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Golden State
Water Company
A Subsidiary of American States Water Company

2025 URBAN WATER MANAGEMENT PLAN

GOLDEN STATE WATER COMPANY
WEST ORANGE SYSTEM



PREPARED BY:

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Golden State Water Company West Orange System

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EKI Environment & Water, Inc.
C40261.00

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West Orange System

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Golden State Water Company – West Orange System

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ABBREVIATIONS AND ACRONYMS

°F	degrees Fahrenheit
AB	Assembly Bill
AF	acre-feet
AFY	acre-foot per year
AWE	Alliance for Water Efficiency
AWSDA	Annual Water Supply and Demand Assessment
AWWA	American Water Works Association
BEA	Basin Equity Assessment
BPP	Basin Production Percentage
CalWEP	California Water Efficiency Partnership
CCF	hundred cubic feet
CCR	California Code of Regulations
CGC	California Government Code
CII	commercial, industrial, and institutional
CIMIS	California Irrigation Management Information System
CMIP5	Coupled Model Intercomparison Project
CPUC	California Public Utilities Commission
CRA	Colorado River Aqueduct
CWC	California Water Code
DCP	Delta Conveyance Project
Delta	Sacramento-San Joaquin Delta
DMM	demand management measure
DWA	Division of Water and Audits
DWR	California Department of Water Resources
eARDWP	electronic Annual Reports to the Drinking Water Program
EO	Executive Order
ERP	Emergency Response Plan
ETo	annual reference evapotranspiration
GLAC IRWM	Greater Los Angeles County Integrated Regional Water Management
GPCD	gallons per capita per day
gpf	gallons per flush
gpm	gallons per minute
GPSCD	gallons per service connection per day
GRC	General Rate Case
GSWC	Golden State Water Company
GWRS	Groundwater Replenishment System
HMP	Hazard Mitigation Plan
kWh	kilowatt hours

kWh/AF	kilowatt hours per acre-foot of water
kWh/MG	kilowatt-hours per million gallons
LACSD	Los Angeles County Sanitation District
LHMP	local hazard mitigation plan
MAWA	Maximum Applied Water Allowance
MCCWL	Making Conservation a California Way of Life
MCL	Maximum Contaminant Level
mg	million gallons
mgd	million gallons per day
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
MWELO	Model Water Efficient Landscape Ordinance
O&M	operation, and maintenance
OCGB	Orange County Groundwater Basin
OCSD	Orange County Sanitation District
OCWD	Orange County Water District
Plan	Urban Water Management Plan
PRISM	Parameter Elevation Regression on Independent Slopes Model
psi	pounds per square inch
PSPS	Public Safety Power Shutoff
PWS	Public Water System
RCP	Representative Concentration Pathway
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RUWMP	Regional Urban Water Management Plan
SARW IRWM	Santa Ana River Watershed Integrated Regional Water Management
SB X7-7	Water Conservation Act of 2009
SB	Senate Bill
SCAG	Southern California Association of Governments
SGMA	Sustainable Groundwater Management Act
SWP	State Water Project
SWRCB	State Water Resources Control Board
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objective
WRP	Water Reclamation Plant
WSCP	Water Shortage Contingency Plan
WUE	Water Use Efficiency
WWTP	Wastewater Treatment Plant

LAY DESCRIPTION

CWC §10630.5

Each plan shall include a simple 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.

This 2025 Urban Water Management Plan (UWMP or Plan) is prepared for the Golden State Water Company – West Orange System (GSWC West Orange), which serves approximately 13,138 acre-feet (AF) of water to a population of approximately 114,756. GSWC West Orange meets the definition of an urban water supplier.¹ Therefore, in accordance with California Water Code (CWC) §10621(e), GSWC West Orange is obligated to develop and submit an UWMP to the California Department of Water Resources (DWR) by 1 July 2026.

This UWMP serves as a foundational planning document and includes descriptions of historical and projected water demands and supplies, and the resulting reliability during a set of defined water supply conditions over a minimum 20-year planning horizon. This Plan also describes the actions GSWC West Orange is taking to promote water conservation (referred to as “demand management measures”), and includes a Water Shortage Contingency Plan (WSCP) to address potential water supply shortages from drought or other impacts to supply availability. This Plan is updated every five years in accordance with state requirements under the UWMP Act and amendments (Division 6 Part 2.6 of CWC §10610 – 10656). Past plans developed for GSWC West Orange are available on the DWR Water Use Efficiency (WUE) Data Portal website: <https://wuedata.water.ca.gov/>.

Pursuant to the requirements of the CWC §10630.5, this lay description provides a simple summary of this UWMP. This Plan includes 10 sections, which are summarized below.

Section 1 UWMP Introduction

This section presents the background and purpose of the UWMP, describes the Plan organization, and provides an overview of the Plan. GSWC West Orange’s water supply portfolio includes a combination of purchased water from Municipal Water District of Orange County (MWDOC) and groundwater from the Orange County Groundwater Basin (OCGB). The City of Seal Beach has historically supplied water to GSWC West Orange; however, GSWC is currently installing a transmission main that will change the regular-use interties to emergency interties. The GSWC West Orange service area also receives recycled water from the City of Cerritos. Because purchased water comes from the Sacramento-San Joaquin Delta (Delta), this section also demonstrates consistency with The Delta Plan by the Delta Stewardship Council.

Section 2 UWMP Preparation

This section discusses key structural aspects related to the preparation of this UWMP, and describes the coordination and outreach conducted as part of the preparation of the Plan, including coordination with local agencies (i.e., the cities of Cypress, Stanton, Los Alamitos, Seal Beach, Garden Grove, La Palma, and Cerritos, Orange County, MWDOC, and Orange County Water District [OCWD]), and the public.

¹ Per CWC §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 AF of water annually.

