify, to the extent records are available, past... water use... based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors...

All Suppliers

For the Water Service Reliability and Drought Risk Assessments, Suppliers will need to characterize the water supply reliability under various hydrologic conditions. These assessments will require examination of past water uses that may be useful to report in this section. Please refer to Chapter 7 for more detailed guidance on the Water Service Reliability and Drought Risk Assessments.

Retail Only

Water Code Section 10631(d)(1) requires Retail Suppliers to quantify past water use by sector, to the extent records are available. Water Code does not specify how far back in the past water use should be reported, therefore there is no UWMP Submittal Table for past water use by sector. Retail Suppliers will need to include this information in the UWMP narrative in accordance with a format and timeframe that best suits their planning needs. Historic trends analysis, tables or graphs of past use, incorporating previous

UWMP Submittal Tables by reference, and other displays may be useful for providing quantification of past water use by sector.

Past water use is valuable to Retail Suppliers during development of projected uses as it helps Retail Suppliers understand water-use trends; effects of temporary use restrictions imposed during the most recent prolonged drought and recovery from such temporary restrictions; effects of long-term DMMs; and other pertinent water-use factors. Useful sources of information for documenting past uses in 2025 UWMPs include reports filed with the State (e.g., eAR or Water Audits) and previous UWMP tables.

Wholesale Only

Wholesale Suppliers are not required to quantify past water use. However, Wholesale Suppliers may choose to include a discussion in their narrative because past water use will be valuable to Wholesale Suppliers during development of normal year, dry year, multiple dry year, and projected uses for the WSRA (Chapter 7 of this Guidebook) and it helps Wholesale Suppliers understand water-use trends, effects of temporary use restrictions imposed during the most recent prolonged drought, recovery from such temporary restrictions, effects of long-term DMMs, and other pertinent water-use factors.

4.2.4 Current Water Use

Water Code Section 10631(d)

- (1) For an urban retail water supplier, quantify, to the extent records are available ...current water use... based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors...

Retail Only

Retail Suppliers must report current water use by water sector, as identified in Sections 4.2.1 and 4.2.2. Submittal Table 4-1 R is used by retail water Suppliers to report the actual water use by sector for 2025 (fiscal year or calendar year).

Current water use may be determined by analyzing information generally managed by the Retail Supplier (e.g., meter data, billing records, and others) or any monthly reports submitted to the State Water Board.

Submittal Tables 4-1 R (2025 Use) and 4-2 R (Projected Use) will now include the volume of recycled water used in the service area, though it may be aggregated with other water sources and optionally identified “Potable” or

“Non-Potable.” Identifying and quantifying each specific recycled water use in the service area is required by other sections of Water Code as described in Chapter 6 and reported in Submittal Table 6-4 R.

Wholesale Only

Water Code does not require that Wholesale Suppliers report current water use by sector, but they **may** do so using Optional Submittal Table 4-1 W.

Note that Wholesale Suppliers are required to report current (and projected) recycled water use pursuant to Water Code Section 10633. This use is reported in Submittal Table 6-3 W, which is used exclusively for reporting recycled water use in the service area. (Refer to Chapter 6 of this Guidebook).

Wholesale Suppliers may also, at their discretion, choose to report an aggregation of all customer-reported water uses by sector. This is not required by Water Code and no Submittal Table is provided for compiled service area use by retail sector.

Recommended

Retail Suppliers are encouraged to use the Planning Tool—especially Part 1 of the Use Worksheet: Normal/Base Year Total Water Use in Appendix L. Information entered into the Planning Tool Use Worksheet can facilitate completing DWR’s UWMP Submittal Tables. More importantly, the Planning Tool Use Worksheet can facilitate the Supplier’s analysis of projected water use by water-use sector, because it is a consolidated location to record water use in a manner that helps visualize relationships between the past and future projected uses.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-1 R
- Wholesale Suppliers: Optional Submittal Table 4-1 W

4.2.5 Projected Water Use

4.2.5.1 General Guidance on Projections

Water Code Section 10631(d)

- (1) For an urban retail water supplier, quantify, to the extent records are available, ... projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors...

Water Code Section 10633

The plan shall provide, to the extent available, information on recycled water...and shall include all of the following:...

- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision...

Water Code Section 10635 (a).

Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

All Suppliers

In accordance with Water Code Section 10635(a), all Suppliers will need to report their projected water use, in five-year increments through 2040. Water use projections are required in three places: in this chapter, in Chapter 6, and in Chapter 7. General guidance provided for estimating projections applies to all of these projections.

Projected water use can be determined by examining past and current water-use trends, along with consideration of land-use planning data, climate change (refer to Section 4.2.5.5), expected population changes, and other factors relevant to sector-specific water use. As described in Chapter 3, Suppliers "...shall coordinate with local or regional land-use authorities to determine the most appropriate land-use information..." (Water Code Section 10631[a]). Land-use information can be a primary basis for organizing current water-use sectors and projecting future water use for each sector. Coordination with the local and regional land-use authorities may help identify expected rates of development for the various sectors that can be used to inform projected water uses.

Population projections, identified in Submittal Tables 3-1 R and 3-1 W, can inform water-use projections. When using population trends to estimate

future water use, it may help to also assess trends in new housing products being offered within the region (e.g., large homes on small lots, which have lower landscape water use), how new development plumbing codes might affect water use, and how new residents will affect the need for non-residential services with their commensurate water uses (e.g., new retail or new job center).

Retail Only

Water Code Section 10631(h).

An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available...

If a Retail Supplier receives water from a Wholesale Supplier, the Retail Supplier must provide their projected use of that supply to the Wholesale Supplier. Suppliers will report which wholesale suppliers were informed of their projected use using Submittal Table 2-4 R.

Wholesale Only

No general guidance applicable to Wholesale Suppliers only.

Recommended

Appendix K, Estimating Future Water Savings from Adopted Codes, Standards, Ordinances, or Transportation and Land-Use Plans. Retail Suppliers are encouraged to use Appendix K, which provides a preferred methodology for projecting water use and allows Retail Suppliers to reflect anticipated conservation savings for its existing customers, assess their service area water-use trends, and predict future use for new customers that are subject to newer federal, State, and local water-use related codes, standards, and ordinances. If future codes, ordinances, or standards are known, DWR recommends including those as part of the water savings estimates as well.

Appendix L, Optional Planning Tool. Suppliers are encouraged to use the Planning Tool Use Worksheet to:

- Organize and record current water-use data
- Record projected water use in five-year increments to 2040 (required) or 2045 (optional)
- Develop projected water use for the next five consecutive years (e.g., 2021 through 2025) as the first step in preparing a Supplier's five-year WSRA.

Suppliers are encouraged to reference any documents used to estimate projected use and describe methods used. Suppliers are also encouraged to attach any technical studies or reports developed for future projections.

Separate Potable and Non-Potable Reporting. Suppliers are encouraged to report non-potable water uses separately from the potable water uses to facilitate analysis. This may be useful when analyzing supply reliability because non-potable water cannot be used to serve drinking water uses.

25-year Planning Horizon. Suppliers are encouraged to project through 2045 to bridge the data gap between plan cycle years. If water use is not projected through 2045, there will be no 20-year projections available for land or water resources management planning between 2020 and 2025 UWMP cycles.

4.2.5.2 Water-Use Projections by Sector

Water Code Section 10631(d)

For an urban retail water supplier, quantify, to the extent records are available ...projected water use, based upon information developed pursuant to subdivision (a),

Retail Only

Retail Suppliers are required to report projected water uses by the sectors described in Section 4.2.1 of this Guidebook. Submittal Table 4-2 R is used to report projected water use. In accordance with Water Code Section 10635(a), all Suppliers will need to report their projected water use, in five-year increments through 2045.

Wholesale Only

Water Code does not require Wholesale Suppliers to project water uses by sector. However, Optional Submittal Table 4-2 W is provided for Wholesale Suppliers choosing to report projected water use by beneficial use, sector, or other categories.

Wholesale Suppliers are required to report recycled water use projections in accordance with a separate Water Code requirement, which is addressed in Chapter 6.

Recommended (Wholesale)

Wholesale Suppliers are encouraged to report water uses in Optional Submittal Tables 4-1 W and 4-2 W. This information can be used in the Supplier's reliability assessment (further guidance is in Chapter 7).

Optional Submittal Table 4-2 W, if used by the Wholesale Supplier, will report all water deliveries, which should include the projected delivery of recycled water, which may or may not be aggregated with all water deliveries.

For Wholesale Suppliers that choose to complete Tables 4-1 W and 4-2 W, only report the Wholesale Supplier's direct uses and Sale/Transfer/Exchange to other agencies. Wholesale Suppliers will not report the end uses of the water provided to other agencies. For example, if a Wholesale Supplier sells water to a retailer and the retailer uses that water for their industrial customers, the Wholesale Supplier would only report the sale to the other agency in Submittal Tables 4-1 W and 4-2 W, not the industrial use. The Retail Supplier is responsible for reporting the uses of their water supply to the industrial customer in their own UWMP.

Wholesale Suppliers may, at their discretion, choose to also report an aggregation of water uses by sector. This is not required by Water Code and no Submittal Table is provided for compiled service area use by retail sector.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-2 R
- Wholesale Suppliers: Optional Submittal Table 4-2 W

4.2.5.3 Standards, Codes, Ordinances, and Plans

Water Code Section 10631(d)(4)

- (A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.
- (B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:
 - (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.
 - (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

4.2.5.4 Retail Only

Water savings from codes, standards, ordinances, and land-use or transportation plans, are typically considered “passive savings” or “passive conservation” because through these design features and infrastructure changes, reduced water use is achieved without requiring conscious action by the customers.

Future water projections reported in Submittal Table 4-2 R are to include, where available, estimated passive/future water savings expected to occur pursuant to Water Code Section 10631(d)(4)(A).

These various factors generally decrease water use for new and future customers compared to existing customers. However, some ordinances and standards may also apply to existing customers, such as plumbing code changes that result in lower water use when existing customers replace fixtures and appliances. If available, water-use projections will display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land-use plans identified.

Extent Passive Savings Were Considered. Additionally, Retail Suppliers are required to state the extent to which passive savings are considered in their water-use projections. There is no Submittal Table for this information, but it should be included in the UWMP narrative along with the relevant citations.

Submittal Table 4-3 R is used for reporting whether or not water-use savings from codes, standards, ordinances, or transportation and land-use plans were included in the development of water-use projections and to identify where in the narrative the associated citations are located.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 4-3 R; one for each participating Supplier.

Wholesale Only

There are no Wholesale Only requirements or considerations.

Recommended

If a Retail Supplier indicates in Submittal Table 4-3 R that passive savings were included in their projections, they are encouraged to complete Optional Submittal Table 4-4 R. This Submittal Table provides for quantification of the passive savings over the 20-year planning horizon.

Retail Suppliers are also encouraged to include their methods and analysis for estimating passive conservation and note which mechanism(s) was(were) considered to result in the identified passive savings.

Retail Suppliers are encouraged to also provide their Wholesale Supplier with information regarding the extent to which water-use projections consider savings from codes, standards, ordinances, or transportation and land-use plans along with applicable citations.

Relevant Submittal Tables in Section 4.4:

- Retail Suppliers: Submittal Table 4-3 R, Optional Submittal Table 4-4
- Wholesale Suppliers: None

4.2.5.5 Lower-Income Households

Water Code Section 10631.1.

- (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.
- (b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

California Health and Safety Code Section 50079.5 (a)

“Lower income households” means persons and families whose income does not exceed the qualifying limits for lower income families... In the event the federal standards are discontinued, the department shall, by regulation, establish income limits for lower income households for all geographic areas of the state at 80 percent of area median income, adjusted for family size and revised annually.

Retail Only

Retail Suppliers are required to include the projected water use for lower-income households in their projections for water use in their 2025 UWMPs. A lower-income household has an income below 80% of area median income, adjusted for family size.

Inclusion of lower-income household water use in water-use projections will assist a city in addressing the requirement of Government Code 65589.7, which grants priority for providing water service to lower-income households.

The Water Code does not specify a method for assessing this projected water use. The following describes one potential method:

1. Determine the number of lower-income single-family and multi-family housing units projected for the service area, as identified in the housing elements of the applicable land-use agency's General Plans, RHNA, or other planning documents;
2. Estimate the projected water use for those lower-income housing units, and then
3. Verify that the expected water use for low-income housing, as estimated above, was included in the projected water demands.

Submittal Table 4-3 R: Inclusion in Water-Use Projections, allows Suppliers to record their consistency with this requirement.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 4-4 R; one for each participating Supplier.

Wholesale Only

The Water Code does not require Wholesale Suppliers to include projections of lower-income household water use.

Recommended

Retail Suppliers are encouraged to report lower-income residential projected water use separately from the remaining residential water use.

Retail Suppliers are encouraged to review Appendix K for a closer look at lower-income housing and RHNA.

If the Retail Supplier has included their method for accounting Lower-Income Residential Demands, they may provide the page number where this accounting can be found in the UWMP to expedite review.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-3 R
- Wholesale Suppliers: None

4.2.5.6 Climate Change Considerations

Water Code Section 10630.

It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied, while accounting for impacts from climate change.

Water Code Section 10635(b)

Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment ...(and) shall include each of the following ...

- (4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

All Suppliers

All Suppliers must include consideration of climate change in their water use and supply projections for their long-term water service reliability assessments and DRA.

Including climate change analysis into a water-use analysis can assist a Supplier in understanding the potential effects on long-term reliability, which in turn, allows Suppliers to proactively begin planning appropriate responses. For example, if current landscape types are maintained into the future, hotter and drier weather may lead to an increased use in landscape irrigation—especially during spring and fall months—increasing the pressure on water supplies that may have availability restrictions during these periods.

Recommended

Suppliers are encouraged to refer to Appendix I for guidance on incorporating climate change into water-use projections.

DWR recommends including a section in this chapter describing what type and degree of climate change impacts were considered in the water-use projections, and on what scientific or other information those projections are based. Suppliers that have participated in or conducted climate change vulnerability or risk assessments are encouraged to refer to them and to attach them with the submission of their UWMP. Additionally, GSPs may be a resource Suppliers can use to help identify potential effects of climate change to groundwater supplies.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-2 R
- Wholesale Suppliers: Optional Submittal Table 4-2 W

4.3 Distribution System Water Loss

Water Code Section 10631(d)(3)

- (A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.
- (B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.
- (C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34.

4.3.1 Previous Five Years Distribution System Losses

Retail Only

Retail Suppliers must report their distribution system water loss for each of the five years preceding the plan update (Water Code Section 10631[d][3]) in accordance with the rules adopted pursuant to Water Code Section 10608.34. To streamline reporting, Suppliers can simply provide a link to their water loss reports submitted to DWR's Water Loss Audit Program. Submittal Table 4-5 R is used to report the water loss audits' submittal status. Including the link to the Supplier's submitted reports in the notes section of Submittal Table 4-5 R and including the table in the UWMP satisfies the requirement.

Distribution system water losses are the physical potable water losses from the pressurized water distribution system and the Supplier's storage facilities up to the point of delivery to the customer's system (e.g., up to the residential water meter) calculated using the American Water Works Association (AWWA) Method in accordance with the annual water loss audit regulation (23 CCR Section 638.1 et seq.). This is the sum of AWWA Method "real losses" and "apparent losses." Those Retail Suppliers that have multiple

PWSs must annually submit separate annual water loss audit reports for each of their PWSs (23 CCR Section 638.5). For further information on annual water loss audit reporting, refer to [DWR's Urban Water Loss webpage](#).

Those Retail Suppliers that also account for non-potable water losses in the system may choose to include these in their reporting.

This reporting requirement is in addition to reporting projected water losses, in five-year increments for at least 20 years, as one of the water-use sectors pursuant to Water Code Section 10631(d)(1).

Wholesale Only

Wholesale Suppliers are not required to perform water loss audits and are not subject to the UWMP distribution system water loss reporting. However, DWR recommends reporting estimated losses in characterizing water years for water service reliability planning and projected water needs. Optional Submittal Tables 4-1 W and 4-2 W provide the option to report distribution system water losses. Optional Submittal Table 4-5 W is also provided for Wholesale Suppliers who chose to report water losses.

Wholesale Suppliers may report relevant narrative from their description of implementation of the Asset Management DMM reported in Chapter 9, as it applies to distribution system water loss.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-5 R
- Wholesale Suppliers: Optional Submittal Table 4-5 W

4.3.2 Progress Toward Meeting the Water Loss Performance Standard

Pursuant to Water Code Section 10631(d)(3)(C), Retail Suppliers are required to provide data demonstrating whether the Retail Supplier met its State Water Board Water Loss Performance Standard in 23 CCR Section 980 et seq. for each applicable PWS. Submittal Table 4-6 R allows for reporting on progress toward meeting the Water Loss Performance Standard.

All guidance in this section is for general informational purposes. Interpretation of the Water Loss Control regulation is under the authority of the State Water Board.

The Water Loss Performance Standard does not have to be met until 2028. However, Water Code Section 10631(d)(3)(C) still requires that Retail Suppliers include data in their 2025 UWMPs to show whether they met it.

- Retail Suppliers may have met their Real Water Loss Performance Standard if their 2025 annual water loss audit shows actual real water loss at or below the standard (23 CCR Section 981[b]).
- Retail Suppliers may still meet the Real Water Loss Performance Standard if, by January 1, 2028, their 2026 or 2027 annual water loss audit shows actual real water loss at or below the standard (23 CCR Section 981[a] and [b]). However, those values will not be available for the 2025 UWMP.
- Apparent Water Loss Performance Standards are evaluated at the time compliance with the Real Water Loss Performance Standard is assessed (23 CCR Section 981[d]).

Those Retail Suppliers that have multiple PWSs will have a separate Water Loss Performance Standard for each applicable PWS. Refer to the [PWSID-DWRID Crosswalk](#) to identify relevant PWSs.

State Water Board Water Loss Performance Standards are in units of either gallons per service connection per day (GPSCD) or gallons per mile of main per day (GPMD). This standard is composed of two parts: 1) the real water loss standard, 2) the apparent water loss standard. Individual PWS Water Loss Performance can be accessed on the State Water Board's Water Loss Model website, "Individual System Water Loss Standards." State Water Board Water Loss Performance Standards are not applicable to PWSs less than 200 connections. Additionally, the Water Loss Performance Standard may not have been determined for all applicable PWSs if a Retail Supplier has not submitted annual water loss audits for all of their PWSs.

To streamline reporting consistent with Water Code Section 10609(c)(4), if water loss audit reports have already been submitted to DWR, Retail Suppliers may incorporate these reports by reference by completing Submittal Table 4-5 R column "Submitted to DWR Water Loss Audit Program" with a "yes" value as part of their UWMP and providing a reference via link. Inclusion of Submittal Table 4-5 R containing the reference link is a sufficient incorporation of these reports. Alternatively, Retail Suppliers may attach a copy of all relevant annual water loss audit reports for the past five years to their UWMP.

Retail Suppliers are also required to report their DMM to reduce water loss (Water Code Section 10631[e][1][B][v]), which will be described in Chapter 9 but may be referenced in this chapter.

Relevant Submittal Tables in Section 4.4

- Retail Suppliers: Submittal Table 4-6 R.
Note: submittal of this table and relevant data are for UWMP Act purposes only and do not constitute compliance or non-compliance with the Water Loss Control Regulation, which is under the authority of the State Water Board.
- Wholesale Suppliers: None.

4.4 Submittal Tables

Submittal Tables relevant to customer water use are introduced in this section and are similar to the tables Suppliers completed for their 2020 UWMPs, with some modifications to reflect streamlining, reporting clarifications, clear identification of optional material, the 2025 timeframe, and to provide additional Supplier flexibility to ensure the tables are functionally useful for the Supplier.

The following tables are the standardized tables for submittal of a Supplier's 2025 UWMP. These are also part of DWR's electronic reporting system for data input and are used by DWR to evaluate regional and statewide water-use information and summarize data for DWR-required legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier's Submittal Tables in a UWMP document, the review will be designated "indeterminate," and all Submittal Table data will be flagged as "unsubstantiated." This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. "Indeterminate" status may affect grant and loan eligibility.

An Excel workbook, "2025 Submittal Tables," is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the "Urban Water Management Plans" section and click the "Resources" button to download the file. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, where tables are different, each will be displayed. Where essential information is the same, only the Retail Supplier Submittal Table will be displayed.

There are no Submittal Tables for reporting past water use by sector.

4.4.1 Submittal Table 4-1: Total Uses for Potable and Non-Potable Water—Actual

Retail Only

Submittal Table 4-1 R is used to report the Retail Supplier's water use by sector for 2025 (fiscal year or calendar year).

Retail Suppliers can use the "Use Type" drop-down list to indicate the water-use sector and optional "Potable or Non-Potable" drop-down list to identify if the water was "Potable" or "Non-potable." Each use type that is offered in the drop-down list is displayed in the rows below. Any can be used multiple times or not at all, depending on the Retail Supplier's needs. Retail Suppliers can also add categories by selecting "Other" from the drop-down list and describing it in the "Additional Description" column, if necessary.

If recycled water is used, that volume of water should be added to the appropriate "Use Type" (and "Potable or Non-Potable" category, if applicable). Refer to Chapter 6 for separate reporting requirements for recycled water supply and use required by Water Code Section 10633.

Submittal Table 4-1: Retail: Total Uses for Potable and Non-Potable Water—Actual

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual Water Code Section 10631(d)(1)			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Potable or Non- Potable (OPTIONAL) Drop down list	Volume
Add additional rows as needed			
Single Family		Potable	
Multi-Family		Non-Potable	
Commercial			
Industrial			
Institutional/Governmental			
Landscape			
Saline water intrusion barrier			
Groundwater recharge			
Agricultural			
Wetlands or wildlife habitat (optional)		Subtotal Potable	0
Sales/Transfers/Exchanges to other Suppliers		Subtotal Non-Potable	0
Distribution System Water Loss		Total	0
Other (optional)			
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES:			

Wholesale Only

Water Code Section 10631 does not require Wholesale Suppliers to report on current water use. However, Optional Submittal Table 4-1 W is provided for those Wholesale Suppliers choosing to report current water use by sector or beneficial use category. A number of sectors and beneficial use categories have been prepopulated in the “Use Type” drop-down list, however, as for Retail Suppliers, Wholesale Suppliers can select an “Other” category for those not listed.

Optional Submittal Table 4-1. Wholesale: Total Uses for Potable and Non-Potable Water—Actual

OPTIONAL Submittal Table 4-1 Wholesale: Total Uses for Potable and Non-Potable Water — Actual Water Code Section 10631(d)(1)			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	Volume
Add additional rows as needed			
Sales to other agencies		Potable	
Transfers to other agencies		Non-Potable	
Exchanges to other agencies			
Groundwater recharge			
Saline water intrusion barrier			
Agricultural			
Wetlands or wildlife habitat (optional)			
Incidental Retail Use			
Distribution System Water Loss			
Other (optional)			
Subtotal Potable			0
Subtotal Non-Potable			0
Total			0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES:			

4.4.2 Submittal Table 4-2: Total Uses of Potable and Non-Potable Water—Projected

Retail Only

Submittal Table 4-2 R is used to report the Retail Supplier’s projected water use by sector for 2025 (fiscal year or calendar year) through at least 2045, and optionally through 2050, in five-year intervals.

Retail Suppliers can use the “Use Type” drop-down list to indicate the water-use sector and optional “Potable or Non-Potable” drop-down list to identify if the water was “Potable” or “Non-potable.” Each use type that is offered in the drop-down list is displayed in the rows below. Any can be used multiple times or not at all, depending on the Retail Supplier’s needs. Retail Suppliers can also add categories by selecting “Other” from the drop-down list and describing it in the “Additional Description” column, if necessary.

If recycled water is used, that volume of water will be included in this table to the appropriate “Use Type.” Optionally, the “Potable or Non-Potable” column may be completed to indicate potable or non-potable and “Additional Description” may state if the water is recycled. Refer to Chapter 6 for separate reporting requirements for recycled water supply and use required by Water Code Section 10633.

Submittal Table 4-2 Retail: Total Uses of Potable and Non-Potable—Projected

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type	Additional Description (as needed)	Projected Water Use (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	2030	2035	2040	2045	2050 opt
Add additional rows as needed.							
Single Family		Potable					
Multi-Family		Non-Potable					
Commercial							
Industrial							
Institutional/Governmental							
Landscape							
Saline water intrusion barrier							
Groundwater recharge							
Agricultural							
Wetlands or wildlife habitat (optional)							
Sales/Transfers/Exchanges to other Suppliers		Subtotal Potable	0	0	0	0	0
Distribution System Water Loss		Subtotal Non-Potable	0	0	0	0	0
Other (optional)		Total	0	0	0	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES:							

Wholesale Only

Wholesale Suppliers report projected recycled water uses by sector in Submittal Table 6-4 (refer to Chapter 6). However, Optional Submittal Table 4-2 W is provided for those Wholesale Suppliers choosing to report projected water uses for potable and non-potable water by sector. A number of sectors and beneficial use categories have been prepopulated in the “Use Type” drop-down list. Suppliers can select an “Other” category for those not listed.

Submittal Table 4-2. Wholesale: Total Uses for Potable and Non-Potable Water—Projected

OPTIONAL Submittal Table 4-2 Wholesale: Total Uses for Potable and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool.	Additional Description (as needed)	Potable or Non-Potable (OPTIONAL) Drop down list	2030	2035	2040	2045	2050 opt
Add additional rows as needed							
Sales to other agencies		Potable					
Transfers to other agencies		Non-Potable					
Exchanges to other agencies							
Groundwater recharge							
Saline water intrusion barrier							
Agricultural							
Wetlands or wildlife habitat (optional)							
Incidental Retail Use		Subtotal Potable	0	0	0	0	0
Distribution System Water Loss		Subtotal Non-Potable	0	0	0	0	0
Other (optional)		Total	0	0	0	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES:							

4.4.3 Submittal Table 4-3: Inclusion in Water-Use Projections

Retail Only

Retail Suppliers are to include any estimated passive savings expected to occur in their water-use projections pursuant to Water Code Section 10631(d)(4)(A) and future water projections needed for lower-income residential water use pursuant to Water Code Section 10631.1. These are reported in Submittal Table 4-3 R and the UWMP narrative.

Retail Suppliers can select “Yes” or “No” in the “Are Future Water Savings Included in Projection?” row to address requirements of Water Code Section 10631(d)(4)(B)(ii) and reference the relevant citations in their narrative on the row below to address requirements of Water Code Section 10631(d)(4)(B)(i).

Retail Suppliers can select “Yes” or “No” in the “Are Lower-Income Residential Demands Included In Projections?” row to address requirements of Water Code Section 10631.1.

RUWMPs will use multiple versions of Submittal Table 4-3 R; one for each participating Supplier.

Submittal Table 4-3 Retail: Inclusion in Water-Use Projections

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? Drop down list (y/n)	
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. <i>Optional</i> Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	
Are Lower Income Residential Demands Included In Projections? Drop down list (y/n)	
<i>Optional</i> If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES:	

Wholesale Only

There is no Submittal Table 4-3 for Wholesale Suppliers.

4.4.4 Optional Submittal Table 4-4: Passive Water Savings Projection

Retail Only

Suppliers may use Optional Submittal Table 4-4 to report their projected passive water-use savings.

Suppliers can use the "Description" column to state the ordinance, plan or other information that will bring about the expected passive savings.

The volume of passive savings can be added for each provided year.

RUWMPs may optionally use multiple versions of Submittal Table 4-4 R; one for each participating Supplier.

Optional Submittal Table 4-4 Retail: Passive Savings Projections

OPTIONAL Submittal Table 4-4 Retail: Passive Water Savings Projections Water Code Section 10631(d)(4)(A)					
Description (Codes, Standards, Ordinances, or Plans)	Passive savings				
	2030	2035	2040	2045	2050 (opt)
Add additional rows as needed					
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.					
NOTES:					

Wholesale Only

There is no Submittal Table 4-4 for Wholesale Suppliers.

4.4.5 Submittal Table 4-5: Water Loss Audit Reporting

Retail Only

Submittal Table 4-5 R is used by Retail Suppliers to indicate that they submitted their Water Loss Audit to DWR's Water Loss Audit Program. Retail Suppliers will incorporate supporting water loss audit report data by reference by selecting "Yes" in column "Submitted to DWR Water Loss Audit Program" and including this table in their UWMP. Suppliers will also provide a link to the WUEdata submittals of their Water Loss Audit Reports in the UWMP document, as either a part of the table (in the "Notes" section) or the narrative. Including the link to the Supplier's submitted reports in the notes section of Submittal Table 4-5 R and including the table in the UWMP satisfies the requirement.

RUWMPs will use multiple versions of Submittal Table 4-5 R; one for each participating Supplier.

Submittal Table 4-5 Retail: Water Loss Audit Reporting

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available.		
	2020	
	2021	
	2022	
	2023	
	2024	
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES:		

Wholesale Only

Wholesale Suppliers do not have to report water losses, however an Optional Submittal Table 4-5 W is provided for those that choose to.

Optional Submittal Table 4-5. Wholesale: Water Loss Audit Reporting

Optional Submittal Table 4-5 Wholesale: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID #	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
	2020	
	2021	
	2022	
	2023	
	2024	
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES:		

4.4.6 Submittal Table 4-6: Progress Toward 2028 Water Loss Standard

Retail Only

Retail Suppliers will complete Submittal Table 4-6 R to report data to show whether the Water Loss Performance Standard has been met for all of their relevant PWSs. Each relevant PWS and their associated standards must be listed in the table, along with relevant information for converting between the performance standard and water loss volumes to determine progress toward meeting the water loss standard.

Submittal of this table and relevant data is for UWMP Act purposes only and does not constitute compliance or non-compliance with the Water Loss Control Regulation which is under the authority of the State Water Board.

Note: Values from the AWWA Water Loss Audit, indicated by the headings labeled “Most Recent AWWA Water Loss Audit,” must use units consistent with those reported in Submittal Table 2-3 (AF, MG, CCF).

The Relevant PWSs are listed on the [PWSID-DWRID Crosswalk](#).

Associated Water Loss Performance Standards are listed in the [Individual System Water Loss Standards](#).

RUWMPs will use multiple versions of Submittal Table 4-6 R; one for each participating Supplier.

Submittal Table 4-6 Retail: Progress Toward 2028 Water Loss Standard

Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard Water Code Section 10631(d)(3)(C)											
Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss				Apparent Water Loss					
		State Water Board Standard	Most Recent AWWA Water Loss Audit			State Water Board Standard	Most Recent AWWA Water Loss Audit				
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop-down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit)	Real Water Loss Per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
			<div> <div>Gallons per Service Connection per Day (GPSCD)</div> <div>Gallons per Mile per Day (GPMd)</div> </div>					<div> <div>Gallons per Service Connection per Day (GPSCD)</div> <div>Gallons per Mile per Day (GPMd)</div> </div>			
Water Board's Calculated Water Loss Standards											
DWR NOTES: Units of measure (AF, CCF, MG) for Water Loss MUST remain consistent with units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in this table's calculations.											
NOTES:											

Wholesale Only

There is no Submittal Table for Wholesale Suppliers as there is no associated Water Loss Performance Standard.

5 SB X7-7 Baselines, 2020 Targets, and 2025 Reporting

The [Water Conservation Act of 2009](#), also known as Senate Bill (SB) X7-7 (Steinberg), mandated a 20% reduction in urban per-capita water use across California by 2020. To achieve this goal, SB X7-7 required each Retail Supplier to establish an urban water-use target, contributing to the State's collective efforts. The Legislature stated that the combined reductions from all Retail Supplier's would fulfill the statewide legislative mandate.

Importance

The goal of the SB X7-7 Baseline, 2020 Targets, and 2025 Reporting chapter in the Supplier's 2025 UWMP is to allow the Retail Supplier to report on their progress toward meeting their urban water-use targets in their UWMP, pursuant to Water Code Section 10608.40.

Focus

This chapter focuses on providing Suppliers with a means to address the UWMP reporting requirement; Suppliers are directed to Appendix P for details on calculations and considerations in determining SB X7-7 targets and compliance values.