Section 3 Service Area Description

This section provides a description of GSWC West Orange’s water system and service area, including information related to the climate, population, and demographics. GSWC West Orange is located in Orange County and has a climate characterized by a Mediterranean climate with cool, wet winters and warm, dry summers. It is estimated that GSWC West Orange has a population of approximately 114,756 in 2025, and it is anticipated that the service area population will increase to approximately 124,441 by 2050. The service area is almost fully developed, with predominant low- to medium-density residential land use and commercial and industrial areas.

Section 4 Water Use Characterization

This section provides a description and quantifies GSWC West Orange’s current and projected demands through the year 2050. GSWC West Orange provides drinking water (also referred to as “potable water”), and several customers in the service area also receive recycled water (also referred to as “non-potable water”) from the City of Cerritos. Water demands refer not only to the water used by customers, but also includes the water used as part of the system’s maintenance and operation, as well as unavoidable losses inherent in the operation of a water distribution system. Total water demand within the GSWC West Orange service area was 13,138 AF in 2025. Taking into account historical water use, expected population changes, and conservation, water demand is projected to decrease to 12,689 AF by 2050 under normal hydrologic conditions, a reduction of about 3% compared to 2025.

Section 5 SB X7-7 Baseline, 2020 Target

The Water Conservation Act of 2009 (SB X7-7) was enacted in November 2009 and required the state of California to achieve a 20% reduction in urban per capita water use by 31 December 2020 and directed retail suppliers to establish an urban water-use target (2020 Target) to support this goal. Because the CWC does not set an end date for reporting progress toward the 2020 Target, this section documents GSWC West Orange’s compliance with SB X7-7 as of 2020. GSWC West Orange is not a member of a “Regional Alliance” and was not part of a service area merger or consolidation after 2020. In July 2024, the State enacted the Making Conservation a California Way of Life (MCCWL) regulation to promote long-term water conservation and drought resilience beyond SB X7-7. MCCWL established annual Urban Water Use Objectives (UWUO) for water suppliers. The demand projections provided herein indicate that GSWC West Orange’s water use is expected to remain below its UWUO through 2050.

Section 6 Normal Year Water Supply Characterization

This section presents an analysis of GSWC West Orange’s water supplies over a minimum 20-year planning horizon under normal hydrologic conditions. The GSWC West Orange service area relies on groundwater, purchased or imported water, and recycled water. In 2025, GSWC West Orange’s water supplies were 5,365 AF of purchased water from MWD0C, 17 AF of purchased water from the City of Seal Beach, 7,832 AF of groundwater from OCGB, and 205 AF of recycled water from the City of Cerritos, totaling 13,419 AF.² This section also provides an estimate of water-related energy consumption. Energy intensity is defined as the net energy used for water treatment, conveyance, and distribution for all water entering the distribution system, and does not include the energy used to treat wastewater. The energy intensity for the GSWC West Orange is estimated to be 857 kilowatt hours per acre-foot of water (kWh/AF).

² Estimated supplies differ from estimated demands in 2025 due to metering inaccuracies and/or data errors.

Section 7 Water Service Reliability and Drought Risk Assessment

This section assesses the reliability of GSWC West Orange’s water supplies, with a specific focus on potential constraints such as water supply availability, water quality, and climate change. The intent of this section is to identify any potential constraints that could affect the reliability of GSWC West Orange’s supply (such as drought conditions) to support GSWC West Orange’s planning efforts to ensure that customer demands are met. Water service reliability is assessed during normal, single dry-year, and multiple dry-year hydrologic conditions. Based on this analysis, GSWC West Orange expects the available groundwater, purchased water, and recycled water to be sufficient to meet projected demands in all hydrologic conditions, including a five-year drought period, and considering the impacts of climate change. Further, potential water quality issues are not expected to affect the quality of water served to GSWC West Orange’s customers, as water quality is routinely monitored and GSWC West Orange is able to make all appropriate adjustments to its treatment and distribution system to ensure only high quality drinking water is served.

Section 8 Water Shortage Contingency Plan

This section is GSWC West Orange’s WSCP, which serves as a standalone document to be engaged in the case of a water shortage event, such as a drought, infrastructure failure, regulatory mandates, or catastrophic natural or human-caused events. The WSCP identifies policies and actions GSWC West Orange will implement under varying shortage conditions to protect health and human safety, minimize economic disruption, and preserve environmental and community assets. Consistent with DWR requirements, GSWC West Orange has adopted six standard water shortage stages to address shortage conditions ranging from up to 10% to greater than 50%.

Section 9 Demand Management Measures

This section includes descriptions of past and planned conservation programs that GSWC West Orange operates within each demand management measure (DMM) category outlined in the UWMP Act, including: (1) water waste prevention ordinances, (2) metering, (3) conservation pricing, (4) public education and outreach, (5) distribution system water loss management, (6) water conservation program coordination and staffing support, and (7) “other” DMMs. These DMMs have contributed to GSWC West Orange’s compliance with its 2020 Target and are anticipated will continue to support GSWC West Orange in complying with MCCWL requirements, including achieving its UWUO.

Section 10 Plan Adoption, Submittal, and Implementation

This section provides information on the notice of Plan preparation and public hearing, the public hearing and adoption process, Plan implementation, and procedures for amending the adopted UWMP and WSCP. Prior to adoption, GSWC West Orange held a formal public hearing on 27 May 2026, at 11 AM, to present the UWMP and WSCP. This UWMP and WSCP were submitted to DWR within 30 days of adoption and by the 1 July 2026 deadline.

1 UWMP INTRODUCTION

This section discusses the importance and uses of this Urban Water Management Plan (UWMP or Plan), the relationship of this Plan to the California Water Code (CWC), the relationship of this Plan to other local and regional planning efforts, and how this Plan is organized and developed in general accordance with the California Department of Water Resources' (DWR) 2025 UWMP Guidebook.³

1.1 Background and Purpose

The Golden State Water Company – West Orange System (GSWC West Orange) is one of 17 GSWC water systems requiring a UWMP (see requirement in **Section 1.2** below). GSWC is an investor-owned public utility providing water service to approximately 1 million customers and over 270,000 connections in 80 communities throughout California. Its water systems serve communities spanning from the Clearlake System in the northern portion of the state to the Calipatria System in Southern California. While water rates are set separately for GSWC's customer service areas, oversight of the water rate setting process and operations is provided by the California Public Utilities Commission (CPUC).

GSWC currently serves 29,065 connections in northwest Orange County, including most of the cities of Cypress, Stanton, and Los Alamitos, portions of the cities of Seal Beach, Garden Grove and La Palma, and adjacent unincorporated areas of Orange County including the community of Rossmoor.

This UWMP is a foundational document and source of information about GSWC West Orange's historical and projected water demands, water supplies, supply reliability and potential vulnerabilities, water shortage contingency planning, and demand management programs. Among other things, it is used as:

- A long-range planning document for water supply and system planning; and
- A source for data on population, housing, water demands, water supplies, and capital improvement projects used in:
 - Regional water resource management plans prepared by wholesale water suppliers and other regional planning authorities (as applicable),
 - General Plans prepared by cities and counties,
 - Statewide and broad regional water resource plans prepared by DWR, the State Water Resources Control Board (SWRCB), or other state agencies.

GSWC West Orange's last UWMP was completed in 2021, referred to herein as the "2020 UWMP." This Plan is an update to the 2020 UWMP, carries forward information from that plan that remains current and relevant, and provides additional information as required by subsequent amendments to the Urban Water Management Planning Act (UWMP Act; CWC §10610-10657). Although this Plan is an update to the 2020 UWMP, it was developed to be a self-contained, stand-alone document and does not require readers to reference information contained in previous UWMP updates.

1.2 Urban Water Management Planning and the CWC

The UWMP Act requires urban water suppliers to prepare a UWMP every five years and to submit this plan to the DWR, the California State Library, and any city or county within which the supplier provides water supplies. All urban water suppliers, either publicly or privately owned, providing water for municipal

³ The 2025 UWMP Guidebook is available at:

https://wuedata.water.ca.gov/public/public_resources/4825681388/2025_Draft_UWMP_Guidebook_Release.zip

purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) annually are required to prepare an UWMP (CWC §10617).

The UWMP Act was enacted in 1983. Over the years it has been amended in response to water resource challenges and planning imperatives confronting California. A significant amendment was made in 2009 as a result of the governor’s call for a statewide 20% reduction in urban water use by 2020, referred to as the Water Conservation Act of 2009, or “SB X7-7.” This amendment required urban retail water suppliers to establish water use targets for 2015 and 2020 that would result in statewide water savings of 20% by 2020. Beginning in 2016, urban retail water suppliers were required to comply with the water conservation requirements in SB X7-7 in order to be eligible for state water grants or loans. **Section 5** of this Plan contains the data and calculations used to determine compliance with these requirements.

In 2016, Governor Brown signed Executive Order (EO) B-37-16 Making Conservation a California Way of Life (MCCWL) and subsequently Senate Bill (SB) 606 and Assembly Bill (AB) 1668 were passed. SB 606/AB 1668 added new requirements related to drought planning, including: (1) additional requirements for Water Shortage Contingency Plans (WSCP) (CWC §10640), (2) requirements for urban water suppliers to conduct a drought risk assessments part of their future UWMPs to assess water supply reliability for a period of drought lasting five consecutive water years (CWC §10635(b)), and (3) conduct annual water supply and demand assessments to determine its water supply reliability for the current year and one dry year (CWC §10632(a)). These elements are included in **Section 7** and **Section 8** of this Plan. Additionally, SB 606/AB 1668 set new requirements for urban water agencies to continue to increase water efficiency beyond SB X7-7. Beginning in 2024, agencies were required to report an annual Urban Water Use Objective (UWUO). Although UWUO compliance projections are not required as part of an UWMP, they can provide valuable insight into the potential need and timing for additional conservation measures. For this reason, GSWC has elected to provide preliminary UWUO projections in this Plan.

The UWMP Act contains numerous other requirements that a UWMP must satisfy. **Appendix A** lists each of these requirements and where in the Plan they are addressed.

1.3 UWMP Organization

The organization of this Plan follows the same sequence as outlined in the 2025 UWMP Guidebook.

- Section 1 UWMP Introduction
- Section 2 UWMP Preparation
- Section 3 Service Area Description
- Section 4 Water Use Characterization
- Section 5 SB X7-7 Baseline, 2020 Target, and 2025 Reporting
- Section 6 Normal Year Water Supply Characterization
- Section 7 Water Service Reliability and Drought Risk Assessment
- Section 8 Water Shortage Contingency Plan
- Section 9 Demand Management Measures
- Section 10 Plan Adoption, Submittal, and Implementation

In addition to these sections, this Plan includes a number of appendices providing supporting documentation and supplemental information. Pursuant to CWC §10644(a)(2), this Plan utilizes the standardized forms, tables, and displays developed by DWR for the reporting of water use and supply

information required by the UWMP Act. This Plan also includes additional tables, figures, and maps to augment the set developed by DWR, as appropriate. The table headers indicate if the table is part of DWR’s standardized set of submittal tables. A lay description of the UWMP, including information related to water service reliability, potential issues, and strategies for managing reliability risks, is provided in the executive summary of this UWMP.

1.4 UWMP in Relation to Other Efforts

This Plan focuses on water management and planning within GSWC West Orange’s service area. However, water management does not happen in isolation; several other planning processes intersect with and rely on the UWMP to support urban planning. Therefore, this Plan is both informed by, and helps to inform, other efforts. In particular, the Plan considers relevant city and county planning documents, wholesaler projections, and information from local and regional water resource plans to the extent data are applicable and available.