Essentials

This chapter of the UWMP Guidebook provides guidance for reporting of the Suppliers progress toward meeting their SB X7-7 targets using information that was submitted in the 2020 UWMP. Suppliers that did not meet their 2020 target in 2020 are provided additional guidance for comparing their 2025 water use to the 2020 target. Additional guidance is also provided for various situations where the Supplier may not have an SB X7-7 target and baseline. Detailed guidance and tables for the Suppliers that did not meet their 2020 Target in 2020 is provided in Appendix P. The guidance in this chapter provides for reporting in a manner consistent with the SB X7-7 legislation.

Enhancements

Include a lay person description as an introduction to the chapters. The calculation of baselines, targets, and compliance with the 2020 target is a very important but highly technical portion of the UWMP. To address the non-technical audience, a Retail Supplier may choose to include a written overview that highlights the importance of these calculations, a reference to DWR's Methodologies, and the Retail Supplier's efforts to meet these

targeted reductions. This written component may help the lay reader assess the technical components that report compliance with SB X7-7.

2025 Updates

There are no new statutory requirements for UWMPs, however the 2025 Guidebook has been updated as follows:

- Submittal Table 5-1 developed to report on progress toward meeting 2020 SB X7-7 target.
- Simplified guidance is provided to address the reporting requirements on SB X7-7 targets in UWMPs.
- Specific guidance is provided for addressing situations where the 2020 target was not met in 2020 and special cases where a Supplier was part of a merger or consolidation since 2020. The majority of this calculation guidance has been moved to Appendix P.

Gallons Per-Capita Per Day Terminology

When determining water use in an UWMP, two terms are often used interchangeably:

- **Daily Per-Capita Water Use.** The amount of water used per person per day. In the UWMP calculations, this is total water use within a service area, divided by population, and it is measured in gallons.
- **Gallons Per-Capita Per Day (GPCD).** This is the “daily per-capita water use” measured in gallons. Therefore, the term commonly used when referring to “daily per-capita water use” is “gallons per-capita per day” or GPCD.

It is important to distinguish GPCD (as used in UWMPs) from the Residential GPCD (R-GPCD) that is used in some reporting to the State Water Board.

GPCD is the total water use from all sectors within a service area (residential, commercial, institutional, and any others) minus allowable exclusions, then divided by the population. This is used in UWMPs.

R-GPCD is only a part of the GPCD; it is the estimated residential water use in a service area divided by population.

Chapter Sections

This chapter is divided into the following sections:

- 5.1, Reporting Requirements for Wholesale Suppliers
- 5.2, Reporting Requirements for Retail Suppliers
- 5.3, Submittal Tables

5.1 Reporting Requirements for Wholesale Suppliers

Water Code Section 10608.12.

(aj) “Urban wholesale water supplier,” means 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.

Water Code Section 10608.36.

Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

Wholesale Only

Wholesale Suppliers are not required to calculate baseline, targets, or compliance GPCDs. However, they are required to provide an assessment of their present and proposed future measures, programs, and policies that will help the Retail Suppliers in their wholesale service area to achieve their 2020 Targets (refer to Chapter 9).

5.2 Reporting Requirements for Retail Suppliers

Water Code Section 10608.40.

Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631.

Water Code Section 10608.12.

(af) “Urban retail water supplier” means 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.

Retail Only

The Water Code requires that Retail Suppliers report their progress in meeting the 2020 Target. The Water Code does not set an end date for reporting on this progress.

Suppliers’ reporting requirements will vary depending on whether the Supplier:

- Was considered an urban retail water supplier in 2020,
- Met its 2020 target in 2020,
- Was part of a merger or consolidation since 2020.

The subsections below address each of these situations.

Relevant Submittal Tables in Section 5.3

- Retail Suppliers: Submittal Table 5-1, Appendix P: SB X7-7 Compliance Form—Only for Suppliers that did not meet their 2020 target in 2020
- Wholesale Suppliers: None

5.2.1 Supplier was Not an Urban Retail Water Supplier in 2020

Suppliers that only met the definition of an urban retail water supplier (as defined in Water Code Section 10608.12) after 2020 were not subject to SB X7-7 or UWMP requirements during the 2020 reporting cycle. These Suppliers will check the box at the top of Submittal Table 5-1 R indicating that they were not an urban retail water supplier during or before the 2020 UWMP reporting cycle. For purposes of the UWMP and maintaining alignment with the State Water Board, the number of “end users” are considered to be the number of service connections.

5.2.2 Supplier Met 2020 Target in 2020

Suppliers that met their 2020 Target in 2020 will submit Submittal Table 5-1 R and include their “2020 Target” as well as their “2020 Actual GPCD” to verify that they met the SB X7-7 requirement. This information can be taken

from the Suppliers' 2020 UWMP. Suppliers that were part of an RUWMP that met the 2020 Target only because the RUWMP met its regional target will report on this regional compliance in their UWMP and Submittal Table 5-1 R.

5.2.3 Supplier Did Not Meet 2020 Target in 2020—No Change to Service Area

If a Retail Supplier did not achieve its 2020 Target in 2020 and had no change to their service area since 2020, the Supplier must compare its Actual 2025 GPCD with the 2020 Target to report on progress toward meeting their 2020 Target in their 2025 UWMP.

These Suppliers will:

- Complete Submittal Table 5-1 R to report progress toward the 2020 Target in 2025.
- Complete the SB X7-7 2025 Compliance Form to show the calculations for determining the 2025 GPCD. Refer to Appendix P for guidance on completing the Compliance Form.

5.2.4 Supplier Did Not Meet 2020 Target—Change to Service Area Since 2020

If a Retail Supplier did not meet its 2020 target in 2020 and had a change in the service area from 2020 to 2025, water Suppliers will compare their Actual 2025 GPCD with the 2020 Target to report on progress toward meeting their 2020 Target in 2025.

These Suppliers will:

- Complete Submittal Table 5-1 R to report progress toward the 2020 Target in 2025.
- Provide adequate documentation of their SB X7-7 calculations as needed for various situations, listed below.

5.2.4.1 Types of Changes to Service Area Since 2020

Distribution Area Expansion Caused by Mergers (Assumes All Entities Have Existing Baselines and Targets)

If water Suppliers merge, or one water Supplier acquires a portion of another's service area, between the 2020 and 2025, they have two choices:

- Test compliance separately for each service area and submit the following tables:

- Two versions of Submittal Table 5-1, one for each service area.
- Two versions of SB X7-7 Compliance Form, one for each service area.
- Calculate a (compliance year) population weighted average of each system's target and determine compliance as a single entity using this weighted average. Submit the following tables:
 - Submittal Table 5-1 with the weighted average target and weighted average 2025 GPCD.
 - SB X 7-7 Compliance Form for each service area to document their individual 2025 GPCDs.

Distribution Area Expansion by Annexation of Already Developed Areas (Assumes Newly Annexed Area has No Baseline/Target)

If an area was annexed between the 2020 and 2025, and this new area only met the definition of an urban retail water supplier (as defined in Water Code Section 10608.12) after 2020, they were not subject to SB X7-7 or UWMP requirements during the 2020 reporting cycle. The Supplier will provide SB X7-7 reporting for the service area that was previously reported in the 2020 UWMP.

5.2.5 Funding Eligibility

Water Code Section 10608.56.

- (a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

If a Retail Supplier does not achieve its 2020 Target, the Retail Supplier is not eligible to receive a water grant or loan from the State of California until it complies.

Two exceptions to this are provided:

- Water Code Section 10608.56(c) states that a Supplier shall be eligible for a water loan or grant if it "has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per-capita reductions."
- Water Code Section 10608.56(e) states that a Supplier can also be eligible for a water loan or grant if it "has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community."

5.2.6 Nexus to State Water Board Urban Water-Use Objectives (Not Required for UWMPs)

The State Water Board's Making Conservation A Way of Life Regulation on Urban Water-Use Efficiency Standards, Objectives, and Performance Measures (23 CCR Section 965 et seq.) uses the 2020 Target as a back stop for the UWUO calculations.

23 CCR Section 966

- (h) If a supplier's calculated objective-based total use is larger than its target-based total use, the supplier's urban water use objective shall be its Water Code section 10608.20 individual target less excluded demands as described in paragraph (3). If the supplier's section 10608.20 target is expressed in gallons per capita daily, the supplier shall multiply the target by its residential service area population for the reporting year and the number of days in the year.

Suppliers with incomplete data are allowed a grace period for State Water Board's compliance:

23 CCR Section 966

- (e) If any system owned and operated by a supplier is lacking the data needed to calculate the budgets described in subdivision (c)(1) through (4), that system shall be excluded from the overall objective calculation until the requisite data are obtained. The requisite data must be obtained no later than July 1, 2028, for use in the 2030 reporting year.
- (f) For systems that do not meet the criteria to be considered an urban retail water supplier until after the effective date of this section, and for a system that hydraulically consolidates with a supplier, this section applies beginning five (5) years after the system meets the criteria to be considered a supplier or consolidates with a supplier.

Compliance with the UWUO requirements are under the authority of the State Water Board; UWUO requirements are not part of UWMP plan content requirements. Retail Suppliers are encouraged to consult with the State Water Board staff at ORPP-WaterConservation@waterboards.ca.gov regarding the best approach for their situation if they have one or more areas that did not have an existing 2020 Target.

5.3 Submittal Tables

The following table is the standardized Submittal Table for a Retail Supplier's 2025 UWMP. It is also part of DWR's electronic reporting system for data input and is used by DWR to evaluate regional and statewide water-use information and summarize data for DWR-required legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier's Submittal Tables in a UWMP document, the review will be designated "indeterminate," and all Submittal Table data will be flagged as "unsubstantiated." This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. "Indeterminate" status may affect grant and loan eligibility.

An Excel workbook, "2025 Submittal Tables," is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the "Urban Water Management Plans" section and click the "Resources" button to download the file.

Retail Only

Submittal Table 5-1 R is used to report a Supplier's progress in reaching their 2020 SB X7-7 Target.

A checkbox is provided at the top of Submittal Table 5-1 R to indicate whether the Supplier was an Urban Retail Water Supplier in 2020. If the Supplier was not considered an Urban Retail Water Supplier in 2020, the Supplier does not need to complete the remainder of the table.

When completing the table, use the drop-down to select either "Regional Alliance Target" or "Individual Target." Suppliers will provide their (or regional) 2020 Target and their (or regional) Actual 2020 GPCD. Based on these entries, the Submittal Table will autofill a yes or no response to whether the Supplier achieved the necessary target reduction in 2020.

Supplier Achieved 2020 Target in 2020

If the Supplier receives a "Yes" response, they have completed the table, and no further entry is required for Submittal Table 5-1 R.

Supplier Did Not Achieve 2020 Target in 2020.

If the Supplier receives a “No” when completing Submittal Table 5-1 R, this indicates that the Supplier did not achieve its targeted reduction in 2020. Suppliers in this situation must complete the remaining fields of the table.

These Suppliers will use the SB X7-7 Compliance Form to calculate an Actual 2025 GPCD (refer to Appendix P) and will provide that value in Submittal Table 5-1 R. Based on this entry, the Submittal Table will autofill a yes or no response to whether the Supplier met their 2020 Target in 2025.

Additionally, these Suppliers will indicate in the table whether they were part of a merger or consolidation since 2020. If “yes,” Suppliers will refer to Section 5.2.4 for specific instructions for this circumstance.

RUWMPs will use multiple versions of Submittal Table 5-1 R; one for each participating Supplier and include the name of the Supplier in the “Notes” section at the bottom of the table.

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
<input type="checkbox"/>	Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020 See DWR NOTES below.	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
						NA
DWR NOTES: Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies. Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance. NA=Not Applicable						
NOTES: 						

Wholesale Only

There is no SB X7-7 table for Wholesale Suppliers.

6 Normal-Year Water Supply Characterization

This chapter provides guidance for describing and quantifying the sources of water available to the Supplier during a normal year, including supplies from other agencies, surface water, groundwater, recycled water, desalinated water, stormwater, transfers and exchanges, and any other source water the Supplier considers part of its normal-year water supply portfolio. Required water supply characterization for single dry and multiple dry years, including sources that are only used in the event of a water shortage, is addressed in Chapter 7.

The chapter also includes recommendations for the inclusion of supporting and related information and a section dedicated to guidance for reporting of wastewater collection, treatment, and recycled water uses, and another for reporting of the energy used for water production.

A thorough characterization and analysis of water supplies can provide a realistic reliability assessment of a Supplier's water assets under various hydrological and regulatory conditions. A thorough analysis examines surface water rights, water entitlements (i.e., contracts for water delivery), groundwater supplies, raw water supplies, and recycled water supplies. Moreover, it considers each water asset in the context of the infrastructure systems that convey water to the Supplier's service area—including infrastructure systems that are shared with other water suppliers. A detailed water supply analysis examines each water asset and then aggregates the information into a comprehensive picture of the Supplier's water supply portfolio.

Importance

An accurate and detailed characterization will better prepare Suppliers for managing their water assets, assessing supply reliability, performing their DRAs, and preparing and implementing their WSCP.

The water supply analysis is critically important to Suppliers. The conclusions drawn about supply availability under various hydrological and regulatory conditions permeate all other components of the UWMP. For example, an incorrect assessment of the availability of a single water supply under certain conditions, may impact a Supplier's short-term and long-term water management, and in the worst cases, cause a water shortage crisis that is not adequately anticipated in its WSCP. A thorough analysis also allows a Supplier to characterize each water asset in the context of longer-term issues like climate change and regulatory revisions. Accordingly, a meticulous water

supply analysis will provide a Supplier with a reliable picture of the Supplier's water supply portfolio over the short-term and long-term planning horizons.

Focus

The water supply analysis discussed in this chapter focuses on characterizing each water asset during a normal year to provide the information needed for reliability and risk assessments as well as the availability of recycled water within the service area. The required reporting for non-normal years is discussed in Chapter 7.

Essentials

In essence, the water supply characterization is an assessment of each supply source's availability during a normal year, a single dry year, a drought period lasting five years, and more frequent and severe periods drought, along with future projections for these conditions through 2045. This chapter, however, will focus on necessary information for a normal year with other year-types reported in Chapter 7.

Suppliers need to:

- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the Supplier over the same five-year increments as the water use characterization.
- Consider any information pertinent to the reliability and risk analyses for each source of water supply, including changes in supply due to climate change or potential regulatory actions.
- Describe each source of supply's management in correlation with other identified supplies.
- Include a description of the measures being undertaken to acquire and develop any planned sources of supply.
- Include a current version of any GSP for groundwater supplies (as applicable).
- Describe opportunities for exchanges and transfers on long- or short-term basis.
- Provide a description and quantification of wastewater and recycled water systems in the service area.
- Report the energy used for water production, to the extent this information is available.

Enhancing

Analyzing as many details as possible related to each water asset will better serve a Supplier in understanding the water supply portfolio's reliability. These detailed characteristics could include: the type of water right or entitlement, the priority date of the water asset, the diversion rate and annual diversion limit, groundwater extraction limits (like those potentially imposed under the Sustainable Groundwater Management Act [SGMA]), the nature of a recycled or raw water supply and whether it is a potable or non-potable water supply source, interties between distribution systems with different supply sources, and any other special conditions attached to each water asset.

Additionally, when integrated with their water-use characterization, combining the detailed characterizations of each water asset with a monthly, bimonthly, or seasonal analysis under the defined hydrological conditions can reveal a comprehensive representation of a Supplier's water supply portfolio that provides a clearer understanding of where and under what circumstances the potential for water shortages is greatest.

An enhanced water supply analysis could include analyzing the details of each water asset in the larger context of California's water system. For example, during the most recent critical drought, some appropriative water rights established before 1900 were curtailed and unavailable for use. A Supplier could characterize that extreme condition in the context of a changing climate, changing regulatory conditions, environmental water considerations and public trust uses, and the reasonable use doctrine under California's Constitution. Suppliers can also examine their water supplies for a 25-year period, through 2050, to improve the utility of the UWMP for other land-use planning and regulatory compliance issues by bridging the gap between planning cycles. Together, the broader contexts and extended time horizon, can help reveal the long-term reliability of each water asset that a Supplier may rely on to support future growth.

It can also be useful to separate characterization of potable water supplies from non-potable water supplies and assess each separately. This separation can be important in characterizing supply reliability for minimum human safety standards, long-term water service reliability assessments' potential opportunities and constraints, assessing the DRA, and understanding the utility of water management actions incorporated into the WSCP. Comingling potable and non-potable water supplies may produce a false water supply reliability picture for a Supplier.

Appendix L Optional Planning Tool. An optional planning tool is provided in Appendix L. Suppliers are encouraged to use this Optional Planning Tool, which allows recording of monthly, bimonthly, or seasonal water supplies by individual supply. This approach could highlight variability that may occur during the year, which would not occur if only annual data are evaluated. The Optional Planning Tool could also assist with the requirement to discuss the management of multiple supplies in relation to each of the other supplies.

Updates Since 2020

There are no new statutory or regulatory updates pertaining to the water supply characterization. However, this Guidebook has been updated to provide guidance on:

DPR. After October 1, 2024, Suppliers can begin to apply for permits to implement DPR projects. This creates a new potential water supply in California, although it is expected to take several years for any project to be fully implemented. Currently, there is no specific DPR language in the Water Code pertaining to UWMPs, but UWMP preparers can present information on planned projects as part of the recycled water discussion and supplies from planned DPR projects can be presented as future water supply in Submittal Tables 6-9 R and 6-9 W.

Reporting Potable Reuse. In previous rounds of UWMPs, IPR was inadvertently double counted. This occurred because all recycled water uses reported in Submittal Tables 6-4 R and 6-4 W were combined with water uses reported in Submittal Tables 4-1 R, 4-1 W, 4-2 R, and 4-2 W. Double counting often occurred when recycled water was reported as being sent to storage in 2020 Submittal Tables 6-4 R and 6-4 W, and also reported as a supply when delivered as potable water to end-use customers in Submittal Tables 4-1 R, 4-1 W, 4-2 R, and 4-2 W.

To address this, DWR has ceased combining these tables and historic 2020 Submittal Tables 4-3 W will not be used in the 2025 UWMP and Submittal Table 4-3 R has been repurposed to capture and simplify other required reporting.

Volumetric Annual Report. The State Water Board began requiring wastewater treatment plants to report annual inflow, outflow, and recycled water uses starting in 2019. This system, referred to as the [Volumetric Annual Report of Wastewater and Recycled Water \(VAR\)](#), is now a resource for wastewater plants and recycled water information. The VAR is discussed in greater detail in Appendix M and in the Submittal Table discussion below. DWR recommends that UWMP preparers consult the VAR so that recycled water numbers reported in the UWMP are consistent with the State Water

Board’s reported numbers, or if they are not consistent, DWR recommends including an explanation as to why they are provided.

Chapter Sections

This chapter is divided into the following sections:

- 6.1, Water Supply Analysis Overview
- 6.2, Water Supply Characterization
- 6.3, Energy Use
- 6.4, Submittal Tables

6.1 Water Supply Analysis Overview

California Water Code (Water Code) Section 10631(b)

Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier as described in subdivision (a) [in five-year increments to 20 years or as far as data is available],¹ providing supporting and related information, including all of the following:

- (1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.
- (2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.
- (3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.

¹ The bracketed information is placed in this section to clarify the precise meaning of the statutory section. The exact statutory language of Water Code Section 10631(b) is as follows: “Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a), providing supporting and related information, including all of the following...”

Water Code Section 10631 (h)

... The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

6.1.1 Specific Analysis Applicable to All Water Supply Sources

All Suppliers

To the extent practical, all Suppliers must:

- Identify existing and planned sources of water.
- Quantify these supplies over five-year increments through 2045.
- Describe, in detail, anticipated availability under normal, single dry, five-year droughts, and any other water-year conditions described in the DRA (refer to Chapter 7 for addressing non-normal year conditions).
- Describe the management of each supply in correlation with other identified supplies.
- Consider information pertinent to the reliability analysis, including climate change effects.
- Include any other supporting and related information pertaining to water supplies and their projections.

The narratives and quantities characterized in Chapter 6 also provide the foundation for the Suppliers simple Lay Description regarding its water supply resources, as required by Water Code Section 10630.5. If not already included in an overall summary, provide a Lay Description of water supplies and availability.

Section 6.4 identifies the applicable Submittal Tables and provides more details on the narrative for different sources of supply.

Submittal Table 6-8 is used to report current water supplies for each water supply source. Each supply source is listed and quantified separately, to the extent practicable. For example, if a Supplier has wells in two different groundwater basins, supplies from each groundwater basin are listed separately. The different groundwater basins can be identified by selecting

“Groundwater” in the “Water Supply” column for two different rows, then identifying the basin number in the “Additional Description” column in Submittal Table 6-8.

Projected supplies are listed in Submittal Table 6-9 (R or W) for each supply source, including groundwater supplies. If a Supplier has more than once source for each supply type, add additional rows as necessary and identify the supply source in the “Additional Detail on Water Supply” column. Projections are based on information that is reasonably available to Suppliers, including, but not limited to historical water supplies and trends analysis.

Note: For the purposes of the UWMP, water conservation is not considered a supply but should be reflected in a reduction in water use as described in Chapter 4 of this Guidebook.

Address each water supply source. The narrative may include key technical and regulatory aspects of each water supply identified. For example, a Supplier would describe specific dates for diversion and use, maximum diversion rates, maximum monthly and annual diversion volumes, specific limitations described in the water right or contract, water quality issues, and any other special conditions relevant to each water supply that impact supply availability.

As directed by in Water Code Section 10631(1), the quantification and narrative must consider, for **each** source of water used by the Supplier, any information pertinent to the reliability analysis including climate change. DWR recommends that, even if the source(s) is(are) only used during certain conditions (e.g., during a multiyear drought), they are identified in this section with reference to Chapter 7 analysis.

Some details that are important to be considered for each water asset include: point of diversion and place of use, regulatory issues (including regional agreements) that may impact a water asset in some way, any uncertainties in the water asset itself (such as a water right permit versus a water right license) that may impact the reliability of the water supply, implications of GSPs under SGMA, specific contract language that may limit the water supply under certain conditions, trends in water supply deliveries illustrating increases or decreases in water supply reliability, and other issues that may illuminate any unique conditions related to a particular water asset.

Address management of multiple sources, as applicable. If multiple sources of water are described, the narrative must discuss the management of multiple supplies in relation to each of the other supplies. It is strongly encouraged that each Supplier review all underlying documentation related

to each water asset before developing the UWMP water supply section to confirm each identified supply's technical details.

Address potentially changing availability and future supplies. The availability analysis must consider the historical drought hydrology, plausible changes in projected supplies under climate change (refer to Appendix I), anticipated regulatory changes, and other locally applicable criteria. It is important for the narrative to also include any actions or projects that are anticipated to augment future water supply volumes. In addition to narratives characterizing existing supplies, Suppliers must also identify planned sources of water supply that may be developed in the future, and then describe the actions necessary to bring those water supplies to fruition [Water Code Section 10631(b)(3)].

Consider smaller time-steps. The narrative is most useful when supported by real numbers that describe smaller time-step water supply volumes—instead of just annual volumes—to reflect any variability that may be applicable at various times of the year and under different hydrologic conditions. Therefore, Suppliers are encouraged to reflect monthly, bimonthly, or seasonal water supplies available in their quantification and narrative. For example, even in a normal year, a contract water supply may be reduced below the listed contract amount based on conditions contained in the water supply contract. If the reduction is different in a single dry year or over the course of five consecutive dry years altering the supply's monthly and annual availability, this should be addressed in Chapter 7. Similarly, a direct diversion appropriative water right may have limits on the months available for diversion throughout the course of a year and may be curtailed or otherwise limited in additional months during a single dry year or five consecutive dry years, depending upon drought length and severity. Consideration of smaller time-step variability can be carried forward into the annual five-year increment quantifications when using the optional Planning Tool Supply Worksheet (refer to Section 6.1.2).

Consider separately characterizing potable and non-potable sources. Suppliers may also have non-potable water supplies that may only be used to meet certain non-potable demands. These water supplies must be characterized separately since all sources must be identified and characterized. Separate characterization of non-potable supplies can be important for reliability and risk assessments, depending upon the utility of the non-potable supply to meet potable or non-potable demands. If non-potable supplies, such as raw water, recycled water, or remediated groundwater water, are introduced into sources used to serve potable needs, such as aquifers or large surface bodies feeding water treatment plants, Suppliers are encouraged to consider the supply as part of the list of available potable supplies and then to explain the activities in the water

supply narrative. If such supplies are only available to meet non-potable demands, these supply sources still must be listed separately.

Consider using maps and other displays. Suppliers may choose to describe the water system depicted in the UWMP with other illustrative sources. For instance, Suppliers may include maps depicting the water service systems, an overview of the water delivery and conveyance infrastructure, and other important elements that help describe the Supplier’s water system and inform a reader about supply availability. The Supplier may also include the names of any agencies responsible for water resource management and include a link or appendix of any related management plans.

Submittal Tables

Regional Suppliers

RUWMPs will include multiple versions of Submittal Tables 6-8 and 6-9, one for each participating Supplier (R and/or W, as appropriate).

Recommended

Retail and Wholesale Suppliers are encouraged to work collaboratively in identifying pertinent information, level of detail, and time-steps for characterization of wholesale water supplies.

Additionally, because non-potable water supplies cannot be used to meet demands where potable water is required, Suppliers are encouraged to track potable and non-potable water supplies separately to provide a better basis for the service reliability and DRAs. DWR’s Submittal Tables now allow for identifying the treatment level of each supply source to optionally track these separately.

The Supplier should provide the necessary information needed to fully understand both the overall water supply and its specific components.

For Suppliers that receive wholesale water, water supplies projected in the UWMP should be consistent with notifications on supply availability provided by their Wholesale Supplier.

When listing groundwater sources, basin names should be taken from DWR’s Bulletin 118 and listed in the “Additional Detail on Water Supply” column.

While the statutory requirement is for 20 years of projected future water supplies, Suppliers are encouraged to assess availability for next 25 years to best address potential water supply analyses that may be incorporated into

future documents, such as a Water Supply Assessment (Water Code Section 10910 et seq.) that may arise between 2025 and 2030.

Suppliers are encouraged to use the Optional Planning Tool described in Appendix L to quantify a Supplier's water supply availability because non-potable supplies cannot be used for potable uses when conducting the reliability analyses and to assess supplies on a monthly basis.

Relevant Submittal Tables in Section 6.4

All Supplies must quantify, to the extent practicable, actual and projected water supplies for all supply sources. These will be reported in the following Submittal Tables:

- Retail Suppliers: Submittal Tables 6-8 R and 6-9 R
- Wholesale Suppliers: Submittal Tables 6-8 W and 6-9 W

6.1.2 Special Considerations

Numerous special conditions may affect each Supplier's water supplies. In fact, each individual water supply may have specific conditions that may affect current or future supply characterization. As each water supply is considered and described, Suppliers can incorporate reasonable assertions about climatological, regulatory, and other local conditions that may affect water supply availability—especially when considering the supply's availability for the service reliability and DRAs during single dry years and drought periods lasting five consecutive years (addressed in Chapter 7). This section provides Suppliers with some guidance on addressing these conditions.

6.1.2.1 Climate Change Effects

Climate change is a required consideration for Suppliers in their water supply analysis. There is a significant amount of new information emerging about climate change and how it affects the availability and reliability of water resources. Some Suppliers have initiated their own independent climate change analysis. Other Suppliers may find important and relevant information in applicable GSPs prepared by GSA in accordance with SGMA. These GSPs often have modeled surface and groundwater supplies under various climate change scenarios. Suppliers may have to extract information, or request output for specific conditions pertinent to their situation, to make use of GSP information. For Suppliers that have not initiated their own analysis or that do not have suitable information available from a GSA, DWR has prepared climate change analysis recommendations that may be useful in estimating future water conditions in California. Guidance on a climate

change analysis for examining individual water supplies is included in Appendix I of this Guidebook.

6.1.2.2 Regulatory Conditions and Project Development

Emerging regulatory conditions and planned future projects may also affect characterization of future water supply availability and analysis. For example, an emerging regulatory issue that may prove valuable in assessing current and future water supplies could include new or different regulatory requirements in the Regional Water Quality Control Plan, such as incorporation of elements in the Bay-Delta Water Quality Control Plan to reduce reliance on the Delta.

6.1.2.3 Other Locally Applicable Criteria

Other locally applicable criteria may also affect characterization and availability of an identified water supply. For instance, a region may have a regional water management system that overlays the existing water rights and water contracts. The American River watershed has such an arrangement where flow criteria in the American River, embodied in a regional agreement, may affect the availability of a water supply even though the water right may be legally available for diversion under the terms of the water right or contract. In other instances, changes in regional water transfer rules may alter the availability of a water supply that had historically been readily available. These local conditions should be considered when analyzing the availability of each identified supply relied upon by a Supplier.

6.1.2.4 Wholesale and Retail Suppliers Coordination

Retail Suppliers may rely on the information provided by their Wholesale Supplier in quantifying and characterizing water-year types for that water supply source. Wholesale Suppliers are required to provide their quantification and characterization of normal year, single dry year, five consecutive dry years, and five-year interval projections to each retail customer (Water Code Section 10631[h]).

Suppliers that rely on a Wholesale Supplier for a source of water are, in turn, required to provide the Wholesale Supplier with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data are available (refer to Chapter 7 and Water Code Section 10631[h]).

6.2 Water Supply Characterization

The following sections in this chapter will provide further guidance on the water supply availability quantification and narrative required under the Water Code. These are discussed based on the type of water supply a Supplier may have and considerations when projecting future supplies.

- 6.2.1, Purchased or Imported Water
- 6.2.2, Groundwater
- 6.2.3, Surface Water
- 6.2.4, Stormwater
- 6.2.5, Wastewater and Recycled Water
- 6.2.6, Desalinated Water Opportunities
- 6.2.7, Water Exchanges and Transfers
- 6.2.8, Supply From Storage
- 6.2.9, Other
- 6.2.10, Future Water Projects

6.2.1 Purchased or Imported Water

All Suppliers

Suppliers may import or purchase water from other Suppliers or other entities. Suppliers will make their own determination as to whether a supply is purchased, imported, transferred, or exchanged. Suppliers may provide a narrative description of their purchased water in this chapter and report volumes of purchased or imported water in Submittal Tables 6-8 R or 6-8 W: Water Supplies—Actual, and Submittal Table 6-9 R or 6-9 W: Water Supplies—Projected.

Guidance for reporting the required single dry year, five consecutive dry years, and more frequent and severe periods of drought is discussed in Chapter 7.

Additionally, if a Supplier has supplies available to them only during a shortage, these supplies will not be included in the Submittal Tables of Chapter 6. Sources available only during a shortage will be described and reported in Chapter 7, but may be included a description and assessment of the reliability of that/those supply(ies) in the narrative portion of Chapter 6.

Suppliers may possess Contract Water Supplies, including Water Supply Entitlements or Water Supply Agreements, that are derived from local, regional, State, and federal water agencies. These contracts may include

wholesale delivery contracts, contracts based upon State and federal water projects, and localized contracts between regional entities for surface or groundwater. Suppliers will make their own determination as to whether they use water contracts to divert and deliver water supplies to their customers.

[*The State Water Project Delivery Capability Report*](#) is a source of data that can be used to estimate future water supplies from the State Water Project (SWP). This report provides SWP delivery capability under current regulatory requirements. Additionally, it discusses various processes that might affect reliability such as changes in climate and hydrology, regulation, and facilities.

Recommended

In the narrative, Suppliers are encouraged to include key aspects of each water contract identified, such as: the name and date of the contract, contract expiration and renewal date, specific dates for diversion and use of the water assets subject to the contract, maximum diversion rates, maximum monthly or annual diversion volumes, specific limitations in the contract that affect use (e.g., dry-year reduction provisions), water quality issues, and any other special conditions relevant to each contract water supply. If the contract water supply attaches to a specific water right, Suppliers may want to provide some information about the underlying water right that allows the contract supply to be available.

6.2.2 Groundwater

Water Code Section 10631(b)(4)

If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information:

- (A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.
- (B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For a basin that has not been adjudicated, information as to whether the department has identified the basin as a high- or

medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).

- (C) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (D) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

All Suppliers

Groundwater reporting requirements for the 2025 UWMP apply to any groundwater that a Supplier pumps from any groundwater source, not groundwater that has been pumped by another Supplier and subsequently received. If the Supplier purchases water that has been pumped by another entity, this will not be reported as a groundwater source for the receiving Supplier, but as a purchased or imported water source.