1.5 Special Considerations

This Plan includes information beyond the requirements of the UWMP Act to support other regulatory processes that rely on UWMP data, including the Delta Plan and ocean desalination permitting.

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

Although not required by the UWMP Act, in the 2025 UWMP Guidebook, DWR recommends that all suppliers that are participating in, or may participate in, receiving water from a proposed project that is considered a “covered action” under The Delta Plan by the Delta Stewardship Council—such as a (1) multiyear water transfer, (2) conveyance facility, or (3) new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta)—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 (California Code of Regulations [CCR], Title 23, Section 5003).

GSWC West Orange obtains a portion of its supplies through purchases from Municipal Water District of Orange County (MWDOC), which is a member agency of the Metropolitan Water District of Southern California (MWD).⁴ MWDOC acts as a secondary wholesale water agency, purchasing water from MWD and reselling it to agencies in Orange County, including GSWC West Orange. MWD supplies imported water sourced from the Delta via the State Water Project (SWP) and the Colorado River via the Colorado River Aqueduct (CRA). Additionally, MWD supports the Delta Conveyance Project (DCP), which is a covered action under the Delta Reform Act. Therefore, GSWC has prepared a Regional Self Reliance and Reduced Delta Reliance analysis conservatively assuming that all purchased imported water supplies are sourced from the Delta, as presented in **Appendix B**.

1.5.2 Permitting for Ocean Desalination Projects

California’s *Water Supply Strategy: Adapting to a Hotter, Drier Future* updates state priorities to address water supply shortages due to the accelerating impacts of climate change, including identifying opportunities to access new water sources such as ocean desalination. To streamline permitting for ocean desalination projects, the *Seawater Desalination Siting and Streamlining Report to Expedite Permitting* recommends that UWMPs demonstrate the need for future or proposed ocean desalination projects.

⁴ As noted in **Section 6.1.1.2**, GSWC West Orange also regularly purchases water from the City of Seal Beach, which meets a portion of its demands with imported supplies obtained from MWDOC.

As discussed in **Section 6** and **Section 7**, GSWC West Orange has sufficient water supplies available to meet projected demands through 2050 and does not anticipate the need for an ocean desalination project. While GSWC West Orange is not pursuing ocean desalination to augment its supply portfolio, it may receive desalinated supplies from its wholesalers should they implement ocean desalination projects in the future.

2 UWMP PREPARATION

This section discusses the type of UWMP prepared by GSWC West Orange and includes information that will apply throughout the Plan. It also summarizes the coordination and outreach conducted during the Plan development.

2.1 Basis for Preparing the UWMP

☑ CWC §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.

☑ CWC §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.

☑ CWC §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.

☑ CWC §10621

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

☑ 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.

An urban water supplier is defined in CWC §10617 as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to 3,000 customers or supplying more than 3,000 AF of water annually. Because GSWC West Orange is an urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 AF of water annually, it is obligated to develop and submit an UWMP to DWR by 1 July 2026.

GSWC West Orange is exclusively a retail supplier and operates the Public Water System (PWS) listed in **Table 2-1**. PWSs are the systems that provide drinking water for human consumption and are regulated by the SWRCB, Division of Drinking Water. The SWRCB requires that water agencies report water usage and other relevant PWS information via the electronic Annual Reports to the Drinking Water Program (eARDWP). These data are used by the state to determine, among other things, whether an urban retail water supplier has reached the threshold for submitting a UWMP. In 2025, GSWC West Orange provided water to 29,065 accounts and served 13,138 AF of water (**Table 2-1**). GSWC West Orange is therefore subject to the requirements of the UWMP Act.

Table 2-1 Public Water Systems (DWR Table 2-1)

Has there been a change in the number of affiliated Public Water Systems since the 2020 UWMP?			No
PWS Number	PWS Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
CA3010022	GSWC – West Orange	29,065	13,138
Total		29,065	13,138

NOTES: Volume of water supplied in 2025 includes recycled water supplied by the City of Cerritos.

2.2 Individual or Regional Plan

Urban water suppliers may elect to prepare individual or regional UWMPs. GSWC West Orange has elected to prepare an individual UWMP (see **Table 2-2**).

Table 2-2 Plan Identification (DWR Table 2-2)

	Type of Plan	Name of RUWMP
<input checked="" type="checkbox"/>	Individual UWMP	
<input type="checkbox"/>	Water Supplier is also a member of a SB X7-7 Regional Alliance	N/A
<input type="checkbox"/>	RUWMP	N/A

2.3 Fiscal or Calendar Year and Units of Measure

CWC §10608.20

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

Annual volumes of water reported in this UWMP are measured in AF and are reported on a calendar year basis (**Table 2-3**). Water use and planning data reported in this UWMP for calendar year 2025 cover the full twelve months of the year, as required by the UWMP Guidelines.

Table 2-3 Supplier Identification (DWR Table 2-3)

Type of Supplier	
<input type="checkbox"/>	Supplier is a wholesale supplier
<input checked="" type="checkbox"/>	Supplier is a retail supplier
Fiscal or Calendar Year	
<input checked="" type="checkbox"/>	UWMP Tables are in calendar years
<input type="checkbox"/>	UWMP Tables are in fiscal years
Units of measure used in UWMP	
Unit	AF

2.4 Standard Submittal Tables and Alignment with UWMP Act Requirements

The Plan has been prepared in general accordance with the format suggested in DWR’s 2025 UWMP Guidebook. Text from the UWMP Act has been included in text boxes at the beginning of relevant sections

of this UWMP. The information presented in the respective UWMP sections, and the associated text, figures, and charts are collectively intended to fulfill the requirements of that sub-section of the UWMP Act. To the extent practicable, supporting documentation has also been provided in **Appendices A** through **G**. Other sources for the information contained herein are provided in the references section of the document.

Per CWC §10644(a)(2), selected information for the UWMP updates must be presented in standardized tables for electronic submittal to DWR. Text and tables in the main body of the UWMP document have been cross-referenced to the companion DWR tables. Per the 2025 UWMP Guidebook, the UWMP preparer is requested to complete a checklist of specific UWMP requirements to assist the DWR review of the submitted UWMP. The completed checklist is included in **Appendix A**.

Further, consistent with the 2025 UWMP Guidebook, the terms “water use”, “water consumption”, and “water demand” are used interchangeably in this UWMP.

2.5 Coordination and Outreach

Coordination with other water suppliers, cities, counties, and other community organizations in the region is an important part of preparing a UWMP and WSCP. This section identifies the agencies and organizations GSWC West Orange sought to coordinate with during the preparation of this Plan.

2.5.1 Wholesale and Retail Coordination

☑ CWC §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).

Urban retail water suppliers relying on one or more wholesalers for water supply are required to provide the wholesalers with information regarding projected water supply and demand. As summarized in **Table 2-4**, GSWC West Orange derives a portion of its water supply from MWDOC and the City of Seal Beach. GSWC West Orange coordinated with its wholesaler suppliers throughout the preparation of this UWMP, including alignment on demand projections and reliance on wholesaler-provided supply and reliability information.

Table 2-4 Water Supplier Information Exchange (DWR Table 2-4)

Wholesale Water Supplier Name
Municipal Water District of Orange County
City of Seal Beach (a)
NOTES: (a) As noted in Section 6.1.1.2 , while the City of Seal Beach has historically supplied water to GSWC West Orange, GSWC is currently installing a transmission main that will change the regular-use interties to emergency interties. The City of Seal Beach is therefore not considered a wholesaler for GSWC West Orange after 2025.

2.5.2 Coordination with Other Agencies and the Community

CWC §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.

CWC §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...

In addition to coordinating with its wholesalers, GSWC West Orange also coordinated with regional wholesalers, recycled water suppliers, and other water suppliers that share a common water source, relevant water management agencies that affect the system's water assets, and public agencies with land use or regulatory relationships with GSWC West Orange, including:

- MWD;
- City of Cerritos;
- Orange County Water District (OCWD); and
- Local cities and counties.

The preparation of this UWMP also aligns with the goals and objectives established by the Santa Ana River Watershed Integrated Regional Water Management Plan (SARW IRWMP), known as the One Water One Watershed Plan, and the Greater Los Angeles County Integrated Regional Water Management (GLAC IRWM) Plan. These plans provide a regional framework for integrated water resources planning and coordination.

GSWC West Orange considered planning information from the Southern California Association of Governments (SCAG), which develops regional growth forecasts in coordination with the cities of Cypress, Stanton, and Los Alamitos, Seal Beach, Garden Grove and La Palma, as well as Orange County. These forecasts were reviewed to inform the growth assumptions underlying the UWMP demand projections and are consistent with local land use plans.

2.5.3 Notice to Cities and Counties

CWC §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.

GSWC West Orange provided notice to the entities and the communities it serves at the start of the UWMP process, more than 60 days prior to the public hearing, on 3 September 2025, informing them that the Plan was going to be reviewed and updated. Cities and counties who received the 60-Day Notice from GSWC West Orange are listed in **Table 10-1** of this Plan. For a full list of recipients, see **Appendix C**.

GSWC West Orange also sought public participation and notified the public of its intent to adopt its UWMP through a public hearing and notices to members of the community. Additional information on public participation, including information on noticing, is provided in **Section 10** and in **Appendix D**.

3 SERVICE AREA DESCRIPTION

This section provides a description of the GSWC West Orange water system and service area, including climate, population, demographics, and land uses to help in understanding various elements of water supply and demand.

3.1 General Description

CWC §10631

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

GSWC West Orange is in Orange County and provides service to the majority of the cities of Cypress, Stanton, and Los Alamitos, portions of the cities of Seal Beach, Garden Grove, and La Palma, and adjacent unincorporated areas of Orange County including the community of Rossmoor. The service area encompasses approximately 15.2 square miles, with elevations ranging from 12 to 86 feet above mean sea level. **Figure 3-1** depicts the GSWC West Orange customer service area, which is primarily characterized by residential land use, with some commercial and industrial land use.

GSWC West Orange purchases water from MWDOC and the City of Seal Beach, uses groundwater from the Coastal Plain of Orange County Groundwater Basin (OCGB), and receives recycled water through the City of Cerritos.