Suppliers may provide a narrative description of their existing and planned groundwater supplies in this chapter and will report current actual groundwater supplies in Submittal Tables 6-8 R or 6-8 W: Water Supplies– Actual, and projected groundwater supplies in Submittal Table 6-9 R or 6-9 W: Water Supplies– Projected. For existing and planned groundwater supplies, there are additional specific reporting requirements supplies as described below.

Guidance for reporting the required single dry year, five consecutive dry years, and more frequent and severe periods of drought is discussed in Chapter 7 although Suppliers may provide a narrative description of their groundwater as it pertains to water shortage reliability in this chapter.

The UWMP must provide an overview of the groundwater resource, the Supplier's reliance on the groundwater source, any groundwater management framework or strategies, and include documents that have been developed specifically for groundwater sustainability management such as GSPs under SGMA or AB 3030 Groundwater Management Plans. All requirements for groundwater under SGMA apply to the 2025 UWMP cycle.

If a Supplier does not use any groundwater as a source of supply, the Supplier can simply state this in their UWMP and Submittal Table 6-1 provides a checkbox to indicate that fact.

6.2.2.1 Basin Description

All Suppliers

In addition to identifying and quantifying, to the extent practicable, the existing and planned groundwater available to the Supplier over the same five-year increments described above, the UWMP must include a description of each groundwater basin used by the Supplier

A description of the Supplier's groundwater source includes the basin and/or subbasin name(s). If the Supplier pumps groundwater from fractured rock or volcanics, the Supplier may indicate that the source is fractured bedrock or volcanics. For Suppliers that pump water from more than one defined groundwater basin, the above basin descriptions are required for each groundwater basin. Submittal Table 6-1 allows for reporting of this basic information.

A thorough basin description may include a map of the basin, a list of other known users of the basin, and a discussion of any known issues including changes in groundwater levels, water quality issues, yield, subsidence, or any information that may affect present or future groundwater use.

[*California's Groundwater: Bulletin 118 \(DWR Bulletin 118\)*](#), California's Groundwater may be used to provide some background and general information for describing the basin(s) if more current information or a GSP is not available. If Suppliers need additional guidance identifying the groundwater basin, they may contact DWR staff at: UWMPHelp@water.ca.gov.

Recommended

Basin names in Submittal Table 6-1 (R or W, as appropriate) should be taken from [*DWR Bulletin 118*](#).

DWR recommends that Suppliers list groundwater from each basin as a separate water supply in Submittal Tables 6-8 and 6-9, even though the wells may be delivered in the same potable water distribution system. Reporting on each groundwater source, separately, can also allow any unique constraints applicable to a groundwater basin to be reflected in the Supplier's narrative. For instance, a Supplier may have five wells in one groundwater basin and three in another basin. The basin with five wells may have constraints on the amount of groundwater available as defined in a GSP or have unique water quality consideration, while the other basin may not.

6.2.2.2 Basin Management Information

All Suppliers

Under Water Code Section 10631(b)(4), a Supplier that uses groundwater or plans to use groundwater as a source of supply must provide additional information on the nature and extent of each groundwater basin and the water supply availability from that basin. Specifically, Suppliers must provide all the following information:

- **Current GSP.** Current version of any GSP or alternative adopted under SGMA, any AB 3030 groundwater management plan adopted by the Supplier, or any other specific authorization for groundwater management (e.g., adjudication)
- **Legal or Priority Status.** Reporting requirements based on legal or priority status. Suppliers may attach a copy of any applicable adjudication decrees or GSPs as an appendix, and then summarize them in this section.
 - Adjudicated Basins:
 - A copy of the adjudication order or decree (if applicable), and
 - The amount of water that the Supplier has the legal right to pump; and
 - Non-adjudicated Basins:
 - DWR's priority designation for the basin from the most current bulletin, and
 - A detailed description of the efforts being undertaken by the Supplier to coordinate with GSAs or management agencies to maintain or achieve sustainable groundwater conditions in accordance with a GSP or alternative adopted pursuant to SGMA.
- **Past Five Years Pumped Volume.** A detailed description of the location, amount, and sufficiency of groundwater pumped for the past five years, based on reasonably available information; refer to Section 6.2.2.4.

- **Projected Pumping Volume.** A detailed description of the amount and location of groundwater that is projected to be pumped by the urban water Supplier based on reasonably available information.

Recommended

Suppliers are encouraged to include a brief summary in the UWMP of the groundwater management plan and/or the basin adjudication, if either of these applies to the groundwater source. Such a summary could include groundwater level and water quality monitoring, metering or measuring groundwater pumping, groundwater recharge, conjunctive use programs, water conservation, subsidence monitoring, and use of alternative water supplies.

Groundwater supplies may be limited by GSAs or basin adjudications therefore, projected groundwater supplies should be consistent with any basin management agreements.

6.2.2.3 Other Considerations

All Suppliers

Groundwater supplies may also present other unique conditions that are distinguishable from surface water supplies. For example, in many cases a groundwater basin contains a total volume of water that is shared among the users of that groundwater basin. Although that entire water supply may be available for use, assessing other additional issues like the *sustainable yield*, as described in an applicable GSP, or the *safe yield*, developed under other planning documents, may provide context for the Supplier's available groundwater supplies.

In addition, considerations such as the number and physical capacity of wells, well system integration and operations, and interaction of groundwater systems with surface water supplies may provide insight for reliability assessments as described in Chapter 7. As such, Suppliers may wish to consider their groundwater supplies in the context of its overall system operations and shared supplies with other water users connected to the groundwater basin or basins. The information contained in this section will inform the quantification of water supplies incorporated into the Planning Tool Supply Worksheet.

6.2.2.4 Past Five Years Groundwater Pumping

All Suppliers

The required detailed description of the location, amount, and sufficiency of groundwater pumped for the last five years may be incorporated into Submittal Table 6-1 R or 6-1 W. For Suppliers that do not use groundwater, Submittal Table 6-1 provides a checkbox to indicate that fact. Submittal Table 6-1 also allows Suppliers to optionally track water supplies for potable and non-potable separately.

Recommended

To the extent practicable, each basin where pumping occurs should be separated as its own separate source in Submittal Table 6-1 R or 6-1 W.

DWR also recommends that each type of groundwater, potable or non-potable, is appropriately identified by selecting from the optional drop-down menu. This allows for better resource planning and reliability assessments because non-potable supplies cannot be used for potable purposes unless adequately treated. Additionally, use of potable water for non-potable purposes is often best minimized.

Basin names in Submittal Table 6-1 (R or W, as appropriate) should be taken from [DWR Bulletin 118](#).

Relevant Submittal Tables in Section 6.4

In addition to Submittal Tables 6-8 and 6-9, complete the following Submittal Table for past five years of groundwater pumping.

- Retail Suppliers: Submittal Table 6-1 R
- Wholesale Suppliers: Submittal Table 6-1 W

6.2.3 Surface Water

All Suppliers

Water from streams, lakes, and reservoirs is considered a surface water supply for the purposes of the UWMP. Suppliers may possess surface water rights that are derived from local surface water resources. These supplies may include water rights issued by the State Water Board, pre-1914 appropriative water rights, pueblo water rights, or water rights derived from other sources, such as an adjudication or judicial decree. Suppliers will make their own determination as to whether they use water rights to divert and deliver water supplies to customers.

If a Supplier uses, or plans to use, self-supplied surface water as part of its water supply, the volume of that supply will be reported in Submittal Tables 6-8 R and 6-8 W and Submittal Tables 6-9 R and 6-9 W.

Surface water that is not self-supplied, such as purchases from a Wholesale Supplier, transfers, or exchanges, will be reported as “Purchased or Imported Water,” “Transfers,” or “Exchanges” in Submittal Tables 6-8 R, 6-8 W, 6-9 R, and 6-9 W.

Recommended

Suppliers are encouraged to include key aspects of each water right identified in their narrative. This could include: the water right number (e.g., appropriative right license number, statement of diversion and use number), specific dates for diversion and use, maximum diversion rates, maximum monthly or annual diversion volumes, specific limitations in the water right (e.g., Term 91), water quality issues, and any other special conditions relevant to each water supply. The information contained in this section can inform the availability of water supplies for the water service and DRAs, as well as providing more detailed information when using the optional Planning Tool Supply Worksheet and Drought Risk Assessment Worksheet.

6.2.4 Stormwater

All Suppliers

To meet local water supply demands, communities are increasingly implementing opportunities to beneficially use stormwater. These actions are motivated by constrained local water resources, new regulations, and relieving strain on overburdened stormwater infrastructure. Beneficial uses can include blending with other waters supplies for groundwater recharge, redirecting it into constructed wetlands or landscaping, and diverting it to a treatment facility for subsequent reuse.

If stormwater is being intentionally diverted for beneficial reuse, that volume of stormwater can be reported as a water source in Submittal Tables 6-8 R, 6-8 W, 6-9 R and 6-9 W. It is especially important to incorporate potential effects of climate change on storm duration, timing, frequency, and volumes of stormwater when projecting future availability or for considering use as a future supply source.

Recommended

If using the Planning Tool in Appendix L, assessing the monthly or other time-step availability of stormwater is subject to some speculation based upon its connection to storm events.

6.2.5 Wastewater and Recycled Water

Water Code Section 10633R

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.
- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
- (c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.
- (f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.
- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

All Suppliers

To the extent available, Suppliers must include information in their UWMP on recycled water supplies and its potential for use as a water source in their service area.

For purposes of the UWMP, recycled water is defined as municipal wastewater that is reused beneficially in a manner consistent with recycled water criteria in 22 CCR and in accordance with the applicable Regional Water Quality Control Board permit, such as National Pollutant Discharge Elimination System, waste discharge requirements, or water recycling requirements and has been treated and discharged from a municipal wastewater facility.

Non-potable recycled water is primarily maintained separately from the potable system. Potable recycled water (DPR or IPR) is typically comingled with other potable sources in the distribution system. DWR prefers that agencies address both types of recycled water (potable and non-potable) within one portion of an UWMP, which could be in Chapter 6 or a separate UWMP chapter.

Appendix M is included in this Guidebook to clarify uncertainty and variability in how recycled water is to be reported as a water supply in 2025 UWMPs. The following sections will address how to account for wastewater treatment and recycled water, which is also discussed in Appendix M in more detail.

Beginning in 2019, recycled water data are required to be provided to the State Water Board as part of a wastewater agencies permit requirements. This [VAR](#) Report of Wastewater and Recycled Water can be used to support preparation of a 2025 UWMP.

Recycled water is unique because it can be reported as both a supply and as a use. Both recycled water supplies and uses are presented in this section, which combines aspects of both Chapter 4 and Chapter 6. A Supplier may choose to address both the supply and use aspects of recycled water in a separate chapter dedicated solely to wastewater and recycled water or report both in the water supply chapter.

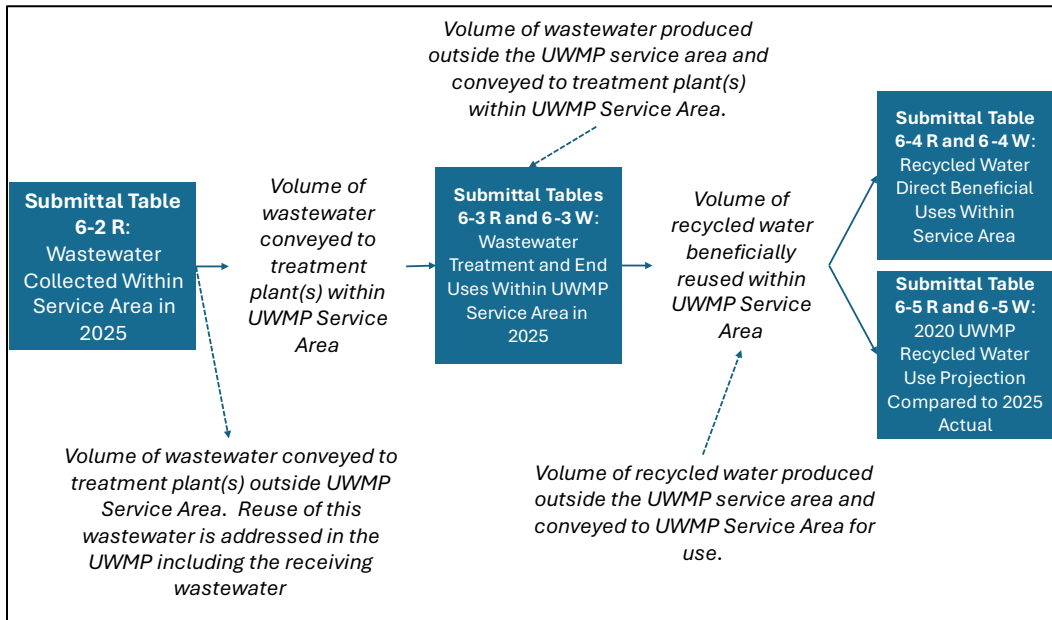
Recycled water as both a supply and use are quantified in the Submittal Tables. This bulleted list is offered as an overview of the Submittal Tables that are specific to wastewater and recycled water in the UWMP:

- **As a Use.** Submittal Tables 6-4 R and 6-4 W quantify 2025 and projected uses.
 - Submittal Tables 6-5 R and 6-5 W compare 2020 projected uses of recycled water in 2025 to actual 2025 uses.

- Submittal Tables 4-1 R and 4-1 W and 4-2 R and 4-2 W report all water use in the service area, which can optionally be identified as potable or non-potable recycled water. These Submittal Tables are discussed in Chapter 4 of this Guidebook.
- **As A Supply.**
 - Submittal Tables 6-2 R and 6-3 R and 6-3 W describe the 2025 wastewater collection and treatment that may be used as the primary source of recycled water.
 - Submittal Tables 6-8 R and 6-8 W quantify all 2025 water supplies, including recycled water.
 - Submittal Tables 6-9 R and 6-9 W quantify the future water supply types projected, including recycled water.
- **Expansion of Recycled Water Use.**

Submittal Tables 6-6 R, 6-7 R, and 6-7 W summarize how recycled water is planned to be expanded or part of any future water supply projects or programs. More detailed plans for additional expansion of recycled water can be presented within the text of the UWMP recycled water section.

Figure 6-1. Relationship of Recycled Water Submittal Tables Showing Values Carried to Subsequent Tables



Retail Only

Retail Suppliers are to include a discussion of wastewater collection and treatment and recycled water use in the UWMP as follows:

If recycled water is currently used or planned to be used in the service area of the Supplier:

- Address Sections 6.2.5.1 through 6.2.5.5 of this chapter (described below).
- Complete Submittal Tables 6-2 R to 6-6 R.

If recycled water is not used and there are no plans for use within the planning horizon of the UWMP,

- Address Sections 6.2.5.1, 6.2.5.2, and 6.2.5.5 of this chapter (described below).
- Complete Submittal Tables 6-2, 6-3, and 6-6.

Wholesale Only

Wholesale Suppliers do not need to summarize wastewater generation or treatment within their service area unless it provides supplemental treatment to recycled water prior to distribution. However, each Wholesale Supplier does need to address recycled water as follows:

If recycled water is currently used or planned to be used in the service area of a Wholesale Supplier:

- Describe how recycled water is or will be used within the service area.
- If not directly involved with the treatment or distribution of recycled water, provide a list of the wholesale and retail wastewater facilities within the service area.
- If any supplemental treatment is provided by the Wholesale Supplier, complete Submittal Table 6-3 W for the supplemental treatment only.
- If recycled water is treated or distributed by the Wholesale Supplier, complete Submittal Tables 6-4 W and 6-5 W.

If recycled water is not used and there are no plans for use within the planning horizon of the UWMP, provide a summary statement to that effect.

Relevant Submittal Tables in Section 6.4

- Retail Suppliers: Submittal Tables 6-2 R to 6-6 R, as applicable
- Wholesale Suppliers: Submittal Tables 6-3 W and 6-5 W, if applicable

6.2.5.1 Recycled Water Coordination

All Suppliers

Water Code Section 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area...

As stated in Water Code Section 10633, the information on recycled water in the information in the UWMP is to be prepared in coordination with wastewater, groundwater, planning, and other local water agencies that operate within the Supplier's service area regarding the existing and potential availability and uses of recycled water. This coordination may occur within the framework of an IRWM Plan or other local or regional planning organization.

Coordination documented by Suppliers may include describing and reporting coordination efforts with the agencies collecting, treating, or discharging municipal wastewater, both generated and treated within the Supplier's service area, as well as with agencies treating and distributing recycled water within the UWMP service area.

Identifying the agencies collecting, treating, or discharging municipal wastewater, both generated and treated within the Supplier's service area, and listing them in the narrative with their roles indicated is a first step.

Other information that can be included in the UWMP to inform the availability and suitability of use may include, but is not limited to:

- Quality of wastewater and associated beneficial reuse opportunities.
- Availability of wastewater for recycled water projects.
- Constraints to use of existing recycled water or wastewater (e.g., distance from area of use, lack of distribution system, and other).
- Planned expansion or new treatment facilities.
- Limiting permit conditions.
- This and other regional questions should be coordinated with other agencies to consistently represent the utility of the water supply for each individual Supplier. Suppliers are advised to review Appendix M before completing the recycled water supply section of the UWMP. The following sections are recommended for presenting recycled water information in an

UWMP. The labeling provided here is only provided as a reference and is not a required numbering system for the UWMP.

6.2.5.2 Wastewater Collection, Treatment, and Disposal

Water Code Section 10633(a)

A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

All Suppliers

Per Water Code Sections 10633 (a) and (b), Suppliers must provide a description of wastewater collection, treatment, and methods of disposal within the service area. This information is reflected in Submittal Tables 6-2 R, 6-3 R and 6-3 W.

The Supplier may use available maps or other displays in their descriptions. Suppliers can also provide reference via a website link or citation for a Recycled Water Master Plan that may be applicable to the Supplier's service area and then summarize required information in their 2025 UWMP.

Recommendations

DWR recommends that Suppliers review the data included in the VAR, as discussed in Appendix M, with wastewater facility operators for 2025 data.

Suppliers should include additional information that is not required but may be useful in projections such as providing an estimate, to the best of the Supplier's ability, of the amount of service area and population (in percentages) that is served by the wastewater collection system. Submittal Table 6-2 R provides an option to report population served information.

6.2.5.2.1 Wastewater Collected Within the Service Area

Retail Only

This section summarizes collection and treatment of wastewater generated within a Supplier's service area. This information can set the stage for identifying infrastructure and operations opportunities and constraints for using recycled water as a supply source.

Describe how the agencies identified in Section 6.2.5.1, above, interact to collect wastewater within the service area, including any joint ventures or joint operations. For example, one agency collects wastewater and delivers it to another agency that operates the treatment facility.

Provide a general description of wastewater collected within the service area in Submittal Table 6-2 R. Submittal Table 6-2 R summarizes information on collection of wastewater within the service area. This table is used for all wastewater **collected** within the service area, the extent to which that information is available.

To complete Submittal Table 6-2 R, Suppliers can consult the relevant VAR data or contact owners and operators of each agency that collects or treats wastewater in the Supplier's service area to identify, to the best of the Supplier's ability and extent that information is available:

- The volume of wastewater collected within the service area.
- Identify the wastewater treatment facility to which the collected wastewater is conveyed. If the collected wastewater is conveyed to multiple facilities, identify each facility, even if it is outside of the UWMP service area because this would be part of the collected wastewater's method of disposal.

Wholesale Only

There is no wastewater collection reporting or Submittal Table for Wholesale Suppliers.

RUWMPS

RUWMPS will use multiple versions of Submittal Table 6-2 R, one for each participating Retail Supplier.

Relevant Submittal Tables in Section 6.4

- Retail Suppliers: Submittal Table 6-2 R.

6.2.5.2.2 Wastewater Treatment and Discharge

Submittal Table 6-3 (R or W, as appropriate) identifies the volume of wastewater treated in the service area and how that water is either recycled or disposed of, to the extent that information is available.

Suppliers will need to indicate if wastewater generated from outside the service area is treated within the service area or disposed of within the

service area because if neither treatment or disposal occurs within the service area, Suppliers do not have to complete this table.

Retail Only

If wastewater is not treated or disposed of within the service area, Submittal Table 6-3 R does not need to be completed. Instead, Suppliers will check the box at the top of the table indicating that no wastewater is treated or disposed of within the UWMP service area and the remainder will be left blank. Suppliers will need to identify the wastewater treatment facility in Submittal Table 6-2 R as part of the description of the methods of wastewater disposal. Suppliers can also provide a narrative of the disposal and/or recycling of treated wastewater at the facility that receives the service area wastewater.

A column is provided in Table 6-3 to enable Suppliers to provide optional information on instream flow requirements included as part of operational permits, if applicable. Additional help completing the Submittal Table are include in Section 6.4, Appendix M, and in the annotated Excel table available in the WUEdata portal.

Wholesale Only

Wholesale Suppliers only complete Submittal Table 6-3 W if they directly use or provide additional treatment to recycled water. Otherwise, the Supplier will only need to check the box at the top of the table indicating that they do not use or provide additional treatment to recycled water.

Recommended

When wastewater is neither treated nor disposed of in the service area, DWR recommends that, as part of the description of methods of disposal, Suppliers identify the outside location or facility name, provide a narrative of the wastewater treatment at the outside facility, and describe quality and disposal (or recycling) of treated wastewater.

Relevant Submittal Tables in Section 6.4

- Retail Suppliers: Submittal Table 6-3 R
- Wholesale Suppliers: Submittal Table 6-3 W

6.2.5.3 Recycled Water System Description

Water Code Section 10633 (c)

A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

All Suppliers

Suppliers must describe the distribution and use of recycled water within the Supplier's service area.

This section can be used to provide an overview of the current recycled water system and its operations in the Supplier's service area. Some factors may include:

- Identification of each agency involved in the recycled water system collection, treatment, and distribution, including Wholesale Suppliers, retailers, special districts, or joint ventures.
- Information on system history and operation.
- Place of use.

Quantification and type of recycled water currently being used will be described in this section and reported in Submittal Table 6-4 (refer to Section 6.2.5.4). If municipal recycled water is being intentionally identified as a potable or non-potable supply, that volume of recycled water can also be reported as a water supply source in Submittal Table 6-8 (R or W) and Submittal Table 6-9 (R or W).

Recommended

As discussed in Appendix M, DWR recommends that Suppliers review data included in the VAR with wastewater facility operators for 2025 data.

Chapter 7 of this Guidebook will integrate recycled water with the water uses. To best assess service reliability and drought risk, potable recycled water supply should be integrated with potable use and non-potable recycled water supply with non-potable use. Thus, DWR recommends appropriately categorizing supply information from Submittal Table 6-4 (R or W) as either potable or non-potable with each recycled water supply, and listing these items as an independent source of supply. This additional information can improve and support consistency in how UWMPs quantify recycled water and facilitate use of the data provided in the UWMPs.

6.2.5.4 Current, Potential, and Projected Recycled Water Uses

Water Code Section 10633

- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

All Suppliers

All Suppliers are to describe the quantity of current, potential, and projected recycled water uses within their service area.

- Current recycled water use must be compared to previous estimates of projected water use for 2020.
- Potential recycled water use is based on how much recycled water can be used for each of the potential beneficial uses within the Supplier's service area.
- Projected recycled water use will include estimates of how much recycled water use is expected to occur during the planning horizon.

The recycled water criteria (refer to Appendix M) includes the term *direct beneficial use*, which is defined in 22 CCR Section 60301.200 as:

The use of recycled water that has been transported from the point of treatment or production to the point of use without an intervening discharge to water of the State.

Appendix M provides a more detailed and comprehensive discussion of how to apply these terms to recycled water.

Current and projected recycled water use is reported in Submittal Table 6-4 R or W. The comparison between projected and actual recycled water use is reported in Submittal Table 6-5 R or W.

Suppliers that do not use and do not plan to use recycled water in their service area will select the box at the top of Submittal Table 6-4 R or W and 6-5 R or W to indicate this. However, these Suppliers will still need to complete the “Potential Recycled Water Use” section of Submittal Table 6-4 R or W and provide the corresponding use type in the “Use Type” column.

Suppliers must also describe the quantity of treated wastewater in the Supplier’s service area that meets recycled water standards, including potable reuse, is being discharged, and is otherwise available for use in a recycled water project.

Any identified recycled water supply actually being used by the Supplier, or available to the Supplier, can be incorporated into Submittal Table 6-4 as either a current individual supply or a planned future supply. If the available recycled water supply is neither a current individual supply nor planned future water supply, Suppliers can provide a narrative on the availability of the supply and actions that could be taken to make the supply available to the Supplier in the future in Submittal Table 6-6 (described in Section 6.2.5.5 of this chapter).

Retail Only

To the best of their ability, a Supplier must describe and quantify the potential amount of recycled water that can be used within the Supplier’s service area, as well as current and projected volumes and uses into the future. Retail Suppliers must provide their Wholesale Suppliers with their current, single dry year, five-consecutive-year drought, and five-year projected water-use information through 2040. Refer to Chapter 7 for non-normal year projections.

Submittal Table 6-4 R is used to provide information on the current, projected, and potential beneficial use of recycled water. The total projected recycled water use for each of the five-year planning increments reported in Submittal Table 6-4 (both R and W) is also included in Submittal Table 4-5 in Chapter 4. Complete Submittal Table 6-4 (R or W, as appropriate) for each beneficial use.

If more than one Supplier provides recycled water within the service area, separate tables may be included for each Supplier (e.g., duplicate Submittal Table 6-4 and refer to the resulting two tables as Submittal Table 6-4a and Table 6-4b, to correspond to data from two different recycled water Suppliers). Please refer to Appendix M before completing Submittal Table 6-4. Appendix M provides additional discussion on how recycled water should be quantified and discusses common errors in evaluating recycled water volume and uses.

Although Submittal Table 6-4 R includes an optional selection of “potable” or “non-potable” treatment level, the description of recycled water use can include a narrative overview of the level or levels of treatment (there may be more than one) of recycled water used for the types of uses. This is important information for assessing the feasibility of expanded recycled water use.

Suppliers may also consider highlighting innovative uses of recycled water, or a particular organization that has demonstrated commitment to the use of recycled water and may choose to provide information on the specific types of recycled water uses, including such information as crops irrigated or type of landscape irrigated.

6.2.5.4.1 Potential Recycled Water Use

Retail Suppliers must include as description of potential recycled water use in their UWMP. Water Code does not provide a method for quantifying the “potential” recycled water use.

Potential beneficial use could be described by estimating the extent of a beneficial use within the service area and how much of that use could be supplied with recycled water. For example, Suppliers could estimate 1,000 acres of golf courses in the service area that could be supplied by 2,000 acre-feet of tertiary treated recycled water. Potential use could also be described by subtracting any permit required environmental volumes from total wastewater discharge volumes. However, this method would not necessarily account for an indication of the potential beneficial use.

The narrative description of potential beneficial uses may also include a determination of the technical and economic feasibility of serving those uses including, but not limited to the transport costs, any necessary wastewater treatment plant upgrades or additional facilities needed, seasonality or timing of use versus availability, and declining wastewater flows because of water conservation or population trends.

The actual use and projected use may be less than the potential use because of availability and delivery constraints.

6.2.5.4.2 Projected Recycled Water Use

Projected recycled water use will include estimates of how much recycled water is actually expected to be used during the planning horizon. This may include expectations for both use and anticipated development of necessary infrastructure projects to be able to deliver sufficient quality of recycled water for the identified beneficial use. These actions and

projections may be described in the UWMP and associated Submittal Tables 6-6 and 6-7 (R or W).

Wholesale Only

For Wholesale Suppliers that provide recycled water, include the name of the retail agency and volume of water to which recycled water is or will be provided in Submittal Table 6-4 W. Wholesale Suppliers that did not deliver or directly use recycled water in 2025, nor project no such delivery or use will check the box at the top of Submittal Table 6-4 W, indicating this fact.

Projected and potential beneficial uses do not need to be included because Wholesale Suppliers do not have to report on specific use sectors in their UWMP.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 6-4 and 6-5; at least one for each participating Supplier.

Recommendations

Please refer to Appendix M before completing this section as this appendix provides additional discussion on classifying recycled water and discusses common errors in evaluating recycled water volume and uses.

Wholesale Suppliers that are not directly involved in recycled water do not need to complete Submittal Table 6-4, but DWR recommends that, in the recycled water section of the UWMP, Wholesale Suppliers provide a list of agencies that provide wholesale or retail recycled water in the Suppliers' service area.

Relevant Submittal Tables in Section 6.4

- Retail Suppliers: Submittal Tables 6-4 R and 6-5 R
- Wholesale Suppliers: Submittal Tables 6-4 W and Table 6-5 W

6.2.5.5 Actions to Encourage and Optimize Future Recycled Water Use

Water Code Section 10633

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier... and shall include the following:

- (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate

the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

Retail Only

The plan to optimize recycled water use in the Supplier's service area, pursuant to Water Code Section 10633(g), will depend on individual Suppliers' service area characteristics, resources and constraints, and other locally-specific challenges or opportunities. The plan could include actions such as expansion of existing recycled water use, development or acquisition of new recycled water supplies, development of a recycled water program education and outreach effort, feasibility studies, necessary capital improvement programs, and others.

Submittal Table 6-6 R is consistent with the same table in the UWMP 2015, containing the methods for expanding future recycled water use, where planned by the Supplier.

Wholesale Only

There is no Submittal Table 6-6 W for Wholesale Suppliers.

Relevant Submittal Tables in Section 6.4

- Retail Suppliers: Submittal Table 6-6 R
- Wholesale Suppliers: Submittal Table 6-6 W

6.2.6 Desalinated Water Opportunities

Water Code Section 10631(g)

Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

All Suppliers

In addition to describing all existing and projected water supplies, Suppliers are required to describe the potential for desalinated water as a water supply option. Suppliers should identify and discuss opportunities for development of desalinated water supplies from ocean water, brackish surface water, and brackish groundwater.

If the Supplier determines that there are no opportunities for use or development of desalinated water sources within the planning horizon of the

2025 UWMP, the Supplier should clearly indicate that desalinated water is not being considered and discuss why.

This description will include existing facilities that are using desalination technologies (primarily reverse osmosis) to remove naturally occurring salts from existing water sources. Treatment of saline municipal wastewater (e.g., municipal wastewater treatment to meet recycled water criteria) should not be included in this description of desalinated water opportunities, even if similar treatment technologies are employed. Wastewater treatment is covered in Section 6.2.5.

Include in the UWMP a description of existing desalinated groundwater or surface water supplies and planned desalination projects. The planned projects could be either those that are planned to be developed and operational during the planning horizon of the UWMP or those that are being conceptually considered for future development.

If the Supplier determines that there are no opportunities for use or development of desalinated water sources within the planning horizon of the 2025 UWMP, the Supplier will indicate that desalinated water is not being considered and discuss why it is not being considered.

Submittal Tables 6-8 R or 6-8 W and 6-9 R or 6-9 W include an option to identify a surface or groundwater supplies as either desalinated or not desalinated. Suppliers either currently desalinating water or planning to within the planning horizon of the UWMP, will include this information in these Submittal Tables by selecting the appropriate water supply option. Suppliers should enter desalinated and non-desalinated supplies on separate rows.

For Suppliers that desalinate only a portion of the groundwater volume reported in Submittal Tables 6-8 R and 6-8 W, DWR requests that these Suppliers state in the “Notes” section of Optional Submittal Table 6-8DS the portion of the produced groundwater that was desalinated.

Recommended

DWR recommends that Suppliers complete Optional Submittal Table 6-8DS. This optional Submittal Table allows for a complete reporting of desalinated water supplies used in the last five years. The optional Submittal Table includes information on water source, salinity measurement (total dissolved solids), and brine disposal.

Desalinated water reported in this Submittal Table is also included in Submittal Tables 6-8 R/W and 6-9 R/W but Submittal Table 6-8DS provides additional detail on the desalination currently employed by the water supplier.

Planned Seawater Desalination. If a Supplier is planning to begin permitting a seawater desalination project before submittal of its 2030 UWMP, the State Water Board has recommended including information in the UWMP assessment of water needs, water demands, and future water supply reliability to support streamlining the permitting process.