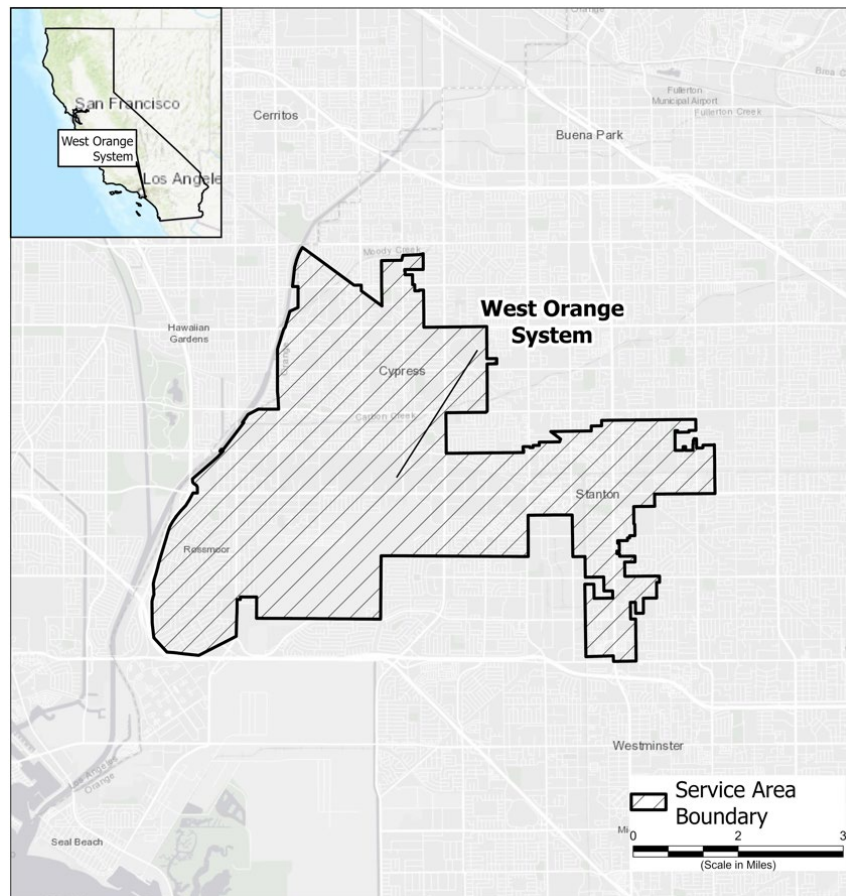


Figure 3-1 GSWC West Orange Location and Service Boundaries

3.2 Service Area Climate

CWC §10631

(a) Describe the service area of the supplier, ...“climate...”

CWC §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.

The GSWC West Orange service area is located within a region characterized by a Mediterranean climate with cool, wet winters and warm, dry summers. Based on modeled data from the Oregon State University Parameter Elevation Regression on Independent Slopes Model (PRISM) Climate Group for 1994 to 2024, the average annual rainfall was approximately 12 inches per year. Precipitation is generally confined to the wet season from November through April. Based on data from the California Irrigation Management Information System (CIMIS), the average annual reference evapotranspiration (ET_o) is approximately 46 inches per year.⁵ The climate characteristics of the service area are summarized in **Table 3-1** and the associated chart in **Figure 3-2**.

Because the average annual ET_o exceeds precipitation by approximately 34 inches, and about 92% of the annual precipitation occurs in the wet season, growing turf or other plantings in this region requires a significant amount of irrigation during the dry season. This irrigation demand contributes to the observed seasonal variation in water demand throughout the service area.

A review of long-term climate data from PRISM (1895 to 2024) shows that temperature has increased at an average rate of 0.30°F per decade. Mean annual temperature for 2020 to 2024 was 1.0°F higher than for 1895 to 1960. Review of long-term climate data also shows that rainfall exhibits considerable variability over time, and periods of consecutive years with below-average rainfall are common. Since 1895, sequences of below-average rainfall lasting three or more years have occurred nine times, and sequences lasting five or more years have occurred three times.

⁵ The ET_o is a standard measurement related to the water demand by plants in a specific region.

Table 3-1 Climate Characteristics

Month	Average Temperature		Standard Average ETo (inches)	Average Rainfall (inches)
	Min (°F)	Max (°F)		
January	47	67	2.0	2.8
February	48	66	2.5	2.9
March	50	68	3.7	1.8
April	53	70	4.6	0.6
May	57	72	4.9	0.3
June	61	74	5.0	0.1
July	64	79	5.8	0.1
August	64	81	5.6	0.0
September	63	80	4.5	0.1
October	58	77	3.3	0.4
November	51	71	2.2	0.7
December	46	66	1.7	2.1
Annual	55	73	46	12

SOURCES:

(a) Average temperature and rainfall data were obtained from PRISM available at: <https://prism.oregonstate.edu/explorer/>.

(b) Reference evapotranspiration data for Long Beach station #174 are from the DWR, CIMIS.

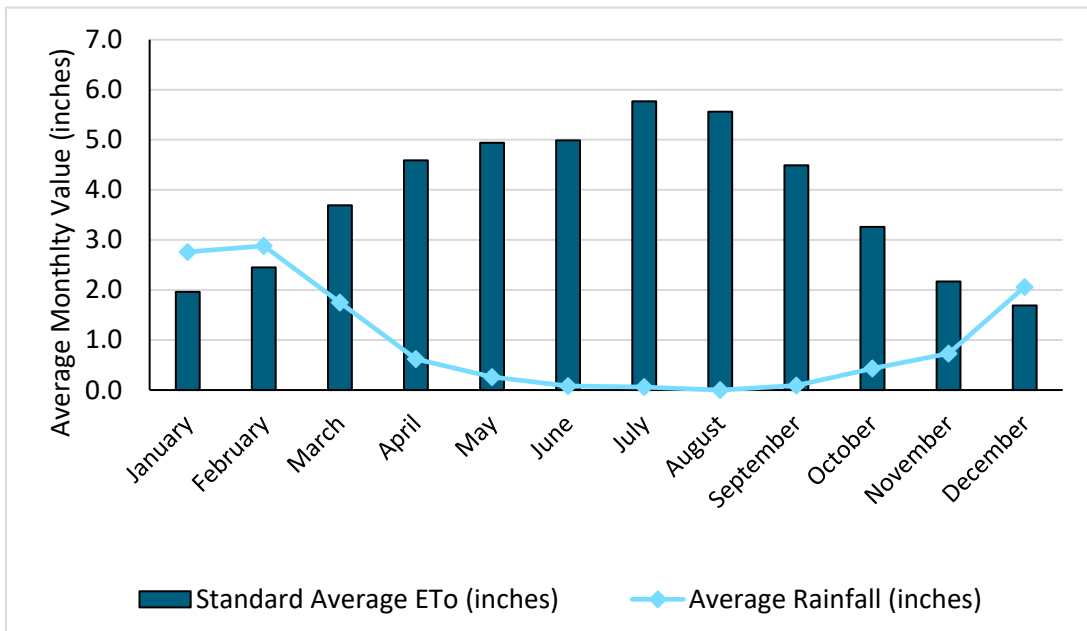


Figure 3-2 Average Monthly Climatic Conditions

According to the Cal-Adapt tool, future projections using the Localized Constructed Analogs downscaled Coupled Model Intercomparison Project (CMIP5) model indicates an average temperature increase of

approximately 3.7°F under medium emissions models (Representative Concentration Pathway [RCP] 4.5) and approximately 5.5°F for high emissions models (RCP 8.5) by 2100 for the GSWC West Orange service area (**Figure 3-3**).