Inclusion of the planning for a seawater desalination facility in the UWMP provides multiple benefits, including linking the need and sizing of the seawater desalination project to the UWMP projected supply and use forecasting. It also provides an opportunity to demonstrate when a seawater desalination project is needed and properly sized both to permitting agencies and to Supplier's customers.

The State Water Board's [*Water Strategy Implementation: Seawater Desalination Siting and Streamlining Report to Expedite Permitting*](#) indicates that a Supplier's UWMP should provide the information needed to support the "identification of need" if it is seeking an expedited permitting process for the seawater desalination facility.

At the time this UWMP Guidebook is being prepared, the State Water Board is updating the Seawater Desalination Provisions in the Ocean Plan, which is expected to include guidance for how Suppliers are to document "identification of need" for the seawater desalination facilities. DWR encourages Suppliers to follow the progress of the Ocean Plan update by visiting the [Ocean Plan Requirements for Seawater Desalination Facilities](#) webpage, and joining the email list.

Including "identification of need" for a seawater desalination facility in the UWMP is not a requirement of the UWMP Act and is, therefore, an optional component of the UWMP. DWR will not review this component of the UWMP, but inclusion is recommended for Suppliers that are participating in planned seawater desalination to assist the State Water Board during the permitting process.

DWR recommends that if a Supplier is considering implementation of seawater desalination before the 2030 UWMPs are submitted to DWR, the Supplier's 2025 UWMP should include a thorough review of the need for the seawater desalination facility and a review of the alternative water supplies considered. A general discussion could be included in the desalination section of the Supplier's UWMP with reference to an appendix containing more

detailed information and supporting documentation. The State Water Board and other permitting agencies may use this to assess the “identification of need” for the seawater desalination facility.

The requirements for how a Supplier would document identification of need have not been prepared at the time of the preparation of this Guidebook since the ocean plan revision is in progress. General guidance for the types of information that a Supplier could include are:

- Demonstration of Need
 - Thorough supply and use analysis
 - Limitations and/or constraints
 - Alternates analysis
 - Regional coordination
- Proper Sizing for Demonstrated Need
 - Identify how the plant was sized
- Report Planned Use of this Potential Supply
 - How the desalinated water will be integrated into existing supplies
 - Implementation of Ocean Plan specifications
 - Coordination with Tribal leaders
 - Human Right to Water
 - Community Impacts

The Supplier may also include any other information it deems applicable and relevant to supporting its determination of need for the proposed project.

Relevant Submittal Tables in Section 6.4

- All Suppliers: Submittal Table 6-8DS

6.2.7 Water Exchanges and Transfers

Water Code Section 10631(c)

Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

All Suppliers

Describe any existing, planned, or potential future water exchanges or transfers. For purposes of the UWMP, a Supplier will make its own determination as to whether a water source is a purchase, import, exchange, or transfer.

The information contained in this section will inform the quantification of water supplies incorporated into Submittal Table 6-8 and 6-9. Suppliers are encouraged to only include those transfers and exchanges in the tables for which they have certainty of the quantity and availability. For instance, Suppliers should not just list “Transfer” as a generic supply option for dry conditions, absent evidence such as an agreement with another party, ability to describe past transfers or exchanges that are expected to be repeated in the future, or other substantiated evidence.

6.2.7.1 Exchanges

All Suppliers

Water exchanges are typically water delivered by one water user to another water user, with the receiving water user providing water in return at a specified time or when the conditions of the parties’ agreement are met. Water exchanges can be strictly a return of water on a basis agreed upon by the participants or it can include payment and the return of water. The water returned may or may not be an *even* exchange; water can be returned on a one-for-one basis or by another arrangement (e.g., for each acre-foot of water received, two acre-feet are returned). There are numerous mechanisms to execute water exchanges that result in water supplies being available for a Supplier. Each current and/or planned exchange water supply is listed and quantified in Submittal Table 6-8 and Submittal Table 6-9. If using the optional Planning Tool, exchanges should also be recorded in the Planning Tool Supply Worksheet.

6.2.7.2 Transfers

The Water Code defines a water transfer as a temporary or long-term change in the point of diversion, place of use, or purpose of use due to a transfer, sale, lease, or exchange of water or water rights. Temporary water transfers generally have a duration of one year or less while long-term water transfers have a duration of multiple years.

Transfers can be between Suppliers that are neighboring or across the state, provided there is a means to convey or store the water. A water transfer can be a temporary or permanent sale of water or a water right by the water right holder, a lease of the right to use water from the water right holder, or a sale or lease of a contractual right to water supply. Water transfers can also take the form of long-term contracts for the purpose of improving long-term supply reliability, including agreements that accommodate the single year transfer under pre-specified annual triggers, though the water only transfers occasionally or potentially not at all.

Suppliers should only include those transfers in the tables for which they have certainty of the quantity and availability. For instance, Suppliers should not just list “Transfers” as a generic supply option for dry conditions, absent evidence such as an agreement with another party, ability to describe past transfers that are expected to be repeated in the future, or other substantiated evidence.

There are numerous mechanisms to execute water transfers that result in water supplies available for the Supplier. Each current and/or planned transfer water supply is listed and quantified in Submittal Tables 6-8 and 6-9.

6.2.7.3 Emergency Interties

Emergency interties are addressed in Chapter 7.

6.2.8 Supply From Storage

If a Supplier removes water from either surface storage or underground storage (surface water) for use during the reporting year, the Supplier will report this as a “supply from storage” in Submittal Tables 6-8 R, 6-8 W, 6-9 R, 6-9 W.

Important Note. To avoid double counting of supplies, report only the retrieved water that has been placed into storage prior to the current reporting year as “Supply from Storage.” If water was both placed into storage and retrieved from storage in the same reporting year, this temporary storage should not be reported as “Supply from Storage,” but should be reported as the initial source (i.e., “Purchased or Imported”). This avoids double counting this water supply as both a purchased or imported source AND a supply from storage.

Recommended

DWR recommends that Suppliers retrieving water from a water bank or active recharge project make a note of this in the “Additional Description” column.

6.2.9 Other

Any water supply that is not adequately described by the water sectors defined above. When using the “Other” category as a water supply, Suppliers must briefly describe the water source reported in this category.

6.2.10 Future Water Projects

Water Code Section 10631 (f)

Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single dry water years and for a period of drought lasting five consecutive water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

All Suppliers

Provide a detailed narrative description of specific expected future projects and programs that the Supplier may implement to increase water supply reliability for a normal year, a single dry year or a drought period lasting five consecutive years. This will also include the anticipated timeline for implementation.

These projects or programs are included in Submittal Table 6-7 R and 6-7 W. Include only those projects or programs that are expected to have a quantifiable increase in the Supplier's water supply and can reasonably be expected to be implemented within the 20-year planning horizon of the UWMP. Examples include desalination plants, recycled water treatment plants or infrastructure, or a known increase in a water right or contractual agreement. Capital improvement projects that do not increase the water supply should not be included in this section. For example, infrastructure projects to reduce system water losses would be included as a reduction in water use in Chapter 4. Additionally, Suppliers should avoid speculative projects or programs because they can mislead the service reliability and risk assessments described in Chapter 7 of this Guidebook.

Recommended

Suppliers are encouraged to report the quantitative annual volumes of the water supply expected from future projects in the optional Planning Tool Supply Worksheet found in Appendix L.

Relevant Submittal Tables in Section 6.4

- Retail Suppliers: Submittal Table 6-7 R
- Wholesale Suppliers: Submittal Table 6-7 W

6.3 Energy Use

Water Code Section 10631.2. (a)

In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:

- (1) An estimate of the amount of energy used to extract or divert water supplies.
- (2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.
- (3) An estimate of the amount of energy used to treat water supplies.
- (4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.
- (5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.
- (6) An estimate of the amount of energy used to place water into or withdraw from storage.
- (7) Any other energy-related information the urban water supplier deems appropriate.

All Suppliers

Suppliers must include information on the amount of energy used for various processes of water supply management, including an estimation of the amount of energy used for treated water supplies in comparison to the amount used for non-treated water supplies, to the extent that the information is readily available. Detailed guidance for estimating the energy usage by each operation and optional tables for this reporting are included in Appendix O. Suppliers can use one of the Optional Submittal Tables O-1A, O-1B, or O-1C, as applicable for the Supplier's organization and data availability. Optional Submittal Table O-2 is offered as a structured table to report water, recycled, and wastewater-related energy use. In the narrative, Suppliers will include any energy-related information they deem appropriate. This could include a description of the methods and data used to measure, calculate, or estimate amounts in optional tables.

Where full information cannot be obtained, Suppliers can provide the most information that is readily obtainable. For example, Suppliers may not have the energy information to compare treated water and untreated water energy use. However, Suppliers would have information on how much of each type of water was produced and the equipment characteristics. These could be used to estimate energy use either in the 2025 UWMP or when more information is available (e.g., number and size of pumps, run times, other equipment used, and their general energy usage rates).

If Suppliers have a preferred alternative format for reporting its energy use information, they may simply upload it with their UWMP as an appendix or within their UWMP.

Recommended

DWR recommends that Suppliers report what data they can using the optional Submittal Tables, as is feasible, and in the “Notes” section of the tables, note the location of any other data that are submitted. Optional Submittal Tables are available for download on the [WUEdata Portal](#); scroll down to the “Urban Water Management Plans” section and click the “Resources” button to download the files. The Water Code does not require a calculation of energy intensity; however, the optional Submittal Tables will automatically calculate the energy intensity, if all information is reported. Refer to Appendix O for more information about reporting energy intensity information.

6.4 Submittal Tables

Water Code Section 10644

- (a)(2) The plan, or amendments to the plan, submitted to the department ... shall include any standardized forms, tables, or displays specified by the department.

The following tables are the standardized tables for submittal of a Supplier’s 2025 UWMP. These are also part of DWR’s electronic reporting system for data input and are used by DWR to evaluate regional and statewide water use information and summarize data for DWR-required Legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier’s Submittal Tables in a UWMP document, the review will be designated “indeterminate,” and all Submittal Table data will be flagged as “unsubstantiated.” This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. “Indeterminate” status may affect grant and loan eligibility.

An Excel workbook, “2025 Submittal Tables,” is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the “Urban Water Management Plans” section and click the “Resources” button to download the file. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, where tables are different, each will be displayed. Where essential information is the same, only the Retail Supplier Submittal Table will be displayed.

6.4.1 Submittal Table 6-1: Groundwater Volume Pumped

All Suppliers

For Suppliers that do not use groundwater, Submittal Tables 6-1 R and 6-1 W provides a checkbox to indicate that fact.

Suppliers will select the Groundwater Type (Alluvial Basin or Fractured Rock) from the drop-down list to identify the type of groundwater being pumped.

If the Supplier pumps from more than one basin, each basin will be reported in a separate line in Submittal Table 6-1 R and 6-1 W. Basin names should be taken from [DWR Bulletin 118](#).

Provide the volume of groundwater pumped for each of the past five years (2021–2025).

There is a retail and wholesale Submittal Table 6-1 but since their content is the same, only the retail table is shown here.

Submittal Table 6-1 Retail: Groundwater Value Pumped

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)							
<input type="checkbox"/>	Check the box if the Supplier does not pump groundwater. Proceed to the next table.						
<input type="checkbox"/>	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)						
Groundwater Type Drop Down List May use each category multiple times	Potable or Non-Potable (OPTIONAL) Drop down list	Location or Basin Name	2021	2022	2023	2024	2025
Add additional rows as needed							
Alluvial Basin	Potable						
Fractured Rock	Non-Potable						
Total			0	0	0	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES 							

6.4.2 Submittal Table 6-2: Wastewater Collected Within Service Area

Retail Only

If there is no wastewater collection system within the service area, Suppliers will indicate this by checking the box at the top of the table. Otherwise, Suppliers will complete Submittal Table 6-2 R.

Indicate the name(s) of the Wastewater Collection Agency using the designated column. Supplier may optionally use the drop-down list to select whether the wastewater volume collected was “metered” or “estimated.”

Suppliers will then provide the volume of wastewater collected from the UWMP service area in 2025 from each reported Wastewater Collection Agency.

Names of wastewater treatment plants for UWMP preparers are included in the drop-down menu in Submittal Table 6-2 R. If a facility is not listed in the drop-down menu, use the “Other” option in the drop-down menu and include the facility name in the Submittal Table notes. Suppliers will also indicate whether the wastewater treatment plant is located within the UWMP service area in the last column of this table.

RUWMPs will use multiple versions of Submittal Table 6-2 R, one for each participating Retail Supplier.

There is a retail and wholesale Submittal Table 6-2 but since their content is the same, only the retail table is shown here.

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area				
Water Code Section 10633(a)				
<input type="checkbox"/>	Check the box if there is no wastewater collection system. Proceed to the next table.			
	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)			
	Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)			
Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL Drop Down List	Volume of Wastewater Collected from UWMP Service Area 2025	Name of Wastewater Treatment Plant (WWTP) and Place ID Number Drop down list	Is WWTP Located Within UWMP Area? Drop Down List
Add additional rows as needed				
	Metered			
	Estimated			
Total Wastewater Received from UWMP Service Area in 2025:		0		
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.				
Additional Guidance. See Appendix M, Section M.21 for detailed guidance on this table.				
NOTES:				

6.4.3 Submittal Table 6-3: Wastewater Treatment and Outcomes Within UWMP Service Area

Suppliers will use Submittal Table 6-3 to provide details about the wastewater treatment plant(s) that treat(s) wastewater in their UWMP service area as well as the quantity and end use of the treated water. If no wastewater is treated or disposed of within the Supplier's UWMP service area, Supplier will indicate this in the provided checkbox. Otherwise, Suppliers will complete the rest of the table.

Suppliers may optionally provide information on the facilities producing the recycled water, the distribution system operating supplier, supplemental water added, and the source of 2025 supplemental water using the designated fields.

If more than one Supplier provides recycled water within the service area, separate tables may be included for each Supplier (e.g., duplicate Submittal Table 6-4 and refer to the resulting two tables as Submittal Table 6-4a and Submittal Table 6-4b, to correspond to data from two different recycled water Suppliers). Please refer to Appendix M before completing Submittal Table 6-4. Appendix M provides additional discussion on how recycled water should be quantified and discusses common errors in evaluating recycled water volume and uses.

RUWMPs will use multiple versions of Submittal Tables 6-4 R or 6-4 W, one for each participating Supplier.

Retail Only

Suppliers will use the “Use Type” drop-down list to report the type of recycled water use. Suppliers may optionally report the end use water quality/type using the drop-down in the following column.

Suppliers will provide the volume of recycled water used for each respective use type for 2025–2045. Suppliers are encouraged to provide this value for 2050 as well, but this is optional. The total volume of recycled water use for each reporting year will automatically be calculated.

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area											
Water Code Section 10633 (c),(d),(e)											
<input type="checkbox"/> Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.											
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL):											
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL):											
Supplemental Water Added in 2025 (volume) Include units (OPTIONAL):											
Source of 2025 Supplemental Water (OPTIONAL):											
Use Type Drop down list	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025	2030	2035	2040	2045	2050	Potential Recycled Water Use		
									Volume	Narrative page number (OPTIONAL)	
Agricultural irrigation											
Landscape irrigation (exc. golf courses)											
Golf course irrigation											
Commercial use											
Industrial use											
Geothermal and other energy production											
Seawater intrusion barrier											
Recreational impoundment											
Wetlands or wildlife habitat											
Groundwater recharge (GPR)											
Reservoir water augmentation (RPA)											
Direct potable reuse (DPR)											
Other (Description Required)											
Total			0	0	0	0	0	0	0	0	

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

Additional Guidance. See Appendix M, Section M.21 for detailed guidance on this table.

Potential recycled water use - a description of the feasibility of these uses must be included in the narrative.

Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.

NOTES:

Wholesale Only

Submittal Table 6-4 W allows Suppliers to provide projected and potential recycled water use data either by receiving Supplier or by the Supplier's direct use. Suppliers may optionally report the end use water quality/type using the drop-down in the following column.

Suppliers will provide the volume of recycled water either directly used or sent to other Suppliers for 2025–2045. Suppliers are encouraged to provide this value for 2050 as well, but this is optional. The total volume of recycled water use for each reporting year will automatically be calculated.

Submittal Table 6-4 Wholesale: Current and Projected Recycled Water Uses

Submittal Table 6-4 Wholesale: Current and Projected Recycled Water Uses Water Code Section 10633(c),(d),(e)										
<input type="checkbox"/> Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.										
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :										
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :										
Supplemental Water Added in 2025 (volume) Include units (OPTIONAL) :										
Source of 2025 Supplemental Water (OPTIONAL) :										
Name of Receiving Supplier or Direct Use by Wholesale Supplier	Water Type (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025	2030	2035	2040	2045	2050	Potential Recycled Water Use	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
	Potable									
	Non-Potable									
Total			0	0	0	0	0	0	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the unit of measure selected in Submittal Table 2-3. Additional Guidance. See Appendix M, Section M.21 for detailed guidance on this table. Potential recycled water use - a description of the feasibility of these uses must be included in the narrative. Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.										
NOTES:										

6.4.5 Submittal Table 6-5: 2020 UWMP Recycled Water-Use Projection Compared to 2025 Actual

All Suppliers

Suppliers will use Submittal Table 6-5 to compare 2020 projections of recycled water use to 2025 actual recycled water use. The volume actually used in 2025 for each use type should be identical to the 2025 reported recycled water use reported in Submittal Table 6-4.

If recycled water was not used in 2020 or projected for use in 2025, Suppliers will use the checkbox to indicate this and not complete the rest of the table. Otherwise, Suppliers will complete the table.

Retail Suppliers

Suppliers will use the “Use Type” drop-down list, adding additional rows as needed, to provide the volume of recycled water use previously projected in 2020 for 2025. Retail Suppliers will use the designated fields to provide the volume of recycled water projected in 2020 and the 2025 actual.

**Submittal Table 6-5 Retail: 2020 Urban Water Management Plan
Recycled Water Use Projection Compared to 2025 Actual**

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633 (e)			
<input type="checkbox"/>		Recycled water was not used in 2025 nor previously projected for use in 2020. The supplier will not complete the table below.	
Use Type Drop Down list		2020 Projection for 2025	2025 Actual Use
Add additional rows as needed			
Agricultural irrigation			
Landscape irrigation (exc golf courses)			
Golf course irrigation			
Commercial use			
Industrial use			
Geothermal and other energy production			
Seawater intrusion barrier			
Recreational impoundment			
Wetlands or wildlife habitat			
Groundwater recharge (IPR)			
Reservoir water augmentation (IPR)			
Direct potable reuse			
Other (Description Required)			
Total		0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3 Additional Guidance. See Appendix M, Section M.21 for detailed guidance on this table.			
NOTES:			

Wholesale Suppliers

Submittal Table 6-5 W does not have water use types provided in a drop-down but instead provides a field to enter either a direct use type or the name of a supplier that received the recycled water. Wholesale Suppliers will use the designated fields to provide the volume of recycled water previously projected in 2020 and the 2025 actual.

Submittal Table 6-5 Wholesale: 2020 Urban Water Management Plan Recycled Water Use Projection Compared to 2025 Actual

Submittal Table 6-5 Wholesale: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633(e)		
<input type="checkbox"/>	Recycled water was not used or distributed by the supplier in 2025, nor projected for use or distribution in 2020. Such a wholesale supplier will not complete the table below.	
Name of Receiving Supplier or Direct Use by Wholesale Supplier	2020 Projection for 2025	2025 Actual Use
Add additional rows as needed		
Total	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Table 2-3. Additional Guidance. See Appendix M, Section M.21 for detailed guidance on this table.		
NOTES: 		

6.4.6 Submittal Table 6-6: Methods to Encourage Future Recycled Water Use

Retail Suppliers

Suppliers will use Submittal Table 6-6 R to describe methods to encourage future recycled water use and the expected increase in recycled water from implementation.

If a Supplier does not plan to expand recycled water use in the future, they will check the checkbox and will not complete the Submittal Table. Instead, Suppliers must explain the limitations for implementing or expanding

recycled water use in their narrative UWMP and provide a page location in Submittal Table 6-6 R. Otherwise, Suppliers will complete the table.

The volumes of “Expected Increase in Recycled Water Use” MUST be reported in the same units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in the table’s conversion of total volume to acre-feet. The Water Code requires that this value be provided in acre-feet, thus, a conversion is provided in the table.

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633 (f)			
<input type="checkbox"/>	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Add additional rows as needed			
Total			0
Unit Conversion to AF			
DWR NOTES: Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in this table's calculations. The unit conversion to Acre Feet autocalculated addresses the Water Code's requirement that this value be provided in acre-feet.			
NOTES:			

Wholesale Suppliers

There is no Submittal Table 6-6 for Wholesale Suppliers.

6.4.7 Submittal Table 6-7: Expected Future Water Supply Projects or Programs

All Suppliers

Suppliers can use Submittal Table 6-7 to report future projects or programs expected to be used. Suppliers can use the designated fields to report whether each project/program is a joint project, the planned implementation year, year type, and the expected volume increase in water supply.

Suppliers can use the drop-down list to select a year-type for implementation of each project/program.

RUWMPs will use multiple versions of Submittal Tables 6-7 R or 6-7 W, one for each participating Supplier.

There is a retail and wholesale Submittal Table 6-7 but since their content is the same, only the retail table is shown here.

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631 (f)							
<input type="checkbox"/> No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.							
<input type="checkbox"/> Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.							
Provide page location of narrative in the UWMP							
Name of Future Projects or Programs	Joint Project with other suppliers?		Additional Description (as needed)	Water Type (after treatment if treated) (OPTIONAL) Drop Down list	Planned Implementation Year	Planned for Use in Year Type Drop Down List	Expected Increase in Water Supply to Supplier (This may be a range)
	Drop Down List (yes/no)	If Yes, Supplier Name					
Add additional rows as needed						Average Year Single-Dry Year Multi-Dry Year All Year Types Average and Single-Dry Year Average and Multi-Dry Year Single-Dry and Multi-Dry Year	
				Potable			
				Non-Potable			
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3.							
NOTES: 							

6.4.8 Submittal Table 6-8: Water Supplies—Actual

All Suppliers

Suppliers can use the “Water Supply” drop-down list to indicate the water supply source and the optional drop-down list to identify if the water is “Potable” or “Non-potable.” Any of the provided water sources can be used in multiple rows or not at all, depending on the Supplier’s needs. Suppliers can also add categories by selecting “Other” from the drop-down list and describing it in the “Additional Description” column, if necessary. Separate potable and non-potable subtotals are provided at the bottom of the table. These will be automatically calculated if the water type is provided.

In Submittal Tables 6-8, 6-8 W, 6-9 R, and 6-9 W, a Supplier will report recycled water supplies by selecting the source as “Recycled Water” then optionally selecting either “Potable” or “Non-Potable.”

Note on DPR and IPR. DPR will be indicated as “Recycled Water” + “Potable.” IPR will be indicated as “Recycled Water” + “Non-Potable.” IPR only becomes potable once it is treated to drinking water standards. Both

DPR and IPR will be reported in Water Use Submittal Tables 4-1 R, 4-1 W, 4-2 R, and 4-2 W as potable water deliveries to the relevant water sector (i.e., single-family homes).

RUWMPs will include multiple versions of Submittal Table 6-8, one for each participating Supplier, as appropriate. Include the name of Supplier in the “Notes” section at the bottom of the table.

There is a retail and wholesale Submittal Table 6-8 but since their content is the same, only the retail table is shown here.

Submittal Table 6-8 Retail: Water Supplies—Actual

Submittal Table 6-8 Retail: Water Supplies — Actual				
Water Code Section 10631 (b)				
Water Supply	Additional Description (as needed)	2025		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below
Purchased or Imported Water				
Supply from Storage				
Groundwater (not desalinated)		Potable		
Surface water (not desalinated)		Non-Potable		
Recycled Water				
Desalinated Water - Groundwater				
Desalinated Water - Surface Water				
Stormwater				
Transfers				
Exchanges				
Other (optional)				
Subtotal Potable			0	0
Subtotal Non-Potable			0	0
Total			0	0

DWR NOTES:
 Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
 Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.

NOTES:

6.4.9 Optional Submittal Table 6-8DS: Source Desalination by Supplier

All Suppliers

Suppliers may use Submittal Table 6-8DS to report on the past five years of desalinated source water.

If the Supplier determines that there are no opportunities for use or development of desalinated water sources within the planning horizon of the 2025 UWMP, the Supplier may indicate this by checking the corresponding check box in Optional Submittal Table 6-8DS and should include narrative states the reasons that desalinated water is not being considered.

For Suppliers that desalinate only a portion of the groundwater volume reported in Submittal Tables 6-8 R and 6-8 W, DWR requests that these Suppliers state in the “Notes” section of Optional Submittal Table 6-8DS the portion of the produced groundwater that was desalinated.

In the first column, titled “Desalination Facility,” a drop-down list of desalination facilities is included as a drop-down list. If a facility is not listed in the drop-down menu, use the “Other” option in the drop-down list and include the facility name in the Submittal Table notes.

Optional Submittal Table 6-8DS: Source Water Desalination by Urban Water Supplier

OPTIONAL Submittal Table 6-8DS: Source Water Desalination by Urban Water Supplier											
Supplier does not reduce salinity in either groundwater or surface water prior to distribution.											
Desalination Facility Drop Down list	Plant Capacity	Intake Type Drop down list	Source Water Type Drop down list	Influent TDS	Brine Discharge Drop down list	Volume of Water Desalinated					Name(s) of Agencies that Receive this Water
						2021	2022	2023	2024	2025	
Add additional rows as needed											
		Open-water intake (screened or unscreened)	Groundwater		Sewer						
		Stand Well	Sea water		Brine Line						
		Vertical Well	Brackish Surface Water		ZLD						
					Evaporation Pond						
					Other (describe in notes section)						
Total						0	0	0	0	0	

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the units of measure reported in Submittal Table 2-3.

NOTES:

6.4.10 Submittal Table 6-9: Water Supplies—Projected

All Suppliers

Suppliers will use Submittal Table 6-9 to report projected water supply for 2025 through 2045, and optionally through 2050, in five-year intervals (fiscal year or calendar year).

Suppliers can use the “Water Supply” drop-down list to indicate the water supply source and the optional drop-down list to identify if the water is “Potable” or “Non-potable.” Any of the provided water sources can be used in multiple rows or not at all, depending on the Supplier’s needs. Separate potable and non-potable subtotals are provided at the bottom of the table. These will be automatically calculated if the water type is provided.

In Submittal Tables 6-8R, 6-8 W, 6-9 R, and 6-9 W, a Supplier will report recycled water supplies by selecting the source as “Recycled Water” then optionally selecting the water quality as either “Potable” or “Non-Potable.”

Note on DPR and IPR. DPR will be indicated as “Recycled Water” in the Water Supply column and “Potable” in the “Potable or Non-potable” column. IPR will be indicated as “Recycled Water” in the Water Supply column and as

“Non-Potable” in the “Potable or Non-Potable” column. IPR only becomes potable once it is treated to drinking water standards. Both DPR and IPR will be reported in Water Use Submittal Tables 4-1 R, 4-1 W, 4-2 R, and 4-2 W as potable water deliveries to the relevant water sector (i.e., single-family homes).

Regional UWMPs will include multiple versions of Submittal Table 6-9, one for each participating Supplier, as appropriate. Include the name of Supplier in the “Notes” section at the bottom of the table.

There is a retail and wholesale Submittal Table 6-9 but since their content is the same, only the retail table is shown here.

Submittal Table 6-9 Retail: Water Supplies—Projected

Submittal Table 6-9 Retail: Water Supplies — Projected Water Code Section 10631 (b)												
Water Supply <small>Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool</small>	Additional Detail on Water Supply	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Projected Water Supply (Report to the Extent Practicable)									
			2030		2035		2040		2045		2050 (opt)	
			Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below
Add additional rows as needed												
Purchased or Imported Water		Potable										
Supply from Storage		Non-Potable										
Groundwater (not desalinated)												
Surface water (not desalinated)												
Recycled Water												
Desalinated Water - Groundwater												
Desalinated Water - Surface Water												
Stormwater												
Transfers												
Exchanges												
Other (optional)												
Subtotal Potable			0	0	0	0	0	0	0	0	0	
Subtotal Non-Potable			0	0	0	0	0	0	0	0	0	
Total			0	0	0	0	0	0	0	0	0	
DWR NOTES:												
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.												
Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.												
NOTES:												

7 Water Service Reliability and Drought Risk Assessment

Assessing water service reliability is the fundamental purpose for a Supplier to prepare a UWMP. Water service reliability reflects a Supplier's ability to meet the water needs of its customers with water supplies under varying conditions. A Supplier's UWMP will consider the reliability of meeting customer water use by analyzing plausible hydrological variability, regulatory variability, climate change conditions, and other factors that affect a Supplier's water supply and its customers' water uses.

This analysis looks beyond a Supplier's past experience and considers what could be reasonably foreseen in the future. This chapter synthesizes the details embedded in the other sections of a Supplier's UWMP, and it provides a rational basis for future decision-making related to supply management, demand management, and project development. This chapter also provides guidance on developing a WSRA and DRA that enables a Supplier to evaluate its risk under a severe drought period lasting for the next five consecutive years in accordance with Water Code.

Importance

The WSRA and DRA are the Supplier's final methodical outcome of assessing supplies and water uses that helps direct management actions, funding allocations, and project prioritization, and can help Suppliers forecast and begin planning for additional project development. The conclusions drawn about water service reliability affect Suppliers' short-term and long-term water management decisions.

As a planning tool, the UWMP helps Suppliers address potential problems before they become acute by augmenting supplies or reducing demands. Moreover, the UWMP also encourages Suppliers to consider other water management conditions that may pervade under a longer planning horizon, such as climate change, development, or emerging technologies in desalination or water recycling.

The DRA offers Suppliers an opportunity to test their near-term reliability by assuming the next five consecutive years are dry. These will provide important information for consideration in developing the DMM and water supply projects and programs to be included in the UWMP and water shortage level actions to be included in the WSCP (refer to Chapter 8).

Focus

This chapter focuses on integrating a Supplier's water supply portfolio with its water use characterization. This integration brings together all UWMP elements into a succinct synopsis that depicts a Supplier's water service reliability for its customers. The reliability assessments highlight the incongruencies, if any, between a Supplier's water supplies and customer's water use, and influences the development of the Supplier's DRA described in this chapter and the WSCP described in Chapter 8. The DRA is a specific planning action that assumes a Supplier is experiencing a drought over the next five years and addresses the Supplier's reliability in the context of presumed drought conditions. Together, the WSRA, DRA, and WSCP allow the Supplier to have a comprehensive picture of its short-term and long-term water service reliability and to identify the tools to address any perceived or actual shortage conditions.

Essentials

Accurately characterizing a Supplier's water service reliability under varying hydrological scenarios is the fundamental analytical result of a thoughtfully developed UWMP. Water service reliability requires assessing the combined investigative results from the water-use analysis in Chapter 4 and the water supply analysis in Chapter 6.

These analyses characterize the Supplier's water uses and supplies under varying hydrological and development conditions through at least a 20-year time horizon. Specifically, Suppliers analyze their water supplies and water uses under normal hydrological conditions, a single-dry-year condition, and at least five consecutive years of drought, and then project what conditions will look like for the next 20 years. The DRA projects what supply and use conditions will look like if the five years following submittal of the UWMP are a drought period. Ideally, these water supply-and-use analyses fully represent projected variances that occur in both supply sources and customer use under changed conditions, which include both short-term and long-term hydrological, regulatory, and development variables. Climate change presents an example of a long-term variable that must be considered by a Supplier in their analyses. DWR's proposed approach for the climate change analysis is described in Appendix I of this Guidebook.

Suppliers that have water sources only available to them during a water shortage should describe these sources in this chapter and Chapter 8.

Enhancing

An enhanced WSRA or DRA would include analyzing a Supplier's water service reliability on a monthly, bimonthly, or seasonal basis on a short-term basis, and annually beyond the 2045 timeframe. A shorter than annual time-step analysis for short-term conditions (through the five consecutive year drought) allows Suppliers to assess potential seasonal or limited-term vulnerability issues. Simply adding five years to the Annual Assessment, by extending the analysis through 2050, provides Suppliers with a platform from which to conduct water supply assessments and analysis for specific development projects and projects that require CEQA compliance in the five-year time period between UWMP updates. In addition, Suppliers may look to augment the water service reliability analysis by qualitatively addressing other opportunities to improve water service reliability. For example, it may be plausible to consider longer-term items like groundwater banking projects, localized water markets, or actions to capture and use conserved water.