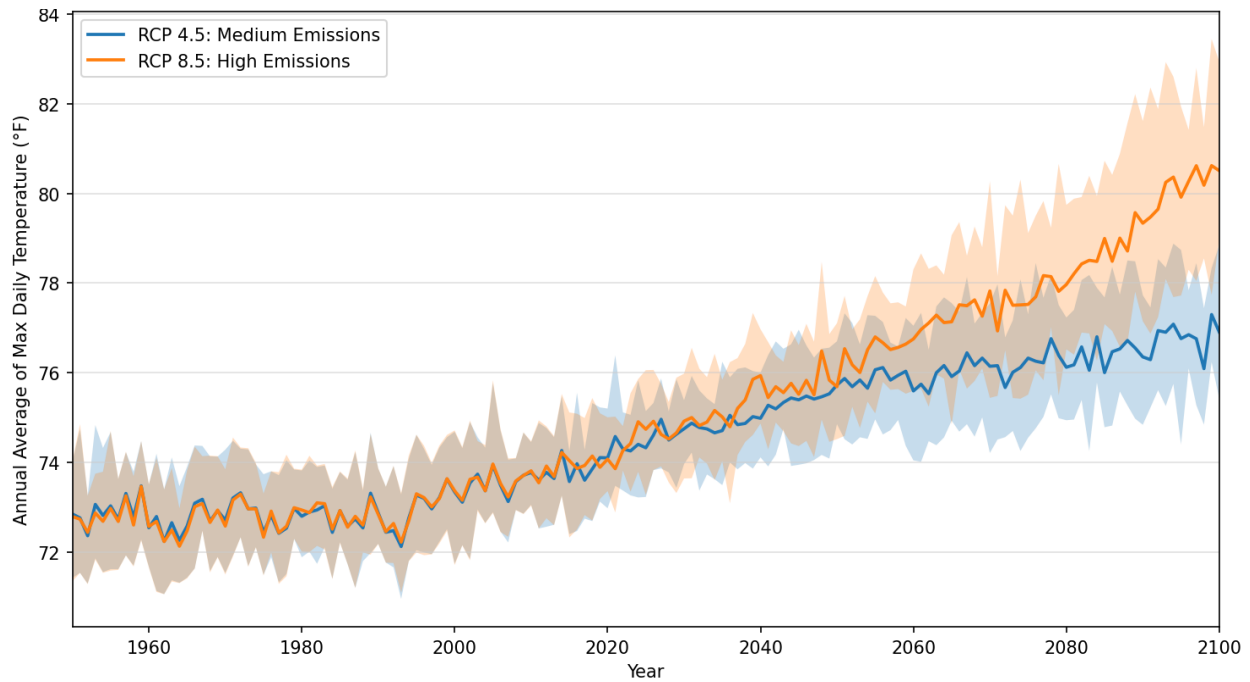


Figure 3-3 Observed and Forecasted Temperature for GSWC West Orange’s Service Area

Changing climate can affect both water demands and supplies. For example, extreme and higher temperatures can lead to increases in water use; declining snowpack and earlier runoff patterns could result in changes in stream flows and reservoir operations; and more frequent, severe, prolonged droughts could lead to not only less surface water available but also exacerbate ongoing stressors in groundwater basins. Some of these pressures are already apparent in California as of 2025.

Pursuant to the CWC requirements and the 2025 UWMP Guidebook, this Plan incorporates climate change considerations into following relevant sections:

- Section 3 – Service Area Description
- Section 4 – Water Use Characterization
- Section 6 – Normal Year Water Supply Characterization
- Section 7 – Water Service Reliability and Drought Risk Assessment.

3.3 Service Area Population and Demographics

CWC §10631

(a) Describe the service area of the supplier, including current and projected population ... 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.

It is estimated that GSWC West Orange’s service area population was 114,756 in 2025. GSWC West Orange estimates its historical and current service area population using decennial census data on household and

group quarters population collected at the census block level. In years between censuses, household and group quarters populations are linearly interpolated. In years following the 2020 Census, including year 2025, population is estimated by scaling the 2020 Census population in proportion to the growth in active single- and multi-family residential services. Future projections of population are based on population forecasts prepared by the SCAG (see Section 3.4), calibrated to the service area’s current population.

Current and projected service area population is shown in Table 3-2. By 2050, the total population within GSWC West Orange’s service area is expected to be approximately 124,441, which represents a 0.32% annual rate of increase from current population.

Table 3-2 Population – Current and Projected (DWR Table 3-1)

Population Served	2025	2030	2035	2040	2045	2050 (Opt)
	114,756	116,623	118,521	120,462	122,435	124,441

Demographic characteristics of the GSWC West Orange service area were approximated using data from the cities of Cypress and Los Alamitos, which lie within the service area and were used as proxies for the broader customer population. Cypress has a significant White population, representing approximately 48% of residents, while Los Alamitos has a significant Asian population, representing approximately 38% of residents. Median household incomes are approximately \$130,215 and \$97,155 for Cypress and Los Alamitos, respectively, which are above the statewide average of approximately \$96,000 (U.S. Census, 2025).

3.4 Land Uses within the Service Area

CWC §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...

Land use authority in the GSWC West Orange service area is divided among the incorporated cities of Cypress, Stanton, Los Alamitos, Seal Beach, Garden Grove, and La Palma, and unincorporated communities under Orange County jurisdiction. The service area is almost fully developed, with predominant low- to medium-density residential land use and some commercial and industrial areas. No agricultural uses are present.