Suppliers may want to consider looking at various levels of severity in short-term and long-term hydrological variables associated with annual characterization of water service reliability to evaluate water supplies and water uses under extreme conditions. Additionally, it may be important to separately assess the reliability for potable and non-potable water supplies, depending on local conditions, since non-potable supplies cannot necessarily be used in lieu of potable supplies, but it may also provide some relief in situations where potable water is serving non-potable uses.

Updates Since 2020

There have been no changes to the requirements for WSRA or DRAs since the 2020 Guidebook.

Chapter Sections

This chapter contains the following sections:

- 7.1, Constraints on Water Sources Considerations
- 7.2, Water Service Reliability Assessment
- 7.3, Drought Risk Assessment
- 7.4, Submittal Tables

7.1 Constraints on Water Sources Considerations

Water Code Section 10631 (b)(1)

A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

Water Code Section 10634

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Water Code Section 10635 (b)(2)

A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.

Water Code Section 10635 (b)(4)

Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

All Suppliers

An analysis of reliability would not be complete or useful to Suppliers without pertinent information on the constraints to water supply sources. To the extent practicable, Suppliers will include a description of any constraints on their water supply that have been identified by the Supplier as part of the determination if the supply is fully reliable under most conditions. This could include factors such as inconsistent availability or water quality issues. Management strategies that have been, or will be, employed to address the constraint(s) would also be useful to include. This narrative description is critical to explaining the degree and probability of any constraint to a water source and in supporting the reliability assessment.

When describing these constraints, Suppliers that are both Retail and Wholesale Suppliers should identify if a constraint is applicable to their wholesale or retail (or both) operations.

If there is another section within the UWMP that describes a constraint on a particular water source and/or plans to supplement this source, there is no need to repeat this information in this section. Suppliers can refer the reader to the other sections within the UWMP that provide these details. However, it is useful to summarize the constraints to water sources in this chapter even if they have been fully documented elsewhere.

The estimation of inconsistent sources or constraints would be determined by the Supplier based on the information reasonably available or known by the Supplier at the time the 2025 UWMP is prepared and as projected to the foreseeable future. The narrative can include information pertinent to the reliability assessment such as:

- A description of any particular circumstance(s) that would make a source inconsistent. For example, a legal, environmental, or climate factor.
- Known future constraints on water supplies, such as declining groundwater levels, sea level rise, or diminishing snowpack.
- A description of the quality of source water and how the water quality may affect water management strategies and/or supply reliability for the Supplier.
- Planned actions and water management strategies to address noted vulnerabilities and inconsistencies.
- A description of plans to supplement or replace these sources with alternative sources of water DMMs, to the extent practicable.

A summary of the water quality information and other identified constraints from such documents such as the Climate Change Vulnerability Assessment, Groundwater Management Plans, Salt and Nutrient Management Plans, and other relevant documents, as applicable, can also be included. Suppliers may choose to include the most recent Consumer Confidence Report for water supplies as an appendix.

Additional, detailed guidance on assessing climate change effects on water supplies, please refer to Appendix I.

Recommended

Maps, charts, graphs, or other visual tools are recommended when they can illustrate a supply issue.

7.2 Water Service Reliability Assessment

Water Code Section 10635(a)

Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

All Suppliers

Every Supplier must provide their projected water service reliability for a normal year, single dry year, and five consecutive dry years for 2030, 2035, 2040, and at least through 2045. Suppliers can use the information gathered in the previous chapters to complete Submittal Tables 7-2 through 7-4 (R or W, as appropriate). Optional Submittal Tables 7-1 R and 7-1 W allow Suppliers to record their water-year type (e.g., average year, dry year) base information used in the analysis.

In this section, Suppliers also provide a narrative describing the water service reliability determination. Historical hydrology and groundwater conditions in representative normal years, single dry years, and five consecutive dry years may be the best indicator of supply availability in the future under similar conditions. Additionally, in accordance with Water Code Section 10631(b)(1), this analysis must account for changes in supply due to climate change.

For Suppliers choosing to perform their reliability assessment separately for potable and non-potable supply sources and uses, two optional tables are included in the Submittal Tables workbook. These optional tables will not be submitted, but they can be used to prepare and inform the Submittal Tables that combine potable and non-potable characterizations into one, overall reliability assessment. These optional tables may be included in the narrative at the Supplier's discretion.

Retail Only

Pursuant to Water Code Section 10631(h), Retail Suppliers are required to provide their water-use projections to their Wholesale Supplier(s) for that portion of supply received from the Wholesale Supplier. In turn, Retail Suppliers can use the supply projections provided by each of their Wholesale Suppliers in their reliability analysis.

Wholesale Only

Pursuant to Water Code Section 10631(h), Wholesale Suppliers must provide their supply projections to their Retail Supplier customers for all required year-types (Normal, Single Dry Year, and Multiple Dry Year). In turn, Wholesale Suppliers can use the water-use projections provided by their Retail Supplier customers in their reliability analysis.

Regional Only

RUWMP will use multiple versions of the Submittal Tables and prepare separate tables for each participating Supplier with the name of the Supplier included in the “Notes” section of the tables. However, RUWMPs may provide summary tables in the main document with the individual tables included as an attachment or appendix. When inputting data into the WUEdata portal, there may be limits on the number of tables that can be submitted. In these cases, the RUWMP summary table can be submitted through the WUEdata portal with individual Supplier tables included in the UWMP attachments or appendixes.

Recommended

While the statutory requirement is for 20 years of projected future water supplies, Suppliers are encouraged to provide WSRAs for next 25 years to best address potential analyses that may be incorporated into future documents, such as a Water Supply Assessment (Water Code Section 10910 et seq.) that may arise between 2025 and 2030.

Optional Planning Tool. DWR recommends that Suppliers use the optional Planning Tool found in Appendix L. This tool allows for a water supply/use assessment on a monthly, bimonthly, or seasonal basis for a single dry year and a five-year drought period. A shorter than annual time-step analysis allows Suppliers to identify potential seasonal and/or short-term shortages. This tool also allows for an assessment of each individual water supply by month during normal, single dry, and five consecutive dry year periods

Include WSCP Actions and Effects. Suppliers are strongly encouraged to complete the optional portion of Submittal Table 7-2, 7-3, and 7-4 (R or W) that reports the expected benefit that would result from the implementation of planned WSCP actions. Completing this optional section of the tables conveys to the reader that the Supplier acknowledges potential shortages and has strategies in place to address the situation.

7.2.1 WSRA Year-Type Characterization

All Suppliers

There are three year-types for which the WSRA must be conducted. To conduct this assessment, Suppliers will need to identify what these year-types are and their associated effects on water supplies for their local conditions. In characterizing their water-year types in their UWMP, Suppliers can include Optional Submittal Table 7-1 to report on some of the characteristics of water supplies during the year-types required for the WSRA.

Recommendation

Suppliers are encouraged to complete the Optional Submittal Table 7-1 R or W for all their available supplies as part of their water-year type characterization. This provides important information that can be directly used in the WSRA and may be used to support the required data descriptions in the DRA. If Suppliers have more than one supply source, complete an optional Submittal Table for each source and just include the name of the source in the table “Notes” section.

7.2.1.1 Types of Years

The year-types that must be included in the WSRA. These include:

- **Normal Year.** This condition represents the water supplies a Supplier considers available during normal conditions. This could be a single year or averaged range of years that most closely represents the average water supply available to the Supplier. In this Guidebook, DWR uses the terms “average” and “normal” interchangeably when addressing the water-year type.
- **Single Dry Year.** Suppliers can analyze trends and extremes to identify the relevant single dry year used for their analysis. In general, this will likely be the year that represents the lowest water supply available to the Supplier.
- **Five-Consecutive-Year Drought.** There are no specifications for characterizing the WSRA five-consecutive-year drought in Water Code.

The DRA, on the other hand, requires an analysis based on the driest five-year historical sequence for the Supplier (Water Code Section 10612). Suppliers may use the same historical five-year sequence for both their WSR and DRA however, they may instead choose to use a different five-consecutive-year dry period such as the lowest average water supply available to the Supplier for five years in a row. Suppliers are encouraged to characterize the five-consecutive-year drought in a manner that is best suited for understanding and managing their water service reliability.

Optional Submittal Table 7-1 R and W provides a “Base Year” column for identifying the years used to characterize each year-type along with the associated volume of water and/or percentage of average supply it represents. These volumes can be a good starting point for the projections when informed by changes in the supplies that have occurred since the base year.

Many Suppliers have multiple water sources, and each may have a different hydrology resulting in different base years for each sources’ year-type that should be described in the UWMP. For example, an imported water source may have experienced its single driest year in the same year that a local water source experienced a normal year. Reporting of different base years for multiple water sources may be accomplished by including multiple versions of Optional Submittal Table 7-1 R or W and identifying which source is being characterized.

Regional Only

If used, RUWMPs will include multiple versions of Optional Submittal Table 7-1, at least one for each Supplier.

Recommended

Suppliers should include in the narrative an explanation of why certain years or averages were selected for their year-types and any assumptions made regarding their projected volumes. This will help provide a strong basis for the projected scenarios and future water management considerations or selection of different year-type characteristics.

Relevant Submittal Tables in Section 7.4

- Retail Suppliers: Optional Submittal Table 7-1 R
- Wholesale Suppliers: Optional Submittal Table 7-1 W

7.2.1.2 Sources for Water Data

SWP Delivery Capability Report. For SWP contractors, information on water supply capacity under several scenarios is available in the latest SWP Delivery Capability Report.

SWP Long-Term Drought Plan. This plan consolidates information and actions taken during the last droughts along with descriptions of the actions taken by the SWP to plan for and prepare for future droughts.

Weather information is available at:

- [National Weather Service](#) website
- [CIMIS](#) website
- [Western Regional Climate Center](#) website

Runoff data are available at:

- DWR's [California Data Exchange Center](#) (CDEC)
- [USGS](#)
- Operators of local dams and reservoirs

Groundwater information is available at:

- Supplier's Local GSA
- DWR's [Sustainable Groundwater Management](#) webpage
- [California Statewide Groundwater Elevation Monitoring](#) Program webpage

7.2.2 WSRA Supply and Demand Comparison

Water Code Section 10635(a)

Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

All Suppliers

The WSRA combines the details of the Supplier's water-use analysis in Chapter 4 and their water supply analysis in Chapter 6. A comparison of supplies and uses provides Suppliers with a complete picture of both their short-term and long-term water service reliability. Suppliers are to make the best determination of the reliability of their water supply(ies) based on what information is reasonably available at the time the 2025 UWMP is prepared. This chapter will demonstrate how to integrate the Supplier's water-use and supply analyses to evaluate a Supplier's short-term and long-term water reliability.

Available data from state, regional, or local agency population, development, urban retail water supplier compliance with their UWUO, ban on use of potable water for non-functional CII turfgrass, local codes and ordinances, and climate change projections within the service area of the Supplier should already be included in projecting average year water use and available supplies as identified in Chapter 4 and 6, respectively.

Submittal Tables 7-2, 7-3, and 7-4 (R or W) are used to summarize the water supply reliability for normal (average), single dry year, and five-consecutive-dry years, respectively, for 2030, 2035, 2040, and 2045 with an additional column for optional reporting for 2050. A brief narrative describing the information and process used to develop the supply and use reliability assessment should accompany each table. Summary information and location of details can be included with the tables when the detailed information is included in other locations.

Some factors to consider in the assessment include the potential for acquiring supplemental water supplies, potential for increased irrigation use because of low rainfall, expected demand reduction due to increased implementation of DMMs, implementation of drought stages, savings from codes and standards, and increased drought messaging.

Suppliers that have a water supply that is only available to them during a water shortage should describe this source in this chapter and Chapter 8. Description of these sources will not be included in Chapter 6 because Chapter 6 only addresses water sources available in a normal year.

Recommended

Water Shortage Actions. If Submittal Tables 7-2, 7-3, or 7-4 (R or W) show a surplus or a shortage when comparing projected supply and use, DWR recommends that the Supplier include a discussion of management actions that it may take in response to the surplus or shortage and include relevant information in the optional WSCP rows of these tables. This demonstrates

that Suppliers have strategies to address potential shortage and surplus conditions.

Separate Analyses for Potable and Non-Potable Supplies. It is highly recommended that Suppliers conduct the reliability analysis separately for potable and non-potable water uses. If supplies that physically or legally cannot be comingled (e.g., excess recycled water supplies produced in winter months may inadvertently be reflected as available to meet potable water uses) are comingled in the analysis, it can result in an incorrect water service reliability determination. If Suppliers choose to characterize potable and non-potable supply and use in separate tables or tools, Suppliers should conduct their reliability assessments by comparing their potable water supplies with potable water use, and non-potable water supplies with non-potable water use. Where crossover between potable supplies serving non-potable water uses may occur, Suppliers should be very clear in characterizing this condition in the tools and tables and in the respective chapters in their 2025 UWMP, so that the two supplies are not comingled inappropriately.

To facilitate separate tracking, the Submittal Tables workbook contains additional tables for tracking potable and non-potable supplies and uses separately. The separate components can then be summarized in Submittal Tables 7-2, 7-3, and 7-4 (R or W, as applicable). The additional tables for tracking potable and non-potable supply sources would not be submitted, but DWR recommends including them in the narrative or in an appendix.

Iteratively with DRA. Suppliers are also encouraged to conduct the WSRA iteratively with the DRA, discussed in the Section 7.3 of this chapter, to best identify and apply any adjustments to dry-year supplies and uses that may not be reflected in the historical supply data and normal year use data.

Optional Planning Tool. DWR recommends that Suppliers use the optional Planning Tool found in Appendix L. This tool allows for a water supply/use assessment on a monthly, bimonthly, or seasonal basis for a single-dry-year and a five-year drought period. A shorter than annual time-step analysis allows Suppliers to identify potential seasonal and/or short-term shortages. This tool also allows for an assessment of each individual water supply by month during normal, single dry, and five-year drought periods.

7.2.2.1 Normal Year

All Suppliers

Submittal Tables 7-2 R and 7-2 W are used for characterizing the Supplier's normal-year water service reliability. This table compares the normal-year supply totals to the normal-year water-use totals for the 20-year projection

horizon (an additional five-year projection through 2050 is optional but recommended).

Retail Only

Data from Submittal Tables 4-2 R (Normal-Year Water-Use Projections) and 6-9 R (Normal-Year Water Supply Projections) are used to complete this table and will automatically be entered into Submittal Table 7-2 R, if Submittal Tables 4-2 R and 6-9 R are complete.

Wholesale Only

Wholesale Suppliers are not required to complete Submittal Table 4-2 W (Normal-Year Water-Use Projections). Therefore, water uses in Submittal Table 7-2 will not autofill with information from Submittal Table 4-2 W. However, in accordance with Water Code Section 10631(h) Retail Suppliers are required to provide water-use projections to their Wholesale Supplier to enable Wholesale Suppliers to complete Submittal Table 7-2 W.

Relevant Submittal Tables in Section 7.4

- Retail Suppliers: Submittal Table 7-2 R
- Wholesale Suppliers: Submittal Table 7-2 W

7.2.2.2 Single Dry Year

All Suppliers

Submittal Table 7-3 R or W is for a Supplier's WSRA for a single dry year projected for the 20-year planning horizon (an additional five-year projection is optional but recommended). These tables are used to compare the single-dry-year supply total to an adjusted water-use total.

Water Use. The projected total water-use values reported in Submittal Table 4-3 R represent normally expected customer water use prior to any adjustments. As such, Suppliers may want to adjust their normal-year water use to reflect changes in usage that may occur during a dry year when comparing it to the single-dry-year supply. Factors that may affect dry-year water use include, but are not limited to: (1) higher water use due to less rainfall and a greater reliance on applied irrigation water by customers, or (2) reduced water use as a result of Supplier-implemented temporary actions specified in its WSCP. Water use can be affected by many factors such as climate change, regulations, population change, development, and other factors, and are expected to already be included in the normal-year projected water uses.

Water Supply. Water supply projections in Submittal Table 6-9 R or W represent the projected supplies under normal conditions and cannot, therefore, be directly used for Submittal Table 7-3 R or W. Suppliers may choose to complete the single-dry-year analysis by using the same single-dry-year value for all years in the planning horizon. However, it is in the Supplier's best interest to estimate future single-dry-year water supplies considering the same factors used for assessing normal-year supplies including, but not limited to, expected limits on supply sources that may affect dry-year supplies, planned development of supplies for use during dry periods, overall changes in water supplies that may affect dry-year supplies, and others. For instance, it may be expected that water supplies from a particular source, which was relied on for dry-year supplies, will be reduced in the future, or that climate change is expected to further reduce dry-year supplies in the future. Additionally, any water sources only available during a water shortage should be described in this section and reported in the Submittal Tables.

Recommended

In addition to the overall recommendations for the WSRA, in completing the single dry-year WSRA, DWR recommends that Suppliers adjust their normal water-use projections to account for changes in usage that may occur during dry-year conditions, including effects from implementing WSCP actions, if applicable. DWR also recommends that Suppliers adjust their single-dry-year water supply, which is quantified in Optional Submittal Table 7-1, to reflect potential changes in potential dry-year supply availability during the 20-year planning horizon.

Adjustment factors, rationale, and data used in the projections should be clearly defined and explained in the narrative.

Relevant Submittal Tables in Section 7.4

- Retail Suppliers: Submittal Table 7-3 R
- Wholesale Suppliers: Submittal Table 7-3 W

7.2.2.3 Five Consecutive Dry Years

All Suppliers

Submittal Table 7-4 is used for the Supplier's WSRA for five-consecutive-dry years, for each of the five-year projection increments out to at least 2045 (2050 projections are optional but recommended). This table is used to compare the five-consecutive-dry year supply totals to adjusted water-use totals for each of the five years in the projection horizon.

Similar to the adjustments made for the single-dry-year scenario, Suppliers may want to adjust the projected water use and supplies for what may happen during a future, longer-term drought. Under the five consecutive dry year scenario, Suppliers may wish to incorporate the triggering of WSCP drought response actions into the analysis as the dry years progress. For instance, maybe in the first year, a Supplier may realize it may not actually trigger any special short-term water-use reduction actions. But upon realizing the next year continues to be dry, the Supplier may trigger a WSCP Shortage Level with an anticipated percentage reduction in water use based on the planned response actions. The following drought years may trigger additional shortage levels and greater assumed reductions in water use or activation of a supply augmentation. Therefore, the Supplier may have a decreasing adjusted water-use value in each subsequent year to reflect increasingly stringent WSCP shortage levels and increase in water supply that are used in Submittal Table 7-4 and in determining the water service reliability.

Recommended

In addition to the overall recommendations for the WSRA, in completing the five-consecutive-dry-years WSRA, DWR recommends that Suppliers adjust their normal water-use projections to account for changes in usage that may occur during multiple dry-year conditions, including effects from implementing WSCP actions, if applicable.

DWR also recommends that Suppliers adjust their five-consecutive-dry-years water supply, which is quantified in Optional Submittal Table 7-1 R or -1 W, to reflect potential changes in five-consecutive-dry-years' supply availability during the 20-year planning horizon. Adjustment factors, rationale, and data used in the projections should also be clearly defined and explained in the narrative.

When possible, DWR recommends that the WSRA five-consecutive-dry years correspond with the DRA five driest consecutive years.

Relevant Submittal Tables in Section 7.4

- Retail Suppliers: Submittal Table 7-4 R
- Wholesale Suppliers: Submittal Table 7-4 W

7.2.3 WSRA Description of Management Tools and Options

Water Code Section 10620(f)

An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

All Suppliers

Provide a summary of the water management tools and options that are being implemented, or are planned for implementation, that maximize the use of local water resources and minimize the need to import water from other regions. This description may include actions such as increased implementation of DMMs, increased use of recycled water, enhanced groundwater management, or improvements in regional water management and coordination.

Recommended

Reduced Reliance On Delta Analysis. As described in Section 1.4 of this Guidebook, DWR recommends that all Suppliers planning to participate in, or that would receive water supply benefits from, a proposed project considered a “covered action” under the Delta Plan provide information in their UWMP to demonstrate consistency with the Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (23 CCR Section 5003). Included in this is, for example, a multiyear water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Delta. Appendix C contains guidance on how a Supplier may demonstrate consistency with the Delta Plan.

Discuss WSCP Actions. If the information shown in Submittal Tables 7-2, 7-3, or 7-4 (R or W) show a surplus or a shortage when comparing projected supply and use, DWR recommends that the Supplier include a discussion of management actions or programs it may implement in response to the surplus or shortage. Some factors to consider in the assessment are:

- Potential for acquiring supplemental water supplies
- Potential for increased irrigation use because of low rainfall
- Expected use reduction due to increased implementation of DMMs
- Implementation of drought stages
- Savings from codes and standards
- Increased drought messaging

It is also important to note that these considerations must be discussed in the Supplier's WSCP, as required under Water Code Section 10632(a)(3).

Furthermore, if supply exactly matches expected water use, a narrative that discusses the basis for that determination is highly encouraged (e.g., groundwater wells would only be pumped as needed to meet water use, even though the groundwater supply could produce more water). These important caveats can be useful when the UWMP is used for other planning or compliance analyses, such as a water supply assessment or a CEQA assessment.

7.3 Drought Risk Assessment

Water Code 10612

"Drought Risk Assessment" means a method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in subdivision (b) of Section 10635.

Water Code Section 10635(b)

Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:

- (1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.
- (2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.
- (3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.

- (4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

All Suppliers

Water Code directs Suppliers to prepare a DRA and include it in their 2025 UWMP. Water Code requires that the DRA include a description of the:

- Data and methods used
- Basis for the supply shortage conditions
- Determination of the reliability of each source
- Comparison of total water supplies and uses during the drought

In accordance with Water Code Section 10612, the DRA is based on the five driest consecutive years on record. Water Code Section 10635 also requires that the analysis include consideration for plausible changes in climate, regulations, and other locally applicable criteria. As such, the historic five driest consecutive years on record can be considered a starting point in the analysis that is informed by other factors and considerations. Suppliers can then use these estimated supply conditions to prepare the DRA, assuming they occur over the next five years.

The DRA can be modified or updated on an interim cycle, if necessary. This allows Suppliers to modify the DRA as more information becomes available, supplies or uses change, and in the event of unforeseen circumstances.

Submittal Tables 7-5 R and 7-5 W have been prepared for Suppliers to demonstrate water supply reliability during the long-term drought scenario detailed in the DRA. Submittal Tables 7-5 R and W also provides an option for Suppliers to include additional supplies that may only be triggered by a particular declared water shortage level. If Suppliers choose to include a supply in Submittal Table 7-5 R or W in this manner, they would not include the same supply in Submittal Table 6-9 R or W; however, Suppliers may choose to include this supply in Submittal Table 7-4 R or W (WSRA).

The DRA provides Suppliers with an opportunity to contemplate management of their water supplies during stressed hydrologic conditions in relation to variations in customer water use. But most importantly, the DRA provides an opportunity to evaluate the functionality of its WSCP shortage response actions (Chapter 8) and understand the degree of response that may be necessary as it relates to managing water supplies. This evaluation can help identify undesired risks and allow proactive steps to be taken prior to the next actual drought period lasting at least five consecutive years.

Recommended

DWR recommends that Suppliers use the optional Planning Tool found in Appendix L. The optional Planning Tool DRA Worksheet in Appendix L has been designed to assist Suppliers in preparing data for Submittal Table 7-5 R or W. This tool allows for a water supply/use assessment on a monthly, bimonthly, or seasonal basis for the five-consecutive-year drought period of the DRA. A shorter than annual time-step analysis allows Suppliers to identify potential seasonal and/or short-term shortages. This tool also allows for an assessment of each individual water supply by month during the five-consecutive-year drought period of the DRAs.

7.3.1 DRA Data, Methods, and Basis for Water Shortage Conditions

All Suppliers

Suppliers must include in their DRA narrative a description of the data used. This can include information about the source(s) of data, tables and graphs that show historical trends, descriptions of research and data analysis that indicate potential future trends, decision-making process for determining supply shortage conditions, and any other information that supports the DRA and values used in Submittal Table 7-5 R or W. It may be that much of the data are already described in detail in other sections of the UWMP. However, because the DRA can be updated outside of the UWMP five-year plan cycle, a description of the data are required in the DRA, itself.

Methods used in the analysis must also be described in the DRA, along with the basis for one or more supply shortage conditions. Methods would include the calculations, estimation techniques, adjustments made to the five-driest consecutive years for climate change, regulatory changes, and other locally applicable criteria; what supply shortage conditions were used and why; and any other information to report on how the analysis was conducted and what decisions were made in preparing the assessment.

For instance, a Supplier with a local surface water supply source may note that during the driest five-consecutive-year drought this source was not available in the second year of the drought resulting in a water supply shortage of 20% during the second year of the drought. Furthermore, the Supplier may note that since then, a groundwater banking program has been implemented that allows the Supplier to withdraw sufficient groundwater to mitigate this shortage, but the WSCP only activates a 10% mitigation during the second year of a drought. As such, the DRA analysis would still show a 10% water shortage level that would have to be mitigated by demand reductions.

This section also provides Suppliers with an opportunity to also indicate how realistic the DRA is (e.g., what the potential sources of error may be, data limitations, or what assumptions were used), as well as to provide explanations of unique or specific items considered in the analysis and how these affect the overall DRA. Detailed data and methods that are used for the DRA can be included as an attachment and summarized in the DRA.

Recommended

If the WSRA five-consecutive-dry years corresponds with the DRA five driest consecutive years, Suppliers are encouraged to complete the Optional Submittal Table 7-1 R or W for all their available supplies as part of their water-year type characterization. This provides important information that can be directly to support the required data descriptions in the DRA. If Suppliers have more than one supply source, complete an optional Submittal Table for each source and just include the name of the source in the table “Notes” section.

7.3.2 DRA Individual Water Source Reliability

All Suppliers

The DRA portion of the 2025 UWMP includes an assessment of the reliability of each water source over the five-consecutive-year drought starting in 2026. Suppliers will characterize the expected quantity and reliability of each water supply source for each year of the five-consecutive-year drought in the narrative. In addition to describing each supply under these conditions, Suppliers may also report the information in Optional Submittal Table 7-1 R or W if the WSRA five-consecutive-dry years is the same as the DRA driest five consecutive years.

It is in the best interest of a Supplier to accurately reflect the likelihood of supply availability under the drought conditions. Where uncertainty exists, Suppliers can make note of this in the narrative as well as in table footnotes. The reliability of water sources expected to be used to help mitigate water supply shortages, that would normally not be considered part of the Supplier’s water portfolio (e.g., special transfer or exchange agreements), must also be described. If there is a water source that is only available during a water shortage, Suppliers should describe that source here.

Retail Only

Pursuant to Water Code Section 10631(h), Retail Suppliers are required to provide their water-use projections to their Wholesale Supplier(s) for that portion of supply received from the Wholesale Supplier. In turn, Retail

Suppliers can use the supply projections provided by each of their Wholesale Suppliers in their reliability analysis.

Wholesale Only

Pursuant to Water Code Section 10631(h), Wholesale Suppliers must provide their supply projections to their Retail Supplier customers for all required year-types (Normal, Single Dry Year, and Multiple Dry Year). In turn, Wholesale Suppliers can use the water-use projections provided by their Retail Supplier customers in their reliability analysis.

7.3.3 DRA Total Water Supply and Use Comparison

All Suppliers

Submittal Tables 7-5 R and W are used for the DRA total water supply and use comparison. It is set up for Suppliers to assume that the next five years are a five-consecutive-year drought, calculates potential shortages (or surplus), and allows Suppliers to estimate shortfall mitigation from WSCP demand-reduction measures and supply augmentation.

A shortage condition may indicate a water service reliability concern the Supplier may want to address with specific WSCP shortage response actions, as described in its WSCP prepared in Chapter 8. The relative magnitude of any surplus or shortage is important to consider (e.g., a shortage of 10 units for a water use of 10,000 units may be minor and inconsequential). Suppliers can then revisit their representation of both individual supply sources and of the water use estimated for each year. Submittal Table 7-5 R and W allow for optional reporting of WSCP expected effects of actions on supply and use.

It is expected that the DRA will correlate with the WSCP water shortage actions and may be an iterative exercise where Suppliers adjust their water supply and use characterization as the practical timing and anticipated benefits of WSCP-defined water shortage level response actions (refer to Chapter 8) are evaluated. Additionally, five consecutive years of any individual water shortage may have more of an effect than one year and Suppliers may need to consider such potential cumulative effects when developing their WSCP.

For instance, a Supplier may initially characterize the management of each supply during an extended drought using total water supplies as identified in Optional Submittal Table 7-1. Comparison of this initial five-consecutive-year drought water supply with projected water use from the WSCP and Submittal Table 4-2 may result in the Supplier returning to the initial water supply characterization and modifying how particular water supplies may be used

across different years (e.g., the timing or percentage of SWP contract carryover water supply used in drought year 2, versus drought year 3).

Recommended

Separate Potable and Non-Potable Supply Analysis. While not required, Suppliers are encouraged to also prepare a DRA that separately analyzes potable and non-potable water service reliability during an extended drought to 2030. Such an exercise would enable an evaluation of whether the availability of potable supplies match the demand for those supplies because non-potable water cannot be delivered for potable uses.

Include Optional WSCP Action Effects. In Submittal Tables 7-5 R or W, Suppliers can elect to provide information on WSCP augmentation and water-use reductions to better evaluate their overall surplus or shortfall conditions and overall effect of their WSCP.

Optional Submittal Table 7-1 R or W. DWR recommends that Suppliers include Optional Submittal Table 7-1 R or W. For all supplies included in Submittal Table 7-1 R or W, Suppliers are also encouraged to ensure the narrative in Chapter 6 and discussion of any response actions in Chapter 8 appropriately detail any management considerations for a WSCP-triggered supply.

Use Monthly or Other Time-Step. DWR recommends that Suppliers conduct their DRA on a time-step that best illuminates water supply and use constraints that may affect water shortage conditions. Supplies may not always be available when demands are high. As such, an annual supply-and-use comparison may indicate no shortage condition, but during certain times of year, water demands cannot be met by the available supply. For example, non-potable demands are simply landscape irrigation needs for public or private urban landscapes (e.g., parks, median strips, front yards) demands are generally seasonal with a cyclical water need—higher in the hotter, drier periods, and lower in the cooler, wetter periods. But often, the non-potable supply used for irrigating the landscapes is typically available in a consistent volume, day to day (e.g., from a tertiary wastewater treatment facility). This can result in a surplus of supply in cooler months and a potential shortfall in hotter months that might be masked by just using an annual average.

Optional Planning Tool. DWR recommends that Suppliers use the optional Planning Tool Workbook provided to assist Suppliers in evaluating water supplies and uses under the five-consecutive-year drought, characterized in the DRA. Use of this tool can facilitate iterative exercises between characterization of water use, water supplies, and the DRA for the five-consecutive-year drought. Once comfortable with the representations, the

Supplier will want to reevaluate narratives included in Chapter 6 for any particular water supply, to assure the narrative matches the plausible management of that particular supply during a drought period lasting for the next five years. Use of the optional Planning Tool is detailed in Appendix L.

Relevant Submittal Tables in Section 7.4

- Retail Suppliers: Submittal Table 7-5 R
- Wholesale Suppliers: Submittal Table 7-5 W

7.4 Submittal Tables

The following tables are the standardized tables for submittal of a Supplier's 2025 UWMP. These are also part of DWR's electronic reporting system for data input and are used by DWR to evaluate regional and statewide water-use information and summarize data for DWR-required legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier's Submittal Tables in a UWMP document, the review will be designated "indeterminate," and all Submittal Table data will be flagged as "unsubstantiated." This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. "Indeterminate" status may affect grant and loan eligibility.

An Excel workbook, "2025 Submittal Tables," is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the "Urban Water Management Plans" section and click the "Resources" button to download the file. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, where tables are different, each will be displayed. Where essential information is the same, only the Retail Supplier Submittal Table will be displayed.

Two versions of each Submittal Table are offered: one for Retail Suppliers and one for Wholesale Suppliers. They are the same, other than the titles, unless otherwise mentioned here. To save space, only the retail version is shown in the chapter when they are the same.

7.4.1 Optional Submittal Table 7-1: Basis of Water-Year Data (WSRA)

All Suppliers

Optional Submittal Tables 7-1 R and 7-1 W can be used to provide basic descriptive information about the year-types used in the WSRA and potentially DRA. These optional Submittal Tables include a “Base Year” column for identifying the years used to characterize each year-type along with the associated volume of water and/or percentage of average supply it represents.

In the “Available Supplies” column of Optional Submittal Tables 7-1 R and 7-1 W, the preparer can specify the percentage and/or volume of water supply that was available in that “base year.” The water volumes identified in this table should be used as a starting point for the projections in the WSRA and DRA as the supply portfolio may have changed since the time of the base years.

For Suppliers with multiple water sources, there may also be multiple “base years” used for the analysis. Suppliers can use multiple versions of Optional Submittal Table 7-1 to characterize each supply source.

RUWMPs will include multiple versions of Optional Submittal Table 7-1 R or W, if used, at least one for each Supplier with the name of the Supplier written in the “Notes” section.

Optional Submittal Table 7-1 Retail: Basis Water-Year Data (Reliability Assessment)

OPTIONAL Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)			
Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Available Supplies if Year Type Repeats	
		<input type="checkbox"/> Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location: [Insert location from UWMP]	
		<input type="checkbox"/> Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available	% of Average Supply
Average Year			100%
Single-Dry Year			
Consecutive Dry Years 1st Year			
Consecutive Dry Years 2nd Year			
Consecutive Dry Years 3rd Year			
Consecutive Dry Years 4th Year			
Consecutive Dry Years 5th Year			
DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 R if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Submittal Table 7-1 R, in the "Notes" section of each submittal table, state that multiple versions of Submittal Table 7-1 R are being used and identify the particular water source that is being reported in each submittal table. Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the units of measure reported in Submittal Table 2-3.			
NOTES:			

7.4.2 Submittal Table 7-2: Normal-Year Supply and Use Comparison

All Suppliers

Submittal Table 7-2 provides a comparison between projected supply and use totals for a normal water year.

Suppliers may optionally complete the "Planned WSCP Actions" section. The surplus or shortfall will be calculated automatically.

For Suppliers choosing to characterize their water service reliability separately for potable and non-potable supplies, optional use tables are included in the 2025 Submittal Tables Excel workbook. Data from the separate tables can be directly input into Submittal Table 7-2 R or W. The separate potable and non-potable tables will not be submitted, but they can be included in the narrative or an appendix.

RUWMPs will include multiple versions of Submittal Tables 7-2 R or 7-2 W, as appropriate, one for each participating Supplier and include the name of the Supplier in the "Notes" section at the bottom of the table.

Retail Only

Data from Submittal Tables 4-2 R and 6-9 R will automatically pre-populate Submittal Table 7-2 R.

Submittal Table 7-2 Retail: Normal-Year Supply and Use Comparison

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison Water Code Section 10635 (a)					
	2030	2035	2040	2045	2050 (Opt)
Supply totals (autofill from Submittal Table 6-9 R)	0	0	0	0	0
Use totals (autofill from Submittal Table 4-2 R)	0	0	0	0	0
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

Wholesale Only

Data from Submittal Table 6-9 W will automatically pre-populate the supply section of Submittal Table 7-2 W. Wholesale Suppliers must manually enter data on water use into Submittal Table 7-2 W. Should Wholesale Suppliers will need to obtain "Use Totals" from their Retail Supplier customers. Alternatively, Wholesale Suppliers can choose to complete Optional Submittal Table 4-2 W and the data from that table can be used as a reference for completion of Submittal Table 7-2 W.

Submittal Table 7-2 Wholesale: Normal-Year Supply and Use Comparison

Submittal Table 7-2 Wholesale: Normal Year Supply and Use Comparison Water Code Section 10635 (a)					
	2030	2035	2040	2045	2050 (Opt)
Supply totals (autofill from Submittal Table 6-9 W)	0	0	0	0	0
Use totals (see OPTIONAL Submittal Table 4-2 W)					
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

7.4.3 Submittal Table 7-3: Single-Dry-Year Supply and Use Comparison**All Suppliers**

Submittal Table 7-3 provides a comparison between projected supply and use totals for a single dry water year. There is a retail and wholesale Submittal Table 7-3 but since their content is the same, only the retail table is shown here.

Suppliers may optionally complete the “Planned WSCP Actions” section and the revised surplus or shortfall will be calculated automatically.

For Suppliers choosing to characterize their water service reliability separately for potable and non-potable supplies, optional use tables are included in the 2025 Submittal Tables Excel workbook. Data from the separate tables can be directly input into Submittal Table 7-3 R or 7-3 W.

The separate potable and non-potable tables will not be submitted, but they can be included in the narrative or an appendix.

Retail Suppliers should obtain projected supplies from their Wholesale Supplier for this Submittal Table and Wholesale Suppliers should obtain projected water use from their customers for this Submittal Table.

RUWMPs will include multiple versions of Submittal Table 7-3 R or 7-3 W, one for each participating Supplier, and include the name of the Supplier in the “Notes” section at the bottom of the table.

Submittal Table 7-3 Retail: Single-Dry-Year Supply and Use Comparison

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030	2035	2040	2045	2050 (Opt)
Supply totals					
Use totals					
Surplus/(shortfall)					
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES					

7.4.4 Submittal Table 7-4: Multiple Dry Years Supply and Use Comparison

All Suppliers

Submittal Tables 7-4 R and 7-4 W are used for the Supplier's WSRA for five-consecutive-dry years, for each of the five-year projection increments out to at least 2045 (2050 projections are optional but recommended). This table is used to compare the five-consecutive-dry year supply totals to adjusted water-use totals for each of the five years in the projection horizon. There is a Retail and Wholesale Submittal Table 7-4 but since their content is the same, only the retail table is shown here.

Suppliers will provide the projected supply and use volume totals for at least four separate planning cycles of the five-year consecutive dry-year period (2030, 2035, 2040, and 2045, with 2050 optional). The years in the column headers indicate the first year of each five-year planning cycle. The rows indicate the year within each five- consecutive dry-year period, for example, the "First Year" indicates the start of a five-year consecutive dry-year period beginning with the year at the top of the column (2030, 2035...). Suppliers will complete the table for the next four consecutive years of that period in the same column. The same will be done for the following columns, with the start of a drought period starting every five years. In total, the projected volume for 20 consecutive years (optionally, 25 years if Suppliers include projections for a cycle starting in 2050) will be captured in this table.

Suppliers may optionally complete the "Planned WSCP Actions" section and the revised surplus or shortfall will be calculated automatically.

For Suppliers choosing to characterize their water service reliability separately for potable and non-potable supplies, optional use tables are included in the 2025 Submittal Tables Excel workbook. Data from the separate tables can be directly input into Submittal Table 7-4 R or W. The separate potable and non-potable tables will not be submitted, but they can be included in the narrative or an appendix.

Retail Suppliers should obtain projected supplies from their Wholesale Supplier for this Submittal Table and Wholesale Suppliers should obtain projected water use from their customers for this Submittal Table.

RUWMPs will include multiple versions of Submittal Table 7-4 R or 7-4 W, one for each participating Supplier, and include the name of the Supplier in the "Notes" section at the bottom of the table.

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030	2035	2040	2045	2050 (Opt)
First year	Supply totals					
	Use totals					
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Second year	Supply totals					
	Use totals					
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Third year	Supply totals					
	Use totals					
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fourth year	Supply totals					
	Use totals					
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fifth year	Supply totals					
	Use totals					
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

7.4.5 Submittal Table 7-5: Five-Year Drought Risk Assessment

All Suppliers

Suppliers will provide their projected water supply and use totals for a five-consecutive-year drought period starting in 2026 and ending in 2030. There is a retail and wholesale Submittal Table 7-5 but since their content is the same, only the retail table is shown here.

Suppliers may optionally complete the “Planned WSCP Actions” section and the revised surplus or shortfall will be calculated automatically.

For Suppliers choosing to characterize their DRA separately for potable and non-potable supplies, optional use tables are included in the “2025 Submittal Tables” Excel workbook. Data from the separate tables can be directly input into Submittal Table 7-5 R or W. The separate potable and non-potable tables will not be submitted, but they can be included in the narrative or an appendix.

Retail Suppliers should obtain projected supplies from their Wholesale Supplier for this Submittal Table and Wholesale Suppliers should obtain projected water use from their customers for this Submittal Table.

RUWMPs will use multiple versions of Submittal Table 7-5 R or 7-5 W; one for each participating Supplier and include the name of the Supplier in the “Notes” section at the bottom of the table.

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	Total
Total Water Use	
Total Supplies	
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
2027	Total
Total Water Use	
Total Supplies	
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
2028	Total
Total Water Use	
Total Supplies	
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
2029	Total
Total Water Use	
Total Supplies	
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
2030	Total
Total Water Use	
Total Supplies	
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES:	

8 Water Shortage Contingency Plan

Water shortage contingency planning is a strategic planning process to prepare for and respond to water shortages. Good planning and preparedness can help agencies maintain reliable supplies and reduce the impacts of supply interruptions.

A water shortage may occur due to a number of reasons, such as population growth, climate change, drought, and catastrophic events. A water shortage means that the water supply available is insufficient to meet the normally expected customer water use at a given point in time. Drought, regulatory action constraints, and natural and man-made disasters may occur at any time.

The WSCP is a detailed proposal for how a Supplier intends to act in the case of an actual water shortage condition. This plan is part of good drought policy even if a Supplier's water supply appears to have a low probability of shortage conditions, as it improves preparedness for droughts and other impacts on water supplies. The WSCP anticipates a water supply shortage and provides pre-planned guidance for managing and mitigating a Supplier's shortage.

A WSCP is a document that can be updated separately from the UWMP and amended as needed without amending the corresponding UWMP. However, it must be included as part of the UWMP when the UWMP is submitted to DWR.

Importance

A well-structured WSCP allows for near real-time water supply availability assessment and structured steps designed to respond to actual conditions, to allow for efficient management of any shortage with predictability and accountability.

The WSCP is the Supplier's operating manual that is used to prevent service disruptions through proactive, rather than reactive, management. In severe drought conditions, a Supplier's WSCP serves as its roadmap of action for how to proceed through various levels of shortage. This way, if and when shortage conditions arise, the WSCP allows the Supplier's governing body, its staff, and the public to identify and efficiently implement pre-determined steps to manage a water shortage.

The WSCP documents the process used by Suppliers to anticipate water supply disruptions and describes how they intend to address a water shortage. A Supplier may also be able to use its analysis and WSCP to help justify the projects, policies, and programs necessary to mitigate the risk of a

water shortage condition. The primary audience for the WSCP is the Supplier's decision-makers, management and operational staff, communications staff, and customers. However, other non-water entities may also be an audience, such as cities, counties, State and federal agency water managers, regulators and decision makers, local media, and business community groups. These entities will likely be interested in key elements of the WSCP. It is also important to note that Water Code Section 10632.3 directs the State Water Board, during a drought emergency, to defer to the locally adopted WSCP to the extent practicable, which highlights an WSCP's important role in supporting local autonomy.

Water Code Section 10632.3

It is the intent of the Legislature that, upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the board defer to implementation of locally adopted water shortage contingency plans to the extent practicable.

Focus

The WSCP is the Supplier's operations plan for water shortages and is best developed in a manner that is suited for a Supplier's specific conditions, constraints, and opportunities. Understanding water supply reliability, factors that could contribute to water supply constraints, availability of alternative supplies, and what effect these have on meeting customer demands provides the Supplier with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage.

To enable a Supplier to best adapt to and endure water shortage conditions, a WSCP identifies and addresses foreseeable and unforeseeable water supply risks facing a water system. For instance, in areas that are subject to specific natural disasters, such as earthquakes, the WSCP would anticipate such a disaster and prepare actions necessary to manage that situation. In other areas, for example, where a water supply is derived from a single water source, the WSCP would anticipate a condition where that water supply source is severely limited or even completely fails. In this latter example, the outage may occur for numerous foreseeable or unforeseeable reasons like fire, flood, system failure, and civil unrest. Regardless of the reason for the outage, a WSCP based on adequate details of demand reduction and supply augmentation measures that are structured to match varying degrees of shortage can help Suppliers understand what to expect during a water shortage situation.

Essentials

The starting point for a robust WSCP is a thorough and realistic WSRA (refer to Chapter 7) that considers a Supplier's existing and projected customer water use (refer to Chapter 4) and supply (refer to Chapter 6). Certain elements of the WSCP are required by Water Code Section 10632 (a)(4), including four types of response actions that align with six standard water shortage levels based on the Supplier's water supply conditions and shortages resulting from supply availability and interruptions, including seismic risk and other catastrophic interruptions. The four categories of shortage response actions listed in Water Code Section 10632 (a)(4) are:

- (A) Locally appropriate supply augmentation actions
- (B) Locally appropriate demand reduction actions to adequately respond to shortages
- (C) Locally appropriate operational changes
- (D) Additional mandatory prohibitions against specific water-use practices

The WSCP will also include the Supplier's administrative procedures to be followed during a water shortage, such as communication protocols, compliance and enforcement, and methods for monitoring the effectiveness of the WSCP during a shortage.

The WSCP must include the Supplier's procedures for conducting an annual water supply and use assessment, which is the written decision-making process for determining supply reliability each year, along with the data and methods used to evaluate reliability. The more accurately and realistically Suppliers can identify their water supply reliability under varying conditions of shortages, including catastrophic events, the better prepared Suppliers will be in the event of water shortage conditions.

Accurately characterizing customer water use and understanding the factors affecting both use and supply provides a baseline that guides the functionality of short-term demand-reduction options. Thoroughly vetting the availability and management of all water supplies, under varying hydrologic and regulatory conditions, unique water right or contract provisions, and infrastructure risks provides the necessary baseline information to develop supply augmentation measures to incorporate with short-term demand-reduction responses for addressing shortage conditions.

Enhancing

The enhanced WSCP would provide more detailed and granular analysis of supply and use. This may include monthly time-steps and specific analysis and response actions for specific areas in the distribution system, to precisely identify and manage water shortages.

The enhanced WSCP could provide significant details that validate precise volumes of water made available through short-term shortage response actions in the Supplier's service area. The details, along with monthly supply and use characterization data, could highlight each individual shortage response action and assign a monthly volume to these actions to mathematically demonstrate the anticipated temporary demand reductions expected. These details may also identify the distribution between indoor and outdoor water use to provide a baseline that guides the functionality of short-term demand-reduction options, such as imposing strict landscape irrigation limits.

Similarly, clear and precise water supply augmentation measures could be demonstrated through executed emergency water supply contracts, emergency coordination agreements among neighboring purveyors, and other alternative supply management actions. The details of these water supply augmentation alternatives could include quantified supplies attributable to each supply augmentation activity. These additional steps could provide a Supplier with a WSCP that can be relied upon for immediate implementation to minimize adverse impacts of the shortage.

The WSCP should also provide details about water sources that are only made available in cases of short-term water shortages as these sources will not have been described in Chapter 6 Water Supplies which addresses normal-year supplies. Examples include executed emergency water supply contracts, emergency coordination agreements among neighboring purveyors, and other alternative supply management actions.

Updates Since 2020

There have been no changes to the Water Code related to the WSCP requirements since 2020.

Chapter Sections

This chapter is divided into the following sections to address all WSCP required elements:

- 8.1, Water Supply Reliability Analysis
- 8.2, Annual Water Supply and Demand Assessment Procedures

- 8.3, Six Standard Water Shortage Levels
- 8.4, Shortage Response Actions
- 8.5, Communication Protocols
- 8.6, Compliance and Enforcement
- 8.7, Legal Authorities
- 8.8, Financial Consequences of
- 8.9, Monitoring and Reporting
- 8.10, WSCP Refinement Procedures
- 8.11, Special Water Feature Distinction
- 8.12, Plan Adoption, Submittal, Availability, and Amendment Procedures
- 8.13, Resources and References
- 8.14, Submittal Tables

A WSCP is a document that stands alone, meaning it can be created separately from the UWMP and amended, as needed, without amending the corresponding UWMP. The Supplier's 2025 WSCP must be included as part of the 2025 UWMP when submitted to DWR by July 1, 2026. The process for WSCP amendments and required public hearings can be found in Chapter 10. Reference documents for consideration in preparing the WSCP can be found in Section 8.4.7 and at the end of this chapter in Section 8.13.

Wholesale Only

Water Code Section 10620(c):

An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

Wholesale Suppliers are required to prepare a WSCP inclusive of the eight elements listed below. Per Water Code Section 10620(c), they may not include planning elements as part of their UWMP that would apply to other water suppliers without the consent of those other suppliers. In other words, a wholesaler without permission from the applicable suppliers still must develop a WSCP composed of the following elements, but their planned actions may not be applicable to other suppliers or their customers.

- WSRA.
- Annual assessment procedures.
- Shortage response levels.

- Shortage response actions.
- Communication plan for shortage levels.
- Description of legal authorities used to implement shortage response actions. Note that this is where a wholesaler could include whether or not its member agencies have given permission for the wholesaler to develop certain planning elements related to their system.
- Financial impact analysis of water shortage conditions.
- WSCP refinement procedures.

8.1 Water Supply Reliability Analysis

Water Code Section 10632(a)(1)

The analysis of water supply reliability conducted pursuant to Section 10635.

Water Code Section 10632.5.(a)

In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

All Suppliers

This section provides a concise narrative, summarizing the Supplier's Water Supply Reliability Analysis in Chapter 7, recognizing that the WSCP can be a stand-alone document that is included in the 2025 UWMP. The Water Supply Reliability Analysis also includes the DRA, along with risk assessments identified in Water Code. This section also describes the key issues that may create a shortage condition when looking at a Supplier's water asset portfolio.

The Supplier is encouraged to consider all issues—foreseeable or unforeseeable—that could lead to water supply shortages. For example, a Supplier that relies exclusively on groundwater may show that its water supplies are reliable under all statutorily required conditions, but that a low probability, high impact issue—like the sudden presence of an unforeseen toxin—may require shuttering the main groundwater pumping system and activating the WSCP. This section would provide the context for evaluation of threats to water supply reliability that are identified in the WSCP.

Seismic Risk Assessment. Earthquakes are common, relatively well-tracked and studied in California, and are recognized as high probability occurrences in many regions across the state. Some Suppliers' facilities, more than

others, may be better engineered to withstand seismic activity, especially if built or otherwise renovated recently. Older facilities may be more vulnerable to seismic activity and therefore such associated risk may be considered higher by the Supplier.

Pursuant to Water Code, the WSCP seismic risk assessment must include a description of the vulnerability of each of the Supplier's water system(s') facilities to earthquakes and other seismic risks. Note that many water distribution systems may have facilities or components that extend outside of the Supplier's service distribution area (e.g., transmission pipes, delivery canals, surface water diversion pumps). These facilities may or may not be owned or controlled by the Supplier. In some cases, a Supplier may decide that the specific descriptions and locations of vulnerable infrastructure is not appropriate to make public. In such situations, a Supplier must still fulfill the Water Code requirements but could find an alternative way to keep the information of concern confidential. As an example, a Supplier might choose to create their own unique identifiers for part of the system in a way that is not readily interpreted by the public to be associated with a particular facility.

In lieu of conducting their own seismic risk assessment, which can be a lengthy process, Suppliers can address the Water Code requirement by submitting the relevant local hazard mitigation plan or multihazard mitigation plan, if available, so long as it includes a seismic risk assessment. Use of such plans has the advantage of also being consistent with local land-use planning. Plans are available by contacting the relevant land-use authority and the online version of many county or city local Hazard Mitigation Plans are available from the local or county website.

Additionally, the California Office of Emergency Services provides an online planning tool called [My Plan 2.0](#) for local planning agencies and interested parties. This tool includes many layers related to seismic risk that can be explored by users. Maps include, but are not limited to, information on shaking hazards, landslide zones, liquefaction, and fault lines. Users can upload their own shapefile of existing facilities and the Supplier's service area to help explore and describe the seismic risks.

Recommended

Suppliers are encouraged to also assess the vulnerability of external facilities that are part of their water infrastructure network since failure of them would still ultimately disrupt the Supplier's ability to serve their customers.

Though not specified in the Water Code, Suppliers are encouraged to include a description of the common components of risk in the UWMP risk assessments, which are (1) the probability or likelihood of occurrence of

seismic activity in the area of their system(s) facilities, and (2) the degree of impact on the reliability of the system's facilities and operations if seismic activity of a given size (or sizes) were to occur.

8.2 Annual Water Supply and Demand Assessment Procedures

Water Code Section 10632(a)

Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan that consists of each of the following elements

Water Code Section 10632(a)(2)

The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:

- (A) The written decision-making process that an urban water supplier will use each year to determine its water supply reliability.
- (B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:
 - (i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.
 - (ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.
 - (iii) Existing infrastructure capabilities and plausible constraints.
 - (iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.
 - (v) A description and quantification of each source of water supply.

Water Code Section 10632.1.

An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated

shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

All Suppliers

Every Supplier is required to prepare an annual water supply and demand assessment (referred to in this Guidebook as an Annual Assessment) and submit an Annual Shortage Report to DWR by July 1 of every year, as required by Water Code Section 10632.1. The Annual Assessment and associated reporting are to be conducted based on the Supplier's procedures detailed in the WSCP.

A stand-alone guidance document recommending practical procedures and analytical methods that may be used at the Supplier's discretion to comply with the Annual Assessment requirement effectively and efficiently is available on DWR's [Annual Water Supply and Demand Assessments](#) webpage. The Annual Assessment guidance discusses varying water supply sources and water use conditions to help Suppliers develop their own procedures.

This section of the Guidebook offers general guidance for Suppliers regarding the Annual Assessment information that must be included in the WSCP, but it does not provide guidance on the Supplier-specific procedures themselves. Furthermore, this section of the Guidebook does not provide guidance on the form or substance of Water Shortage Reports to be submitted to DWR.

As required by Water Code Section 10632(a), the Supplier's WSCP shall include its specific procedures—akin to an instruction manual—that describe annual steps and timing to complete the Annual Assessment, such that it can be consistently followed year-after-year, regardless of changing Supplier staff undertaking the steps. Water Code requires that the following shall be described by the Supplier in its WSCP for this element.

The following sections describe the Annual Assessment and Water Shortage Report elements that must be included in the WSCP.

Recommended

Refer to DWR's [Annual Water Supply and Demand Assessments](#) webpage for details on these processes.

8.2.1 Decision-Making Process

All Suppliers

The written decision-making process that describes the functional steps to determine the Supplier's water supply reliability each year must be included in the WSCP. For example, a Supplier's process may include a schedule or timeline for when certain steps occur that includes a formal presentation to its elected body (e.g., at a Board or Council meeting) with a request that the body vote on the findings of the Annual Assessment and appropriately trigger any recommendations for specific shortage response actions resulting from the Annual Assessment.

8.2.2 Data and Methodologies

All Suppliers

Key data inputs and methodologies that will be used to evaluate the water service reliability for the current year and one dry year must be included in the WSCP. This element must include the following key data inputs and methodologies including:

- **Current Year Unconstrained Customer Demand.** How the Supplier will determine anticipated customer water needs for the current year considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet use objectives in future years, as applicable. Customer water use ideally reflects the same methodology presented in Chapter 4 for projecting use, while allowing for real-time adjustments to account for factors such as weather, prior-year conditions, anticipated new uses for the year, and other factors pertinent to the land use and customer use patterns known to the Supplier.
- **Current Year Available Supply.** How the Supplier will evaluate the current year available supply, considering hydrological and regulatory conditions in the current year and one dry year (e.g., SWP allocations, hydrologic forecasting, restrictions based on prior-year supply availability and use, other methods or factors to take into consideration). Each year's assessment may be informed by the characterizations in Chapter 6 and other current pertinent factors and considerations. Suppliers may, but are not required to, consider more than one dry year.
- **Infrastructure Considerations.** Evaluation of how existing infrastructure capabilities and plausible constraints may affect the Supplier's ability to deliver supplies to meet expected customer water use needs in the current year and one dry year. This could include anticipated capital projects that may influence capabilities, such as repairs that may constrain capabilities (e.g., planned treatment plant upgrades) or new

projects that may add capacity (e.g., a new groundwater well or system intertie).

- **Evaluation Criteria.** The locally applicable evaluation criteria that will be consistently relied on for each Annual Assessment.
- **Water Supply.** Quantification of each source of water supply along with descriptive text and methods used to determine these values.

Since an Annual Assessment reflects the Supplier's specific circumstances, the procedures developed and consistently applied will likely vary among Suppliers—there is no formulaic requirement mandated by the State, only that specific elements are included.

The focus of the Supplier's Annual Assessment is best based on actual forecasted near-term water supply conditions (for the next 12 months) to ensure appropriate shortage response actions are triggered in a timely manner with expected outcomes. This analysis contrasts with the DRA (refer to Chapter 7), which has a longer-term, multiyear water supply reliability focus.

Recommended

Dry Year Characterization. The dry-year characterization is at the discretion of the Supplier, but it should be adequately defined and ideally align with one of the WSCP water shortage levels.

Other Factors. Suppliers are encouraged, but not required, to describe any specific locally applicable factors that can influence or disrupt supplies, along with other unique local considerations that are considered as part of the Annual Assessment.

Early Assessment. Although Water Shortage Reports must be submitted to DWR on or before July 1 of every year, an early Annual Assessment allows Suppliers and customers to identify uncertainties and prepare financially and logistically for any anticipated water supply constraints in the coming months. Therefore, Suppliers are encouraged to develop procedures, including decision-making processes, that facilitate early analysis and adoption.

Evaluate Previous Protocols. Suppliers are encouraged to evaluate how previous Annual Assessment and Water Shortage Reporting worked and update the procedures in the WSCP to address any shortcomings.

Refer to DWR's Guidance. Suppliers are also encouraged to refer to DWR's guidance on the [Annual Water Supply and Demand Assessment](#) webpage for additional guidance, requirements, and details.

8.3 Six Standard Water Shortage Levels

Water Code Section 10632(a)(3)

- (A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.
- (B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.

All Suppliers

Suppliers must include six standard water shortage levels that represent shortages from normal reliability. The shortage levels have been standardized to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. If a Supplier previously used different shortage levels and wishes to continue using them, a cross-reference must be provided (refer to the subsection below and Section 8.14.1).

The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50-percent, and greater than 50% shortage compared to the normal reliability condition) and align with the response actions the Supplier would implement to meet the severity of the shortages. For example, in normal circumstances, a Supplier may meet its anticipated customer water use with 100% of its available supply. At a 10% shortage level, the Supplier must show its normally available supply is reduced by 10%, then identify locally appropriate shortage response actions (refer to Section 8.4) that would address the resulting gap—be those actions that seek temporary reductions in customer water use or actions that initiate alternative supplies not otherwise normally available to the Supplier.

The same shortage considerations apply to the remaining statutorily mandated levels. Catastrophic water shortages must also be included in the water shortage levels with appropriate response actions.

In concept, each of the six shortage levels represents an ever-increasing gap between normally available supplies and normally expected customer water use. The normally expected supply and water use reflects the characterization of each as presented in Chapter 7. Given these quantifiable gaps, the Supplier can then identify specific shortage response actions to address the anticipated magnitude of the shortage (refer to Section 8.4).

A concise summary of the response actions taken for each shortage level are discussed in the sections below and can be described in Submittal Table 8-2.

Retaining Existing WSCP Shortage Levels

Water Code Section 10632 (a)(3)(B) allows Suppliers to continue using their own water shortage levels that may have been included in past WSCPs. If the Supplier chooses to continue to do so in its new WSCP, it must include a narrative or graphic describing the Supplier's water shortage levels in relationship to the six standard water shortage levels prescribed by statute. In other words, the Supplier must provide a cross-reference that clearly translates the Supplier's water shortage levels to those mandated by statute. An example cross-reference is provided in Figure 8-1.

Figure 8-1. Example of Corresponding Relationships Between a Supplier's Own Shortage Levels and the State-Mandated Standard Shortage Levels

2015 UWMP Stage	Supply Condition/ Shortage		2020 WSCP Level	Shortage Level
1 - Voluntary	Normal	→	1	≤ 10%
2 – Water Alert	Slightly Restricted (12%)	→	2	10 - 20%
3 – Water Warning	Moderately Restricted (20%)	→	3	20 - 30%
4 – Water Criteria	Severely Restricted (35%)	→	4	30 - 40%
		→	5	40 - 50%
5 – Water Emergency	Extremely Restricted (>50%)	→	6	>50%

Submittal Table 8-1 will be used for Suppliers to provide the cross-reference between standard water shortage levels and customized shortage levels, if non-standard shortages level will be used by the Supplier. Those Suppliers using standard water shortage levels can just check the box at the top

indicating shortage levels will be consistent with Water Code standardized levels (no cross reference is necessary). The cross-reference details can be included in the UWMP narrative.

Recommended

DWR recommends that Suppliers include a description of how catastrophic shortages are tied to the water shortage levels in the narrative.

Since water use and supply are typically variable on a monthly or seasonal basis, Suppliers are encouraged to develop the shortage evaluation and response actions on a monthly or at least seasonal basis.

DWR strongly recommends that Suppliers using shortage levels that are different from standardized levels complete Submittal Tables 8-2 and 8-3 using the six standard levels. If Suppliers choose to complete Submittal Tables 8-2 and 8-3 with existing, different levels, they should note this in the “Notes” section of these tables.

Relevant Submittal Tables in Section 8.14

- All Suppliers: Submittal Table 8-1

8.4 Shortage Response Actions

Water Code Section 10632 (a)(4)

Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

- (A) Locally appropriate supply augmentation actions.
- (B) Locally appropriate demand reduction actions to adequately respond to shortages.
- (C) Locally appropriate operational changes.
- (D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.
- (E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

Water Code Section 10632.2

An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified

in subdivision (a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1. Nothing in this section prohibits an urban water supplier from taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.

All Suppliers

For each shortage level, the Supplier will have a set of corresponding actions to address the shortage and will address increasing anticipated gaps between supply and use conditions.

For example, Shortage Level 1 will have actions that can be expected to reduce overall water use, or boost supply, by 10%. Level 2 may expand on some of the Level 1 actions and may add new actions, which together can be expected to reduce overall water use and/or boost supply so as to eliminate the shortage gap by 20%. Ideally, the cumulative volume or percentage achieved by implementing all actions for each shortage level should sum to eliminate the shortage gap of that shortage level.

The Water Code specifies the types of shortage response actions to align with the shortage levels that must be included in the WSCP. The authority to determine shortage conditions and to select the appropriate shortage response actions remains with the Supplier. When identifying and developing the specific response actions, DWR recommends that Suppliers consider the availability and feasibility of a broad range of system infrastructure and operational changes, supply augmentation responses, customer-class or water-use-specific demand-reduction initiatives, and increasingly stringent water-use prohibitions. The specific response actions will all depend on the severity of the shortage levels, local conditions, and will ideally be based on a quantitative analysis of the effectiveness of each action. In the WSCP, Suppliers can describe all of the water shortage response actions that they wish to consider for both demand reduction and the supply augmentation in this section.

Suppliers may choose to reserve the most costly and politically challenging tools for the most extreme contingencies.

The following sections provide guidance on how to report actions that will be triggered by the different shortage levels as categorized in Water Code Section 10632 (a)(4).

Recommended

Because supplies, uses, and associated constraints can vary throughout the year, it is highly recommended that the WSCP shortage response actions be identified for smaller time-steps than an annual basis (e.g., seasonal or monthly).

As an internal check, DWR recommends that the cumulative volume or percentage achieved by implementing all actions as reported in Submittal Tables 8-2 and 8-3 for each shortage level should sum to eliminate the shortage gap at that shortage level.

8.4.1 Supply Augmentation

All Suppliers

To the extent a Supplier has already described a supply that would be managed uniquely in response to shortages in other supplies (as described in Chapters 6 and 7 and pursuant to Water Code Section 10631[b][2]) the Supplier may want to indicate that a particular supply augmentation response included in its WSCP has already been integrated into normal water management planning for shortage conditions. In this case, it may not be a response triggered by a WSCP's shortage level but already represented in the determination of any gap between supply and customer water use (refer to Section 8.3).

For example, if a Supplier already intends to pump groundwater during dry conditions when a surface supply is constrained to help meet water supply reliability objectives, then triggering the groundwater pumping under a defined shortage level may either be (1) redundant or (2) inaccurate, as the water shortage level already assumed the pumping was occurring, thus the pumping as a response action will not address the anticipated water shortage level gap.

General actions that are simply theoretical, such as "acquire water through water transfers" should be avoided as a response action because its effectiveness at reducing the gap between supply and use cannot be estimated; the ability of the Supplier to obtain this water and how much can be obtained is unknown. However, specific actions such as, "acquire emergency dry year supply under Contract X with neighboring water supplier" would meet a reasonableness threshold.

Long-term, new water supply development or supply reliability enhancement projects identified in Chapter 6, that are separate from the short-term management objectives, would generally be excluded from consideration as a response action because they are not currently ready to implement.

However, if the long-term water supply augmentation action has a short-term, ready-to-implement actionable component, then it would be applicable to use this source as a response action.

When describing augmentation measures, it is important to identify the water shortage level that triggers the augmentation, what the supply source(s) is, the amount of available supply, and the timing of supply availability. For example, if a Supplier has access to a short-term surface water supply for its supply augmentation portfolio, but these water supplies are only available during the winter months, it may not be useful in mitigating a water shortage condition that only occurs during summer months. However, this augmentation supply may be able to be used in the winter months to free up other water supplies that can then be used to meet summer water shortages. Alternatively, a Supplier may have access to an ample amount of augmentation supply on an annual basis, but that supply has an upper limit on the monthly supply available. If all of the water shortage occurs during a particular month or two, the monthly maximum supply availability may be insufficient to mitigate the water shortage condition. These conditions on the amount and timing of supply availability can affect how a Supplier can realistically activate this supply to mitigate water shortages.

Suppliers are to include supply augmentation and other actions by shortage level in Submittal Table 8-2 R and 8-2 W.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 8-2 R or 8-2 W; one for each participating Supplier and include the name of the Supplier in the “Notes” section at the bottom of the table.

Relevant Submittal Tables in Section 8.14

- Retail Suppliers: Submittal Table 8-2 R
- Wholesale Suppliers: Submittal Table 8-2 W

8.4.2 Demand Reduction

All Suppliers

There are a number of demand-reduction measures Suppliers can implement as response actions to address shortage levels. Some of these may include public education and outreach campaigns, watering and other outdoor use restrictions, and rate structure changes. Other demand-reduction actions, such as infrastructure improvements or installation of water-efficient appliances and fixtures would be implemented over a longer-term and may not be appropriate as a WSCP response action; financial assistance in

response to water shortage conditions that may provide opportunities for these actions cannot be relied upon.

A narrative description of the Supplier's chosen shortage response actions would include an indication of which actions would align with specific defined shortage levels. For these selected possible demand-reduction temporary actions, Suppliers should equate the actions with the amount of demand reduction to address the anticipated gap between supplies and uses. Many Suppliers have found that a table is the most effective means of showing which actions are included in each level and that may describe the approximate quantitative benefit anticipated from its implementation.

Suppliers may include standard or locally developed water-use prohibitions such as outdoor irrigation restrictions by day, time of day, or location, and enforcement patrols and fines for gutter flooding or other customer water waste. In other words, if a Supplier is seeking to address a 20% shortage through demand-reduction response actions, they should have reasonable certainty that the actions will equate to a 20% demand reduction. For example, if the Supplier found that restricting outdoor irrigation to even or odd days had little measurable effect on overall water use, it may be better to consider other more effective response actions.

Any demand-reduction actions for each shortage level are described in Submittal Table 8-3.

RUWMPs. RUWMPs will use multiple versions of Submittal Table 8-3 R or 8-3 W; one for each participating Supplier and include the name of the Supplier in the "Notes" section at the bottom of the table.

Recommended

Suppliers are encouraged to evaluate the likely demand reductions on a monthly basis so that it appropriately aligns expectations and actual conditions during any given month.

Relevant Submittal Tables in Section 8.14

- Retail Suppliers: Submittal Table 8-3 R
- Wholesale Suppliers: Submittal Table 8-3 W

8.4.3 Operational Changes

All Suppliers

In the WSCP, Suppliers should consider their operations and identify changes that can be implemented to address water shortage on a short-term basis.

Some operational changes may be related to supply augmentation or demand-reduction response actions and can be addressed when describing those response actions. Other potential operations' response actions for a non-catastrophic water shortage that a Supplier may wish to consider include, but are not limited to:

- Improved monitoring, analysis, and tracking of customer water usage rates
- Alterations in maintenance cycles and plans to expedite infrastructure repairs and improve system efficiency

There is no separate Submittal Table for operational changes that may be implemented. Any operational changes will be reported as having the effect of either a supply augmentation in Submittal Tables 8-2 R and 8-2 W or demand reduction in Submittal Tables 8-3 R and 8-3 W.

8.4.4 Additional Mandatory Restrictions

Retail Only

Implementation of mandatory restrictions can be an effective but unpopular method for reducing customer usage because it is associated with enforcement actions and penalties. Mandatory restrictions can include a number of items such as limitations on outdoor water use (timing, volume, location), limiting total residential water use, restrictions on using water for certain functions (e.g., car washing), and other restrictions. Mandatory restrictions from either existing codes and ordinances or implemented by the Supplier will be reported in Submittal Tables 8-3 R and 8-3 W.

During large-scale drought conditions, additional State or regional mandatory restrictions may be implemented. However, since these are not known or under the authority of the Supplier, these would not be included in the WSCP unless the WSCP was updated or amended in response to implementation of these restrictions.

8.4.5 Emergency Response Plan

All Suppliers

Catastrophic water shortage response actions must be included in the Supplier's WSCP. America's Water Infrastructure Act of 2018 Section 2013(b) requires community water systems serving populations greater than 3,300 to develop or update an Emergency Response Plan (ERP) that incorporates findings of their risk and resilience assessment. An ERP describes strategies, resources, plans, and procedures utilities can use to

prepare for and respond to an incident, natural or man-made, that threatens life, property, or the environment. Incidents can range from small main breaks or localized flooding to large-scale hurricanes, earthquakes, or system contamination, among other examples. The State Water Board also offers ERP development guidance and requirements for those drinking water systems that serve more than 1,000 service connections.

Where applicable, a Supplier may choose to incorporate elements of its ERP in its WSCP, or to reference the ERP as appropriate for specific conditions and types of water shortages. In either case, Suppliers can include a copy of their latest ERP as an attachment to the WSCP for addressing many catastrophic water shortage conditions. For catastrophic water shortage conditions, the Supplier may have sufficient facilities and infrastructure to reroute around a temporary disruption. Suppliers can also schedule planned disruptions to occur when other supplies are not limited or access to an alternative supply is available. These may be already adequately addressed in the ERP.

8.4.6 Seismic Risk Assessment and Mitigation Plan

Water Code Section 10632.5.(a)

In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

- (b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.
- (c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

All Suppliers

Per the Water Code Section 10632.5, Suppliers are required to assess seismic risk to water supplies as part of their WSCP. The plan also must include the mitigation plan for the seismic risk(s). The Supplier may already have such a plan in place, perhaps for fulfilling part of the risk and resilience assessment as part of the America's Water Infrastructure Act of 2018. Suppliers must also have an ERP, which describes strategies, resources, plans, and procedures utilities can use to prepare for and respond to an

incident, natural or man-made, that threatens life, property, or the environment. Together these (i.e., the risk assessment and ERP) or other existing assessments and plans by the Supplier may be sufficient to use for the UWMP if it meets the requirements described in the Water Code Section 10632.5.

In this section the Water Code specifies the Supplier also must include a description of the plan for mitigating the seismic risks identified. This may be developed by the Supplier, such as for specific facilities, or it may be used from the existing Hazard Mitigation Plans mentioned above, or a combination of both.

8.4.7 Shortage Response Action Effectiveness

All Suppliers

For each specific shortage response action identified in the plan, the WSCP must also estimate the extent to which that action will reduce the gap between supplies and uses. Essentially, the purpose of this section of the WSCP is to demonstrate to the Supplier's satisfaction that a given suite of shortage response actions can be expected to deliver the expected outcomes necessary to meet the requirements of a given shortage level. Specific local circumstances and administrative and political considerations should be acknowledged in the Supplier's description of shortage response actions. The Supplier has the discretion to determine which actions are considered locally appropriate (subparts A, B, C, and D of Water Code Section 10632 [a][4]).

Given the difficulty of accurately quantifying demand-reduction benefits resulting from specific water shortage response actions, it is important to understand current water-use patterns and how demand changes in response to various economic, environmental, and social variables.

Suppliers can estimate effectiveness based on water-use changes that have occurred historically in response to implementing water shortage actions. Suppliers may look to their recent experience (or that of other similarly situated Suppliers) during the drought of 2012-2016, to help quantify the magnitude of reduction benefit they may expect from a given action.

Unforeseen events and conditions can also lead to temporary or long-term water shortages. These could include situations such as wildfires, earthquakes, civil unrest, sudden adverse weather, critical infrastructure failure, and others. Recent responses to, or other experiences with managing any emergency or hazard that results in a water shortage and the associated water shortage level can be useful information for estimating effectiveness of WSCP strategies.

Resources and references listed in Section 8.13 offer a sample of studies and insights regarding effectiveness of conservation measures and other shortage response actions, as well as examples of how to analyze their effectiveness. However, it is likely that Suppliers will have to adjust expected benefits for their own, unique local situation.

Recommended

DWR recommends a month-by-month analysis of the efficacy of the proposed suite of response actions rather than on an average annual basis to ensure an adequate response even in months with highest water use. For example, it may be that a suite of response actions can result in a 10% decrease in annual use, but in any given month, the shortage from *normal* water use in that month may be greater or less than the annual average shortage.

8.5 Communication Protocols

Water Code Section 10632

- (a) Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan consists of each of the following elements:
 - (5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:
 - (A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.
 - (B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.
 - (C) Any other relevant communications

All Suppliers

Per the Water Code, Suppliers must describe their communication protocols and procedures in the event of a water shortage. Timely and effective communication is a key element of water shortage contingency planning implementation. This element is focused on communicating the water shortage contingency planning actions that can be derived from the results of the Annual Assessment, and it would likely be triggered based upon the decision-making process articulated by the Supplier under Section 8.2.1.

The communication protocols and procedures in the WSCP must include specific communications protocols that would be triggered to address each particular shortage level and the response actions to be implemented. The type and degree of communication will likely vary with each shortage level, thus predefined and actionable communication protocols will improve the Supplier's ability to message necessary events. Communication protocols may cover methods and mechanisms used to inform Suppliers' customers; the general public and interested parties; and local, regional, and State government entities. These may include social media posts, bill stuffers or newsletters, press releases, radio spots, television coverage, and blog posts.

Communication protocols could also include emergency communications protocols to address earthquakes, fires, infrastructure failures, civil unrest, and other catastrophic events, however these protocols may already be part of the Supplier's ERP.

This is another element of the WSCP that is useful to summarize as part of a table indicating shortage levels, response actions, and communications protocols and processes for each shortage level.

Recommended

Although Section 10632 specifically identifies the use of these communication protocols specifically when addressing a shortage (or anticipated shortage) that is determined in the Annual Assessment, at a minimum, it is strongly recommended that this section of the WSCP include communication protocols for any water shortage condition including catastrophic and seismic events.

8.6 Compliance and Enforcement

Water Code Section 10632 (a)(6)

For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

Retail Only

Retail Suppliers, must include an element that describes how they will ensure compliance with and enforce provisions of the WSCP. These could include compliance and enforcement actions such as:

- Customer service, education, and communication programs
- Water-waste patrols
- Warning and citation protocols

- Fines and surcharges
- Policies and procedures related to treatment of irrigation malfunctions
- Other Supplier responses

Suppliers can detail their protocols for treatment of first violations, second violations, third violations, and any progressively increasing actions associated with more egregious levels of violation in relationship to the six standard water shortage levels as part of their compliance and enforcement description.

This element must also include a description of their appeals and exemption processes. Where feasible, specific exemptions can be identified and defined. Where not feasible, the process to appeal or obtain an exemption should be detailed.

If a Supplier uses their rate structure as an enforcement mechanism, they may provide detailed information of their drought and/or conservation rate structures in an appendix and summarize the key points in this section.

In addition to providing details in the narrative, Suppliers can use the last column in Submittal Table 8-3 R to indicate if there are any penalties, fines or other enforcement actions associated with a particular demand-reduction action.

Recommended

Suppliers are encouraged to pursue necessary authorities, such as government codes or adopted ordinances, prior to needing to implement any shortage response actions.

8.7 Legal Authorities

Water Code Section 10632 (a)(7)

- (A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.
- (B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1. [see below]
- (C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services

for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

Water Code Section Division 1, Section 350

Declaration of water shortage emergency condition. The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

8.7.1 Legal Authorities

All Suppliers

This section is intended to disclose the legal authorities that the Supplier relies upon to implement and enforce the shortage response actions identified in the WSCP.

The narrative in this section will list all relevant statutory authorities; local ordinances, codes, and resolutions; and any water supply contract provisions to which the Supplier is subject. Suppliers that do not have sufficient authority or are pursuing additional authorities to implement their WSCP should describe the limits of their current authority and may include a summary of their planned actions, copy of and Draft Resolution, Ordinance, Code, or other mechanism they are pursuing. If these authorities become approved and adopted, Suppliers can update their WSCP with the new authorities and readopt it in accordance with the process discussed in Section 8.12.

8.7.2 Declaration of Water Shortage

All Suppliers

Additionally, in their WSCP, Suppliers must include a specific statement that it “shall declare a water shortage emergency,” or similar language to indicate that it is in accordance with Water Code Chapter 3 (commencing with Section 350) of Division 1 general provision regarding water shortage emergencies.

8.7.3 Proclamation of Local Emergency

All Suppliers

California Government Code, California Emergency Services Act (Article 2, Section 8558) requires that the Supplier: “shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency” under. Suppliers can address this requirement by including a description of the coordination. Including a list of and contacts for all cities or counties for which the Supplier provides service in the WSCP, along with developed coordination protocols, can assist Suppliers in addressing this requirement in the event of a local emergency as defined in subpart (c) of Government Code Section 8558.

8.8 Financial Consequences of a Water Shortage Contingency Plan

Water Code Section 10632(a)(8)

A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

- (A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).
- (B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).
- (C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1. [retail urban suppliers only]

8.8.1 Financial Impacts and Mitigation Action

All Suppliers

Suppliers must include a description of the overall anticipated financial consequences to the Supplier of implementing the WSCP shortage response actions.

Fiscal Impacts. This description must include potential reductions in revenue and increased expenses associated with implementation of the shortage response actions described in the WSCP.

Fiscal impacts may include, but are not limited to:

- Reduced revenue from reduced water use under the WSCP level.
- Increased staff costs for tracking, reporting, and enforcement.
- Economic impacts associated with water dependent businesses in the Supplier's service area.
- Impacts of reduced flows on related water utilities (e.g., wastewater collection systems, recycled water).

These should be coupled with the anticipated mitigation actions needed to address these financial impacts.

Mitigation Actions. Mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in this section may include, but are not limited to:

- Triggering of any drought rate structures or surcharges.
- Using financial reserves.
- Reducing operation and maintenance expenses.
- Deferring capital improvement projects.
- Reducing future projected operation and maintenance expenses.
- Increasing any fixed readiness-to-serve charge.
- Increasing any commodity charge and water adjustment rates to cover revenue shortfalls.
- Any other financial management mechanisms used by the Supplier.

Suppliers can indicate which mitigation mechanisms, and to what extent, are to be considered under each of the water shortage levels described in the WSCP.

Recommended

This element of the WSCP can be summarized as part of a table, in addition to the Submittal Tables, displaying response actions, communications protocols, and costs or revenue losses for each water shortage level and/or response action.

8.8.2 Reporting Cost of Compliance With Excessive Water Use Prohibition During Drought Emergency

Water Code Section 10632(a)(8)

(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

Retail Only

Water Code requires Retail Suppliers to report on the cost of compliance with implementing Water Code Section 366, which requires that Retail Suppliers prohibit excessive water use from individually-metered or submetered residential customers through one of two options during one of these three types of drought emergencies identified in Water Code Section 367. These options include:

- Rate structures, or
- Excessive water use ordinance(s).

Reporting on implementing these actions or decisions to determine excessive water use is not a required part of the WSCP or UWMP, however, Water Code Section 10632(a)(8)(C) does require that the cost of compliance with this part of Water Code be reported as part of the Supplier's WSCP.

The types of drought emergencies identified in Water Code Section 367 include:

- Governor declared statewide drought emergency
- Suppliers move to a local water shortage condition requiring mandatory reductions (as part of the WSCP)
- Governor declared local drought emergency

For reference these relevant Water Code Sections are provided below.

Water Code Section 366

- (a) During periods described in subdivision (a) of Section 367, excessive water use is prohibited by a residential customer in a single-family residence or by a customer in a multiunit housing complex in which each unit is individually metered or submetered by the urban retail water supplier.
- (b) Each urban retail water supplier shall establish a method to identify and discourage excessive water use, through one of the following options:
 - (1) Establishing a rate structure, subject to applicable constitutional and statutory limitations, that includes block tiers, water budgets, or rate surcharges over and above base rates for excessive water use by a residential water customer.
 - (2)(A) Establishing an excessive water use ordinance, rule, or tariff condition, or amending an existing ordinance, rule,

or tariff condition, that includes a definition of or a procedure to identify and address excessive water use by metered single-family residential customers and customers in multiunit housing complexes in which each unit is individually metered or submetered and may include a process to issue written warnings to a customer and perform a site audit of customer water usage prior to deeming the customer in violation.

- (B) For the purposes of subparagraph (A), excessive water use shall be measured in terms of either gallons or hundreds of cubic feet of water used during the urban retail water supplier's regular billing cycle. In establishing the definition of excessive use, the urban retail water supplier may consider factors that include, but are not limited to, all of the following:
 - (i) Average daily use.
 - (ii) Full-time occupancy of households.
 - (iii) Amount of landscaped land on a property.
 - (iv) Rate of evapotranspiration.
 - (v) Seasonal weather changes.
- (C)(i) A violation of an excessive use ordinance, rule, or tariff condition established pursuant to subparagraph (A) shall result in an infraction or administrative civil penalty. The penalty for a violation may be based on conditions identified by the urban retail water supplier and may include, but is not limited to, a fine of up to five hundred dollars (\$500) for each hundred cubic feet of water, or 748 gallons, used above the excessive water use threshold established by the urban retail water supplier in a billing cycle.
- (ii) Any fine imposed pursuant to this subparagraph shall be added to the customer's water bill and is due and payable with that water bill.
- (iii) Each urban retail water supplier shall have a process for nonpayment of the fine, which shall be consistent with due process and reasonably similar to the water supplier's existing process for nonpayment of a water bill.
- (D)(i) Consistent with due process, an urban retail water supplier shall establish a process and conditions for the appeal of a fine imposed pursuant to subparagraph (C) whereby the

customer may contest the imposition of the fine for excessive water use.

- (ii) As part of the appeal process, the customer shall be provided with an opportunity to provide evidence that there was no excessive water use or of a bona fide reason for the excessive water use, including evidence of a water leak, a medical reason, or any other reasonable justification for the water use, as determined by the urban retail water supplier.
- (iii) As part of the appeal process, the urban retail water supplier shall provide documentation demonstrating the excessive water use.
- (c)(1) The provisions of subdivision (b) do not apply to an urban retail water supplier that is not fully metered in accordance with Section 527. An urban retail water supplier shall comply with the provisions of subdivision (b) when all of the water supplier's residential water service connections are being billed based on metered water usage.
- (2) An urban retail water supplier that is not fully metered shall prohibit water use practices by an ordinance, resolution, rule, or tariff condition that imposes penalties for prohibited uses of water supplied by the water supplier. The urban retail water supplier may include a process to issue written warnings prior to imposing penalties as well as increased penalty amounts for successive violations.

Water Code Section 367

- (1) During a period for which the Governor has issued a proclamation of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on statewide drought conditions to an urban retail water supplier that has moved to a stage of action in response to a local water supply shortage condition under the water supplier's contingency plan pursuant to paragraph (1) of subdivision (a) of Section 10632 that requires mandatory water use reductions.
- (2) To an urban retail water supplier during a period in which the water supplier has moved to a stage of action in response to a local water supply shortage condition under the water supplier's contingency plan pursuant to paragraph (1) of subdivision (a) of Section 10632 that requires mandatory water use reductions.

- (3) To an urban retail water supplier affected during a period for which the Governor has issued a proclamation of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on local drought conditions.

Wholesale Only

Wholesale Suppliers are not required report on cost of compliance with drought emergency actions.

8.9 Monitoring and Reporting

Water Code Section 10632(a)(9)

For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

Retail Only

Retail Suppliers must describe how they will monitor and report on implementation of their WSCP. Monitoring and reporting key water-use metrics is fundamental to water supply planning and management. Monitoring is also essential to ensure that the response actions are actually achieving their intended water-use reduction or if improvements or new actions need to be considered. Monitoring for customer compliance tracking is also useful in enforcement actions.

Retail Suppliers will need to identify the appropriate data and metrics for monitoring customer compliance, as well as how these data will be collected, tracked, and stored. It should be noted that timing, frequency, and metrics, themselves, will likely be variable, depending on the metric being monitored, water shortage level, as well as enforcement action logistics.

The State Water Board requires monthly reporting of water production and other water uses, along with associated enforcement metrics can also be summarized in the WSCP and incorporated by reference.

Wholesale Only

Wholesale Suppliers are not required to describe methods of monitoring and reporting on the effects of WSCP implementation.

8.10 Water Shortage Contingency Plan Refinement Procedures

Water Code Section 10632 (a)(10)

Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

All Suppliers

The WSCP is best prepared and implemented using an adaptive management approach. Suppliers should describe how it intends to use the results of its monitoring and reporting program, described in Section 8.9, to evaluate the need for, and procedures to revise its WSCP. Suppliers should consider their WSCP as a dynamic tool that should be the subject of refinements as needed to ensure that its shortage response actions are effective and to produce the desired results. If certain procedural refinements or new actions are identified by Supplier staff, or suggested by customers or other interested parties, the Supplier should have an identified mechanism, including criteria, to evaluate their effectiveness, decide on whether to incorporate them into the WSCP, and implement them quickly at the appropriate water shortage level.

8.11 Special Water Feature Distinction

Water Code Section 10632 (b)

For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

Retail Only

Applicable only to Retail Supplier's planning, water features that are not pools or spas are analyzed and defined separately from pools and spas in the WSCP. Non-pool or non-spa water features may use or be able to use recycled water, whereas pools and spas must use potable water for health and safety considerations. Limitations to pools and spas may require different considerations compared to non-pool or non-spa water features. Suppliers

may provide terminology in their WSCP that distinguishes water features from swimming pools, for example, using designations such as “decorative water features” and “recreational water features” and prepare response actions, enforcement actions, and monitoring programs for each, respectively.

Wholesale Only

There are no Wholesale Supplier requirements for special water feature distinction.

8.12 Plan Adoption, Submittal, Availability, and Amendment Procedures

Water Code Section 10632 (c)

The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

Water Code Section 10642.

...Prior to adopting either [UWMP and WSCP], the urban water supplier shall make both the plan [UWMP] and water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon...After the hearing or hearings, the plan [UWMP] or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

Water Code Section 10640.

- (b) ...The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article [Article 3 Sections 10640 -10645]

Water Code Section 10644(a)(2)(b)

If an urban water supplier revises its water shortage contingency plan the supplier shall submit to the department a copy of its water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 [required elements of a WSCP] no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

All Suppliers

In this element, Suppliers can document their processes and steps to adopt, submit, implement, and amend the WSCP. In most cases, these processes will follow those used for the Supplier's UWMP (Chapter 10). However, the WSCP may be periodically amended independently of the UWMP, as needed. With regard to any amendments of the WSCP, Suppliers can describe how and when notices are issued concerning the amendment process, including the public adoption hearing and how and when it notices affected cities, counties, and the public about the adoption process, and submittal of the UWMP to DWR, the California State Library, local libraries, and others. Suppliers can also describe how the plan has been made available to all of the cities and counties it serves no later than 30 days after it is adopted. Refer to Chapter 10 of this Guidebook for more details on formal processes.

This section can be used to describe the adoption, submittal, and availability procedures to follow when updating the WSCP outside of the UWMP update cycle as a reference for subsequent amendments.

8.13 Resources and References

The following is a list of resources and references Suppliers may find helpful in developing their WSCP.

Alliance for Water Efficiency and California Water Efficiency Partnership

- [Drought Resources Hub](#)
- [Model Water Shortage Contingency Plans](#)
- Water-Waste Ordinances
- Drought Communications Primer
- [Use and Effectiveness of Municipal Irrigation Restrictions During Drought 2020](#)
- [Water Conservation Tracking Tool](#) 2019

American Water Works Association

- AWWA M19: [Emergency Planning for Water and Wastewater Utilities](#), Fifth Edition
- AWWA M52: [Water Conservation Programs](#)
- AWWA M60: [Drought Preparedness and Response Manual](#), Second Edition
- AWWA M71: [Climate Action Plans—Adaptive Management Strategies for Utilities](#)

California Department of Water Resources

- [DWR Drought Webpage](#)
- 2021 [SWP and CVP California Drought Contingency Plan](#)
- 2024 [SWP Long-Term Drought Plan](#)
- 2020 [Draft Handbook for Water Budget Development With or Without Models](#)
- 2008 [Urban Drought Guidebook 2008 Updated Edition](#)

California State Water Resources Control Board

- [Drought Information and Updates](#)
- [Emergency Response Plan Guidance for Public Drinking Water Systems](#)

California Public Utilities Commission

- 2014 [California Public Utilities Commission Drought Procedures Standard Practice U-40-W](#)

Additional Resources

Dilling, L, ME Daly, DA Kenney, R Klein, K Miller, AJ Ray, WR Travis, and O Wilhelmi. 2019. "Drought in Urban Systems: Learning Lessons for Climate Adaptive Capacity." *Climate Risk Management* 23:32–42. <https://doi.org/10.1016/j.crm.2018.11.001>

Katz, D, A Grinstein, A Kronrod, and U Nisan. 2015. "Evaluating the Effectiveness of a Water Conservation Campaign: Combining Experimental and Field Methods." *Journal of Environmental Management* 180:335–343. <https://doi.org/10.1016/j.jenvman.2016.05.049>

Maggioni, E. 2014. "Water Demand Management in Times of Drought: What Matters for Water Conservation." *Water Resources Research*. 51(1):125–139. <https://doi.org/10.1002/2014WR016301>

U.S. Environmental Protection Agency National Homeland Security Research Center. 2011. *Planning for an Emergency Drinking Water Supply*. EPA document 600/R-11/054. Prepared by the American Water Works Association and CDM. June. https://www.epa.gov/sites/default/files/2015-03/documents/planning_for_an_emergency_drinking_water_supply.pdf

Vogt, JV, G Naumann, D Masante, J Spinoni, C Cammalleri, W Erian, F Pischke, R Pulwarty, and P Barbosa. 2018. *Drought Risk Assessment and Management: A Conceptual Framework*. Technical report

published by the Joint Research Centre.

<https://dx.doi.org/10.2760/057223>

Wang H, A Tirusew, D Bracciano, A Adams, and N Wanakule. 2019. "Proactive Water Shortage Mitigation Integrating System Optimization and Input Uncertainty." *Journal of Hydrology* 571:711–722.

<https://doi.org/10.1016/j.jhydrol.2019.01.071>

Washington State Department of Health. 2011. *Guidance Document, Preparing Water Shortage Response Plans*. July.

<https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs//331-301.pdf>

Whilhite, D, M Sivakumar, and R Pulwarty. 2014. "Managing Drought Risk in a Changing Climate: The Role of National Drought Policy." *Weather and Climate Extremes* 3:4–13.

<https://doi.org/10.1016/j.wace.2014.01.002>

8.14 Submittal Tables

The following tables are the standardized tables for submittal of a Supplier's 2025 UWMP. These are also part of DWR's electronic reporting system for data input and are used by DWR to evaluate regional and statewide water-use information and summarize data for DWR-required legislative reports.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier's Submittal Tables in a UWMP document, the review will be designated "indeterminate," and all Submittal Table data will be flagged as "unsubstantiated." This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. "Indeterminate" status may affect grant and loan eligibility.

An Excel workbook, "2025 Submittal Tables," is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the "Urban Water Management Plans" section and click the "Resources" button to download the file. The tables can be found in the [WUEdata portal](#), under the "Urban Water Management Plan" section, by selecting the "Resources" button. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, where tables are different, each will be displayed. Where essential information is the same, only the Retail Supplier Submittal Table will be displayed.

8.14.1 Submittal Table 8-1: Cross-Reference for Standard vs. Supplier Shortage Levels

All Suppliers

Suppliers will report their shortage levels and how they correspond to the six standard shortage levels required by Water Code Section 10632(a)(3)(A). Suppliers that use the six standard levels will check the box at the top of Submittal Table 8-1 indicating that fact. These Suppliers will not need to complete the remainder of the table.

There is only one table provided for use by both retail and wholesale suppliers.

RUWMPs will use multiple versions of Submittal Table 8-1; one for each participating Supplier and include the name of the Supplier in the “Notes” section at the bottom of the table.

Submittal Table 8-1: Cross-Reference for Standard vs Supplier Shortage Levels

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels Water Code Section 10632(a)(3)(B)			
<input type="checkbox"/> Supplier Uses the Standard Six Levels of Water Shortage. The supplier will not complete this table.			
Standard Shortage Levels	Percent Shortage Range	Suppliers Shortage Levels	Percent Shortage Range
1	Up to 10%		
2	Up to 20%		
3	Up to 30%		
4	Up to 40%		
5	Up to 50%		
6	>50%		
NOTES:			

8.14.2 Submittal Table 8-2: Supply Augmentation and Other Actions

All Suppliers

Suppliers will provide the supply augmentation methods or other actions used at each shortage level. The Submittal Table must indicate whether the shortage gap reduction value is reported as a volume or a percentage. Suppliers will do this by selecting “volume” or “percentage” in the “Volume or Percentage” column. The value, either percentage or volume, will be provided in the “Shortage Gap Reduction Value” column. This value may be a range.

There is a retail and wholesale Submittal Table 8-2 but since their content is the same, only the retail table is shown here.

RUWMPs will use multiple versions of Submittal Table 8-2 R or 8-2 W; one for each participating Supplier and include the name of the Supplier in the “Notes” section at the bottom of the table.

Recommended

DWR strongly recommends that Suppliers using shortage levels different from the standardized levels complete Submittal Tables 8-2 and 8-3 using the six standard levels. If Suppliers choose to complete Tables 8-2 and 8-3 with existing, different, shortage levels, they should note this in the “Notes” section of these tables.

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions				
Water Code Section 10632(a)(4)(A),(C) and (E)				
Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier Drop down list These are the only categories that will be accepted by the WUdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range)	
Add additional rows as needed				
	Expand Public Information Campaign	Volume		
	Improve Customer Billing	Percentage		
	Implement or Modify Drought Rate Structure or Surcharge			
	Transfers			
	Exchanges			
	Other Purchases			
	New Recycled Water			
DWR NOTES: Units of measure must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES:				
	Rain Seeding			
	Stored Emergency Supply			
	Other Actions (describe)			

8.14.3 Submittal Table 8-3: Demand Reduction Actions

All Suppliers

Suppliers will provide the demand-reduction methods or other actions used at each shortage level. The table must indicate whether the shortage gap reduction is reported as a volume or a percentage. Suppliers may do this by selecting “volume” or “percentage” in the “Volume or Percentage” column. The value, either percentage or volume, will be provided in the “Shortage Gap Reduction Value” column. This value may be a range.

There is a retail and wholesale Submittal Table 8-3 but since their content is the same, only the retail table is shown here.

RUWMPs will use multiple versions of Submittal Table 8-3 R or 8-3 W; one for each participating Supplier and include the name of the Supplier in the “Notes” section at the bottom of the table.

Recommended

DWR strongly recommends that Suppliers using shortage levels different from the standardized levels complete Submittal Table 8-2 and 8-3 using the six standard levels. If Suppliers choose to complete Tables 8-2 and 8-3 with existing, different, shortage levels, they should note this in the “Notes” section of these tables.

Submittal Table 8-3 Retail: Demand Reduction Actions

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B) and (E)					
Is the Supplier completing this table using the standard six levels? (yes/no)					
Shortage Level	Demand Reduction Actions Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? For Retail Suppliers Only Drop Down (yes/no)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range)		
Add additional rows as needed					
		Volume			
		Percentage			
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

Expand Public Information Campaign
Improve Customer Billing
Increase Frequency of Meter Reading
Offer Water Use Surveys
Provide Rebates on Plumbing Fixtures and Devices
Provide Rebates for Landscape Irrigation Efficiency
Provide Rebates for Turf Replacement
Decrease Line Flushing
Reduce System Water Loss
Increase Water Waste Patrols
Moratorium or Net Zero Demand Increase on New Connections
Implement or Modify Drought Rate Structure or Surcharge
Landscape - Restrict or prohibit runoff from landscape irrigation
Landscape - Limit landscape irrigation to specific times
Landscape - Limit landscape irrigation to specific days
Landscape - Prohibit certain types of landscape irrigation
Landscape - Prohibit all landscape irrigation
Landscape - Other landscape restriction or prohibition
CII - Lodging establishment must offer opt out of linen service
CII - Restaurants may only serve water upon request
CII - Commercial kitchens required to use pre-rinse spray valves
CII - Other CII restriction or prohibition
Water Features - Restrict water use for decorative water features, such as fountains
Pools and Spas - Require covers for pools and spas
Pools - Allow filling of swimming pools only when an appropriate cover is in place.
Other water feature or swimming pool restriction
Other - Customers must repair leaks, breaks, and malfunctions in a timely manner
Other - Require automatic shut of hoses
Other - Prohibit use of potable water for construction and dust control
Other - Prohibit use of potable water for washing hard surfaces
Other - Prohibit vehicle washing except at facilities using recycled or recirculating water
Other

9 Demand Management Measures

Demand management is an integral part of sustainably managing water resources in California. As population continues to grow, demand for water typically increases. This increase in water demand, coupled with reduced supplies or shifts in supplies because of climate change and other factors, can jeopardize water reliability if no mitigation is in place. To better prepare for and reduce effects caused by these situations, implementing water-use DMMs help lower water demands that can improve the water service reliability and help meet state and regional water conservation goals. Reducing demands can also benefit Suppliers by reducing energy costs, putting the Supplier in a better position for its future water security.

Importance

This chapter provides the opportunity for Suppliers to communicate their efforts to promote water conservation and reduce water use. It also offers Suppliers the opportunity to closely look at what has been implemented, what has worked, and what else might be implemented for additional water savings. This type of analysis may help identify actions that require a longer-term implementation plan and budget, and that can inform their water demand forecasting analysis. Careful analysis of the DMMs may also help Suppliers in preparing their WSCP, which requires identifying how much a selected action mitigates the water shortage conditions.

Focus

The goal of the DMMs section in an UWMP is to provide a comprehensive description of the water conservation programs that a Supplier has implemented, is currently implementing, and plans to implement to meet water conservation goals.

Essentials

Suppliers will describe the nature and extent to which they have implemented specific DMMs over the past five years.

Recommended

Several sections in this chapter recommend additional information to include in the UWMP to enhance the presentation of DMMs. These are clearly called out under the subsection heading of “Recommended.” Some Suppliers may have Water Conservation Master plans or Water Efficiency Master Plans. In cases where this fulfills all the requirements in the Water Code for the DMMs, DWR recommends that Suppliers attach this more-detailed document as an

appendix to the UWMP and provide a summary of information in the UWMP as is required in Water Code Section 10631. As another example of a suggestion, DWR recommends, but does not require, that Suppliers preparing their 2025 UWMP consider what DMMs they will use to help meet their current and future water-use efficiency standards that are used to calculate their annual water-use objectives. As such, each Supplier is encouraged to consider aligning conservation management actions and the changing urban use patterns to consider these future obligations. Including this information in the 2025 UWMP will help Suppliers prepare for the future requirements.

New Requirements

There are no new requirements regarding DMMs since the 2015 UWMP Guidebook.

Contents

The following organization for this section is not required, but it is offered as guidance. Suppliers may use other types of organization, such as organizing by type of DMM.

This chapter contains the following sections:

- 9.1, Demand Management Measures for Retail Suppliers
- 9.2, Demand Management Measures for Wholesale Suppliers

9.1 Demand Management Measures for Retail Suppliers

Water Code Section 10631

- (e) Provide a description of the supplier's water demand management measures. This description shall include all of the following:
 - (1)(A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measure that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.
 - (B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

- (i) Water waste prevention ordinances.
- (ii) Metering.
- (iii) Conservation pricing.
- (iv) Public education and outreach.
- (v) Programs to assess and manage distribution system real loss.
- (vi) Water conservation program coordination and staffing support.
- (vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.

9.1.1 Implementation Over the Past Five Years

Retail Only

Retail Suppliers are required to provide a narrative description addressing the nature and extent of each DMM implemented over the past five years, from 2021 through 2025. Each DMM listed in Section 9.1.3 for Retail Suppliers must be addressed.

Retail Suppliers should distinguish those DMMs that are implemented by a Wholesale Supplier on their behalf. This will avoid double counting DMM implementation.

Recommended

For all Retail Suppliers, to address the nature of each DMM, DWR recommends describing DMM program details such as the dollar value for individual toilet replacements, the process used to inform customers of a landscape water budget program, the content of a school education program, or information about DMM programs they may have implemented.

For all Retail Suppliers, to address the extent of each DMM, DWR recommends quantifying the implementation of the DMM (e.g., the number of customers that have used the toilet rebate program, the number of large landscape accounts that have been assigned a water budget, or the number of school presentations given by the Supplier). Additionally, DWR recommends that Retail Suppliers identify the available capacity remaining (e.g., the number of customers with inefficient toilets or the remaining large landscape areas without a water budget), as well as any constraints or opportunities for further extending the DMM (e.g., insufficient budget to

implement more rebate programs, new advanced meter infrastructure [AMI] meters installed providing the opportunity to implement customer leak detection programs, or availability of a state grant program to improve the billing and water-use tracking system).

DWR recommends that Suppliers also report on specific DMMs in each category and examine their effectiveness to help quantify the demand reductions. This information can be used for assessing water shortage action mitigation effects in their WSCP. Additionally, examining the feasibility of expanding the extent of DMM implementation may help in resource planning and demand forecasting.

9.1.2 Implementation to Achieve Water-Use Targets

Water Code Section 10631

(e)(1)(A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measure that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

Retail Only

Using the list of DMMs in Section 9.1.3, describe the DMMs that the Supplier implemented to achieve its water-use targets (as described in Water Code Section 10608.20 and Chapter 5 of this Guidebook).

DMMs for SB X7-7 Targets. Most Suppliers achieved their SB X7-7 target as reported in their 2020 UWMP, however some did not. To address reporting on DMMs for SB X7-7 target compliance (Water Code Section 10631[e][1][A]):

- Suppliers that met their SB X7-7 target in 2020, along with those that met their SB X7-7 target as reported in their 2025 UWMP, would simply state this fact in this chapter.
- Suppliers that did not meet their SB X7-7 target by 2020 or this 2025 UWMP will include in their narrative the measures they plan to implement to meet their SB X7-7 target. Suppliers in this situation are also referred to Chapter 5 and Appendix P for additional guidance on SB X7-7 reporting.

Recommended

If a Supplier plans to implement or extend implementation of a DMM, DWR recommends that the Supplier then describe its planning efforts, any legal or other opportunities or constraints, schedules, budgets, and finance plans such as rate structures, bond funds, or capitalizing investments in consumer incentives in accordance with Governmental Accounting Standards Board Statement 62 (GASB 62).²

Suppliers are encouraged to also describe any other DMMs they plan to implement that may not have a material effect on achieving their water-use targets or UWUOs but achieve the Supplier's own conservation goals and objectives.

Suppliers are encouraged to consider aligning conservation management actions with changing urban use patterns and overall long-term resiliency. Suppliers are also encouraged to consider describing plans and progress toward those DMMs and CII performance measures that would facilitate their compliance with urban water-use objective and annual reporting as defined under 23 CCR Sections 965 through 978.

9.1.3 Required Demand Management Measures

9.1.3.1 Water-Waste Prevention Ordinances

Retail Only

A water-waste prevention ordinance explicitly states that the waste of water is to be prohibited. The ordinance may prohibit specific actions that waste water, such as excessive runoff from landscape irrigation or use of a hose outdoors without a shut off nozzle.

A water-waste prevention ordinance is in place at all times and is not dependent on a water shortage for implementation. However, a water-waste prevention ordinance may include increasingly restrictive prohibitions that may be implemented in response to water shortages as part of a WSCP.

If the Supplier has a water-waste prevention ordinance in place or another equivalent mechanism it can be described in the narrative and included as an attachment in the UWMP.

² For guidance on GASB 62, refer to [*GASB 62: Guidance Clarifying Regulated Operations Accounting Applies to Water Utilities*](#).

9.1.3.2 Metering

Water Code Section 526

- (a) Notwithstanding any other provisions of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract... shall do both of the following:
 - (1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings... located within its service area.

Water Code Section 527

- (a) An urban water supplier that is not subject to Section 526 shall do both the following:
 - (1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

Retail Only

Water Code requires customer connection metering as described above. Suppliers that are fully metered should state this in their UWMP. If a Supplier has not yet fully met these requirements (Water Code requires full metering by 2025), they should include in their UWMPs their plans for becoming fully metered in accordance with Water Code 527.

Recommended

Suppliers are encouraged to include a discussion of their programs for meter maintenance, replacement, and calibration, along with any planned or implemented improvements to their metering system.

Automatic meter reading, or high-frequency (10–20 second) AMI water-use measurement devices that are employed within their service area offer several benefits for Suppliers. AMI meters can enable Suppliers to more closely track water use, waste, and leaks on a timely basis. Additionally, higher-frequency measurement devices that may be deployed for customer use may assist in behavioral water conservation practices.

Suppliers are encouraged to include a discussion of any innovative metering programs, such as AMI coupled with customer-interface and outreach tools.

DWR also recommends that Suppliers discuss their efforts to identify addresses and landscapes irrigated by dedicated irrigation meters (DIMs), programs to measure the landscape area associated with DIMs, and

programs to implement DIMs for large landscapes. This will be important for compliance with the Making Conservation A Way of Life Regulation (23 CCR Sections 965 through 978) requirements for large, landscaped areas irrigated with dedicated meters and CII performance measure for large landscapes.

Suppliers are encouraged to include a discussion of any significant submetering programs, especially landscape irrigation and multi-family residential submetering, that they have implemented or plan to implement, along with any potential mechanism for tracking submetered water use.

9.1.3.3 Conservation Pricing

Retail Only

In this section, Suppliers will describe their conservation pricing structure, if applicable. A conservation pricing structure is always in place and is not dependent on a water shortage for implementation, however, a conservation pricing structure could include drought rate structures.

Conservation pricing must be related to the cost of service (per California Constitution, Article 13C added November 5, 1996, via Proposition 218 initiative measure). The rates cannot be seen as penalties for excessive water use. Before conservation pricing is part of a rate structure, the pricing should be reviewed by the Supplier's legal counsel. Refer to Appendix N for an example of a conservation rate structure that includes a drought rate structure to be implemented as needed. Drought rate structures and surcharges are addressed in Chapter 8.

Conservation pricing sends a signal to customers regarding their water use. A common example of conservation pricing is a tiered rate structure where efficient water use is billed at a lower price and higher water use is billed at progressively higher prices. Another example is the use of water budgets, wherein each customer is given a water budget and if that budget is exceeded, the customer must pay a penalty, or a higher water rate, for that portion of water that exceeds the water budget.

Suppliers may provide detailed information of their drought and/or conservation rate structures in an appendix, and then summarize the key points in the main body of the UWMP in the following sections, as applicable:

- Section 8.6, Compliance and Enforcement
- Section 8.8, Financial Consequences of a Water Shortage Contingency Plan
- Section 9.1.3, Required Demand Management Measures

Recommended

Before conservation pricing is implemented as part of a rate structure, Suppliers should consult their legal counsel to ensure it complies with applicable laws and regulations.

For those Suppliers undergoing, or intending to undergo, a change in their conservation pricing structure, DWR recommends that plans for this change—including the Proposition 218 election schedule and engineering documents—are summarized in this section.

9.1.3.4 Public Education and Outreach

Retail Only

Describe the Supplier's current and planned public education and outreach efforts.

This may include:

- Marketing of rebates and giveaways
- Communicating water use via water bills (e.g., increased frequency of billing, an easy to understand bill format, or bills that compare a customer's water use to the water use of similar customers)
- Providing school education programs
- Information booths at fairs and public events
- Newsletters
- Informative websites, online tools, or social media
- Newspaper articles
- Other activities not listed here

9.1.3.5 Programs to Assess and Manage Distribution System Real Loss

Retail Only

Describe the Supplier's current and planned programs to detect and repair distribution system leaks. A reference to the distribution system losses reported in Chapter 4 is appropriate to include here. Suppliers may also wish to include any schedule, finance plan, and budget information for plans and programs to reduce system losses and comply with the Water Loss Control Regulation (refer to Chapter 4).

Recommended

Suppliers are encouraged to include a description of routine and planned system maintenance to prevent losses. This may be shared from the Supplier's most recent water loss audit.

A distribution system loss standard is being developed by the State Water Board. Suppliers are encouraged to consider how they may approach addressing a new standard.

9.1.3.6 Water Conservation Program Coordination and Staffing Support

Retail Only

Describe the coordination activities and staffing support of the water conservation program, if any.

This could include such information as the name and contact information of the water conservation coordinator(s), the number of staff in the program, and a description of program funding.

9.1.3.7 Other Demand Management Measures

Retail Only

This category provides Suppliers with the opportunity to report additional or innovative approaches to demand management that do not belong to any of the categories above. This may include rebate programs offered by the Supplier, detecting leaks and facilitating repairs of customers' systems, tracking and targeting messaging and assistance to high-use water users, implementing improved billing programs to facilitate better tracking of water use, and others.

9.2 Demand Management Measures for Wholesale Suppliers

Water Code Section 10631

- (e) Provide a description of the supplier's water demand management measures. This description shall include all of the following:
 - (2) For an urban wholesale water supplier, as defined in Section 10608.12, (provide) a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its

distribution system asset management and wholesale supplier assistance programs.

Wholesale Only

Water Code requires that Wholesale Suppliers provide narrative descriptions of four specific measures, metering, public education and outreach, water conservation program coordination and staffing support, and other applicable DMMs, as well as a narrative of asset management and Wholesale Supplier assistance programs in their UWMP.

Recommended

For Wholesale Suppliers, DWR recommends but does not require including a narrative for each DMM implemented.

9.2.1 Required Demand Management Measures

9.2.1.1 Metering

Wholesale Only

A Wholesale Supplier that is fully metered should state that fact in the UWMP. If a Supplier is not yet fully metered, they should discuss any plans to increase customer metering.

Recommended

Suppliers are encouraged to include a discussion of their programs for meter replacement and/or calibration.

9.2.1.2 Public Education and Outreach

Wholesale Only

Describe the public education and outreach efforts by the Wholesale Supplier, if any. These may include actions that are being taken to assist Retail Suppliers that are served by the Wholesaler Supplier.

Examples include:

- Mass media campaigns encouraging conservation
- School education programs
- Information booths at fairs and public events
- Newsletters
- Informative websites, online tools, or social media

- Newspaper articles
- Other activities not listed here

9.2.1.3 Water Conservation Program Coordination and Staffing Support

Wholesale Only

Describe the Wholesale Supplier's water conservation program coordination and staff support. Include the activities of the Supplier's water conservation staff, if any.

Recommended

The description may include the name and contact information of the water conservation coordinator(s), the number of staff in the program, and a description of program funding.

9.2.1.4 Other Demand Management Measures

Wholesale Only

This category provides Wholesale Suppliers an opportunity to report additional approaches to demand management that do not belong to the categories listed above.

If a Wholesale Supplier includes a discussion of rate structures or supply management as part of its DMM discussion, it may provide detailed information of the rate structure in an appendix and then summarize the key points in the main body of the UWMP.

9.2.2 Wholesale Demand Management Measures

9.2.2.1 Asset Management

Wholesale Only

Provide a narrative description of the Wholesale Supplier's distribution system asset management program, including distribution system maintenance and improvements. Asset management programs will vary greatly from one Supplier to another, from responding to needed repairs as they arise, to sophisticated GIS mapping with a structured improvement and repair program.

Recommended

Provide, or reference, any appropriate documentation related to the Wholesale Supplier's asset management program.

9.2.2.2 Supplier Assistance Programs**Wholesale Only**

Provide a description of the Wholesale Supplier's assistance programs to the Retail Suppliers that it serves. This may include assistance with rebate programs, public education and outreach on water conservation, or other efforts to reduce water demand. It is not necessary to duplicate descriptions that may have been provided above. Suppliers may simply provide a reference to the section(s), as applicable.

10 Urban Water Management Plan Adoption, Submittal, and Implementation

This chapter provides guidance for addressing the Water Code requirements for notifying agencies and the public that a new or updated UWMP or WSCP is in preparation; the UWMP and WSCP adoption process; submitting an adopted UWMP and WSCP and making these plans available to the public; plan implementation; and the process for amending an adopted UWMP and WSCP.

Importance

Procedures for adopting and implementing the UWMP and WSCP in a transparent and accessible manner is important for good governance of water resources. It is important for customers to have the opportunity to understand how water is managed and how reliable it is. Supporting a public process through adequate notifications and public hearings also allows for the interested public to submit comments and suggest revisions affecting future investments in local water management. Adopting the plan makes it part of the formal management strategy of the Supplier, which is often important for justifying investment decisions and potential rate restructuring over the near- and long-term.

Focus

In this section of the UWMP, Suppliers create a record of the process used to adopt and implement their plan, thereby documenting compliance with statutory requirements for transparency and accessibility.

Essentials

Water Code lays out several procedural requirements for preparing and adopting the UWMP and the WSCP.

- Notice of Plan Preparation (Section 10.2) at least 60 days before public hearing.
- Notice of Public Hearing (Section 10.3) published in a local newspaper at least once a week for two successive weeks.
- Public hearing and optional adoption (Section 10.4) can be combined but must be separate agenda items.
- Plan submittal (Section 10.5) submitted (including the WSCP as part of the UWMP) to DWR by July 1, 2026.

- Plan availability (Section 10.6) no later than 30 days after adoption.
- Amending adopted UWMP and/or WSCPs (Section 10.9) follow same process.

The UWMP submitted by July 1, 2026 must include the WSCP, but the WSCP must be treated as a stand-alone plan for the public hearing and adoption procedures. This separate treatment allows for the WSCP to be revised and re-adopted on a shorter timeline than the rest of the UWMP, in cases where a Supplier chooses to do so. Each process is described in this chapter below and includes the following steps for both the UWMP and WSCP.

Recommended

Suppliers are encouraged to host hearings and additional meetings, if useful, to engage with community members and other interested parties on their UWMP and WSCP development. Requirements in the Water Code specify the approval and input process at the end of developing the UWMP, but community members and other interested parties' input earlier can allow for Suppliers to incorporate their interests and experiences into the UWMP (including the WSCP) as it is being developed. Such early participation supports developing the UWMP and WSCP in a transparent fashion, inform interested parties about important considerations and conditions, and can better support inclusion of cross-sector and regional water interests, as well as social equity and other important considerations. Suppliers can also use this chapter to describe their plan to implement the UWMP, including the WSCP.

Updates Since 2020

There have been no changes to the requirements for plan adoption, submittal, and implementation.

Contents

- 10.1, Plan Completion Timeline
- 10.2, Notice of Plan Preparation
- 10.3, Notice of Public Hearing
- 10.4, Public Hearing and Adoption
- 10.5, Plan Submittal
- 10.6, Public Availability
- 10.7, Notification to Public Utilities Commission
- 10.8, Plan Implementation
- 10.9, Amending an Adopted Urban Water Management Plan or Water Shortage Contingency Plan

- 10.10, California Department of Water Resources Review of Submitted Plans
- 10.11, Submittal Tables

10.1 Plan Completion Timeline

All Suppliers

If a Supplier is reporting on a calendar year basis, the 2025 UWMP cannot be completed before the end of the calendar year 2025 because current year information is required by Water Code and would include the water-use and planning data for the entire year of 2025. However, if a Supplier is reporting on a fiscal year basis, they may complete their 2025 UWMP at the end of their fiscal year.

10.2 Notice of Plan Preparation

Water Code Section 10621

- (b) Every urban water supplier required to prepare a plan shall ... at least 60 days prior to the public hearing on the plan ... notify any city or county within which the supplier provides waters supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

All Suppliers

The Water Code states that cities and counties must be notified that the Supplier will be reviewing the UWMP and considering amendments to the plan.

60 Days Prior to Hearing. This notice must be sent at least 60 days prior to the public hearing. Notification letters can be addressed to a city manager, county administrator, or other local contacts, as appropriate for the Supplier's service area.

Recommended

To provide cities and counties ample opportunity to participate in the UWMP process, Suppliers are encouraged to send this notification at the beginning of the UWMP planning process, well in advance of the required 60 days prior to the public hearing.

The notices to the cities and counties should include the anticipated location where the 2025 UWMP can be viewed, the UWMP revision schedule, and contact information of the UWMP preparer.

Relevant Submittal Tables in Section 10.11

- Retail Suppliers: Submittal Table 10-1 R
- Wholesale Suppliers: Submittal Table 10-1 W

10.3 Notice of Public Hearing

Water Code Section 10642

...Prior to adopting either [the plan or water shortage contingency plan], the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon. Prior to any of these hearings, notice of the time and place of the hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code [see below]. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies. Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area.

Government Code Section 6066

Publication of notice pursuant to this section shall be once a week for two successive weeks. Two publications in a newspaper published once a week or oftener, with at least five days intervening between the respective publication dates not counting such publication dates, are sufficient. The period of notice commences upon the first day of publication and terminates at the end of the fourteenth day, including therein the first day.

All Suppliers

Public hearings are required for both the UWMP and the WSCP prior to their adoption.

Two Weeks Prior Notice in Public Newspaper. The public hearing must be noticed in a local newspaper for two successive weeks (14 calendar days), at least two times, with at least five days between publication dates, as prescribed in Government Code Section 6066. This notice must include time and place of hearing, as well as the location where the plan is available for public inspection.

Suppliers will complete Submittal Table 10-1 R or 10-1 W to indicate notification of the public hearing.

Recommended

To verify that this notification has taken place, the UWMP should include a copy of the public notices as attachments.

10.4 Public Hearing and Adoption

Water Code Section 10642

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. Prior to adopting either, the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon.... After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

Government Code Section 7291

...every local public agency... serving a substantial number of non-English-Speaking people, shall employ a sufficient number of qualified bilingual persons in public contact positions or as interpreters to assist those in such positions, to ensure provision of information and services in the language of the non-English-speaking person.

All Suppliers

The public hearing provides an opportunity for the public to provide input to the plan before it is adopted. The governing body shall consider all public input prior to adoption.

The public hearing for either or both the UWMP and WSCP may take place at the same meeting as the adoption hearing of the governing board; however, the public hearing portion must take place before the adoption portion and the hearing portion and adoption must be separate agenda items. This allows the governing body the opportunity to modify the UWMP or WSCP in response to public input before adoption.

Before submitting the UWMP or WSCP to DWR, the governing body must formally adopt the plan (UWMP or WSCP). The WSCP must be adopted at the same time or prior to the UWMP

Suppliers will include the adoption resolution(s) in the UWMP for the UWMP and the WSCP. This may be included as an attachment to the UWMP or as a web address indicating where the adoption resolution can be found online.

Language Interpretation Support. If the Supplier’s audience for the UWMP and/or WSCP hearing includes a substantial number of the population that are not able to speak or understand English, the Supplier must provide sufficient language interpretation support. The determination of whether this language assistance is needed is at the discretion of the Supplier (per Government Code Section 7293).

10.5 Plan Submittal

Water Code Section 10621

- (e) Each urban water supplier shall update and submit its 2025 plan to the department by July 1, 2026...

Water Code Section 10635

- (c) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

Water Code Section 10644

- (a)(1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption.

The following sections provide guidance for submitting UWMPs and updates to WSCPs to DWR, the State Library, and cities and counties.

10.5.1 Submitting a UWMP and Water Shortage Contingency Plan to DWR

All Suppliers

2025 UWMPs (including the WSCP) must be submitted to DWR within 30 days of adoption and by July 1, 2026. UWMP submittal will be done electronically through the [WUEdata portal](#), an online submittal tool that will be updated for 2025 UWMPs and available in adequate time for UWMP submittal.

10.5.2 Electronic Data Submittal

All Suppliers

Water Code Section 10644 (a)(2)

The plan, or amendments to the plan, submitted to the department ... shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

Suppliers must submit the UWMP, including the WSCP, and associated Submittal Tables data, and other information electronically using the [WUEdata portal](#).

The availability of the WUEdata Portal for 2025 UWMP Submittal Tables will be announced to the Guidebook Working Group, other DWR Water Use Efficiency Workgroups, DWR's UWMP email update subscribers, the Water Plan eNews, and posted on DWR's [Urban Water Management](#) webpage.

10.5.3 Submitting a UWMP, Including WSCP, to the California State Library

All Suppliers

No later than 30 days after adoption, the Supplier shall submit a file on compact disk (CD) or a hard copy of the adopted 2025 UWMP, including the adopted WSCP, to the California State Library at:

California State Library Government Publications Section
Attention: Coordinator, Urban Water Management Plans
P.O. Box 942837
Sacramento, CA 94237-0001

If delivered by courier or overnight carrier to the State Library, use the following street address instead of the P.O. Box:

California State Library Government Publications Section
Attention: Coordinator, Urban Water Management Plans
900 N Street
Sacramento, CA 95814

10.5.4 Submitting a UWMP to Cities and Counties

All Suppliers

No later than 30 days after adoption, the Supplier shall submit a copy of the adopted 2020 UWMP, including the WSCP, to any city or county to which the Supplier provides water. This copy may be in an electronic format. This will also satisfy Water Code Section 10635(b).

10.6 Public Availability

Water Code Section 10645

- (a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.
- (b) Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

All Suppliers

To demonstrate compliance with public availability requirements, include a statement in the UWMP describing the availability of the adopted UWMP and the adopted WSCP for public review during normal business hours. Examples of public availability include placing a copy of the UWMP and WSCP at the front desk of the Supplier's office or by posting the plans on the Supplier's website for public viewing.

10.7 Notification to Public Utilities Commission

Water Code Section 10621 (c)

An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier's general rate case filings.

Per Water Code Section 10621(c), those Suppliers that are regulated by the California Public Utilities Commission must submit their UWMP and WSCP to the California Public Utilities Commission as part of its general rate case filings.

10.8 Plan Implementation

Water Code Section 10643

An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10.9 Amending an Adopted Urban Water Management Plan or Water Shortage Contingency Plan

Water Code Section 10621

(d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

Water Code Section 10644

(a)(1) Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

10.9.1 Amending a UWMP or WSCP

All Suppliers

If a Supplier amends an adopted UWMP or WSCP, each of the steps for notifications, public hearing, adoption, and submittal must also be followed for the amended plan. Below is a possible checklist of tasks for amending a UWMP.

UWMP Amendment Checklist

Notification	Water Code Section	Checkbox
Notification at least 60 days prior to public hearing to any city or county that Supplier will be reviewing plan and considering amendments or changes to plan	10621(b)	<input type="checkbox"/>
Encourage active involvement of diverse cultural, economic, social elements of service area population	10642	<input type="checkbox"/>
Prior to adopting—Made available for public inspection?	10642	<input type="checkbox"/>
Publicly-owned Supplier -	10642	<input type="checkbox"/>

Notification	Water Code Section	Checkbox
Notification of time and place of hearing published in your jurisdiction pursuant to Government Code §6066? <ul style="list-style-type: none"> • In a newspaper • Once a week for two successive weeks • At least 5 days in between 	10642	<input type="checkbox"/>
Notification of time and place of hearing to any city or county within which the Supplier provides water supplies in accordance with Government Code Chapter 17.5 beginning with §7290, Use of a Foreign Language in Public Services?	10642	<input type="checkbox"/>
Privately-owned Supplier—equivalent notice within its service area?	10642	<input type="checkbox"/>
No later than 30 days after adoption	10644(a)(1)	<input type="checkbox"/>
Submitted to DWR?	10644(a)(1)	<input type="checkbox"/>
Submitted to the California State Library?	10644(a)(1)	<input type="checkbox"/>
Submitted to any city or county within which the Supplier provides water?	10644(a)(1)	<input type="checkbox"/>

10.9.2 Submitting Revised Water Shortage Contingency Plan

All Suppliers

Water Code Section 10644 (b)

If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its water shortage contingency plan prepared...no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

Suppliers that revise their WSCP after DWR has accepted the 2025 UWMP, must submit to DWR an electronic copy through the [WUEdata portal](#) of its revised WSCP within 30 days of its adoption.

10.10 California Department of Water Resources Review of Submitted Plans

After the adopted UWMP has been submitted to DWR, DWR reviews the UWMP using the provided checklist (Appendix F) and determines whether the UWMP addresses Water Code requirements. DWR will contact the Supplier as needed during the review process. Upon completion of plan review, DWR will

issue a letter to the Supplier with review results. More detail on DWR’s review process can be found in Chapter 1, Section 1.5.

10.11 Submittal Tables

Submittal Tables relevant to notification of public hearing are introduced in this section and are the same as the tables Suppliers completed for their 2020 UWMPs.

The following tables are the standardized tables for submittal of a Supplier’s 2025 UWMP. These are also part of DWR’s electronic reporting system for data input and are used by DWR to evaluate regional and statewide water-use information and summarize data for DWR-required reports to the Legislature.

Including Submittal Tables in a UWMP supports the DWR review process. If DWR cannot readily find information used to populate a Supplier’s Submittal Tables in a UWMP document, the review will be designated “indeterminate,” and all Submittal Table data will be flagged as “unsubstantiated.” This may or may not affect regulatory requirements such as the annual UWUO report, which may rely on some UWMP data. “Indeterminate” status may affect grant and loan eligibility.

An Excel workbook, “2025 Submittal Tables,” is available for use in preparing tables for the 2025 UWMP and for electronic submittal. This file can be downloaded from the [WUEdata Portal](#); scroll down to the “Urban Water Management Plans” section and click the “Resources” button to download the file. There are separate Submittal Tables for Wholesale and Retail Suppliers. In the section below, each table will be displayed.

10.11.1 Submittal Table 10-1: Notification to Cities and Counties

All Suppliers

Supplier will provide the name of the city(ies) notified and use the drop-down menus to indicate whether the public was given a 60-day notice and notice of public hearing by selecting “yes” or “no” in the fields for “60-Day Notice” and “Notice of Public Hearing.”

Retail Only

RUWMPs will use multiple versions of Submittal Table 10-1 R, one for each participating Supplier.

Submittal Table 10-1 Retail: Notification to Cities and Counties

Submittal Table 10-1 Retail: Notification to Cities and Counties		
Water Code Section 10621(b) and 10642		
City Name	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
County Name Drop Down List	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
NOTES:		

Wholesale Only

Wholesale Suppliers that have notified more than 10 cities or counties may opt to provide a separate list of all informed cities and counties instead of completing Submittal Table 10-1 W. If Suppliers opt to provide a separate list of all informed cities and counties, they will provide the page number or location of this list in the indicated field and not complete the rest of the table.

Wholesale Suppliers that have notified 10 or fewer cities or counties will complete the table.

Submittal Table 10-1 Wholesale: Notification to Cities and Counties

Submittal Table 10-1 Wholesale: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
<input type="checkbox"/>	Check the box if the Supplier has notified more than 10 cities or counties. Completion of the table below is not required. Provide a separate list of the cities and counties that were notified.	
	Provide the page or location of this list in the UWMP.	
<input type="checkbox"/>	Check the box if the Supplier has notified 10 or fewer cities or counties. Complete the table below.	
City Name	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
County Name Drop Down List	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
NOTES:		