The SCAG prepares economic forecasts for the Orange County region, which includes GSWC West Orange. Given the large area and diversity of jurisdictions within the GSWC West Orange service area, it is assumed that regional planning organizations like SCAG are best prepared to project growth over the entire service area. In SCAG’s 2024 Demographic and Growth Forecasts Technical Report, the region’s growth rate remains lower than in past decades, but the entire SCAG region is expected to add approximately 2 million people from 2019 to 2050 through a combination of natural increase, domestic migration, and immigration (SCAG, 2024).

For planning purposes, this UWMP assumes incremental growth in water use across all customer classes. This approach is conservative and ensures that the UWMP accounts for both the built-out nature of the service area and the potential effects of regional demographic and economic trends, as described further in Section 4.2.2.

4 WATER USE CHARACTERIZATION

This section provides a description and quantifies GSWC West Orange’s historical, current, and projected water uses through 2050. For the purposes of this UWMP, the terms “water use” and “water demand” are used interchangeably.

4.1 Non-Potable Versus Potable Water Use

Potable and non-potable water uses are accounted for separately in this section. Potable uses are served by GSWC West Orange’s potable water delivery system. Potable water deliveries comply with Title 22 Drinking Water Standards. Non-potable water uses may include recycled and untreated raw water deliveries, such as tertiary treated recycled water, remediated groundwater, or untreated surface or groundwater supplies that do not meet potable drinking water standards. Uses of potable versus non-potable water are clearly distinguished in the tables included in this section of the Plan.

4.2 Past, Current, and Projected Water Use by Sector

CWC §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.

Demand within GSWC West Orange’s water service area is measured using water meters that are installed at each customer account. Records of current and historical water use at each account are maintained by GSWC. Demand within GSWC West Orange’s service area is tracked and reported for the following sectors:

- **Single Family Residential:** Attached or detached dwelling units that are individually metered.
- **Multi-Family Residential:** Two or more dwelling units served by a common water meter.
- **Commercial/Institutional:** Includes commercial and institutional customers. If irrigation water use at these sites is separately metered, it is included in the landscape sector.
- **Industrial:** Includes industrial customers. If irrigation water use at these sites is separately metered, it is included in the landscape sector.

- **Landscape:** Water meters used exclusively for outdoor uses associated with multiple family residential customers (i.e., homeowner associations [HOAs]) and other irrigation sites.
- **Other:** Includes temporary meters, and miscellaneous customers not listed elsewhere.

Water use categories described in CWC §10631(d)(1)(G) through (I), listed below, were not included in GSWC West Orange’s water demand calculations because they do not apply to the system:

- Sales to other agencies;
- Sales for agricultural irrigation; and
- Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

GSWC West Orange’s total water demand consists of all potable and recycled (i.e., non-potable) water demands within its service area. Total demand includes water consumed by metered accounts, authorized but unbilled uses, and system water losses. These losses are categorized as either apparent or real losses. Real losses represent physical losses from the distribution system, such as seepage, leaks, and spills. Apparent losses reflect non-physical losses, including meter inaccuracies, data handling errors, and unauthorized consumption.

4.2.1 Past and Current Water Use

CWC §10631

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

Table 4-1 and **Figure 4-1** show water uses from 2021 through 2025 in AF. Potable demands comprise nearly all water uses in GSWC West Orange’s service area. Within the potable use category, residential customers accounted for almost 64% of potable demand in 2025. The other major potable use category is commercial/institutional, which accounted for 22% of potable demand in 2025. Together, the residential and commercial/institutional usage sectors comprise roughly 86% of potable demands in a given year.

GSWC West Orange also receives recycled water from the City of Cerritos for landscape irrigation. In 2025, GSWC West Orange delivered 232 AF of recycled water (inclusive of delivery losses), accounting for less than 2% of total water use. Detailed discussion of GSWC West Orange’s recycled water program is provided in **Section 6.5**.

Table 4-1 Total Uses for Potable and Non-Potable Water – 2021-2025 Actual (DWR Table 4-1)

Use Type	Additional Description	Potable or Non-Potable	Historical Water Use - Volume (AF)				
			2021	2022	2023	2024	2025
Single Family		Potable	6,526	6,129	5,624	5,808	5,858
Multi-Family		Potable	2,639	2,515	2,380	2,450	2,432
Commercial	(a)	Potable	3,241	3,044	2,713	2,871	2,847
Industrial		Potable	44	33	32	31	32
Landscape		Potable	926	877	662	708	752
Other		Potable	0	0	59	59	0
Losses	(b)	Potable	877	926	810	977	984
Landscape	Recycled water	Non-Potable	201	153	157	178	214
Losses	Recycled water (c)	Non-Potable	13	11	11	15	18
<i>Subtotal Potable</i>			<i>14,253</i>	<i>13,523</i>	<i>12,279</i>	<i>12,904</i>	<i>12,906</i>
<i>Subtotal Non-Potable</i>			<i>214</i>	<i>164</i>	<i>168</i>	<i>193</i>	<i>232</i>
Total			14,467	13,687	12,448	13,097	13,138
NOTES:							
(a) Includes institutional water uses.							
(b) Sum of unbilled authorized consumption, apparent losses, and real losses.							
(c) Same loss rate as potable system is assumed.							

Total demand decreased by approximately 9% over the five-year period shown in **Table 4-1**, continuing the long-term downward trend in GSWC West Orange’s water use. Since 2015, total demand has declined by almost 2%, even though 2015 was an extreme drought year during which mandatory conservation requirements were in effect. Per capita water use has fluctuated since 2015, ranging from 97 to 115 gallons per person per day (GPCD). The current 2025 per capita use of 102 GPCD is 4% lower than 2015 levels, as shown in **Table 4-2**.

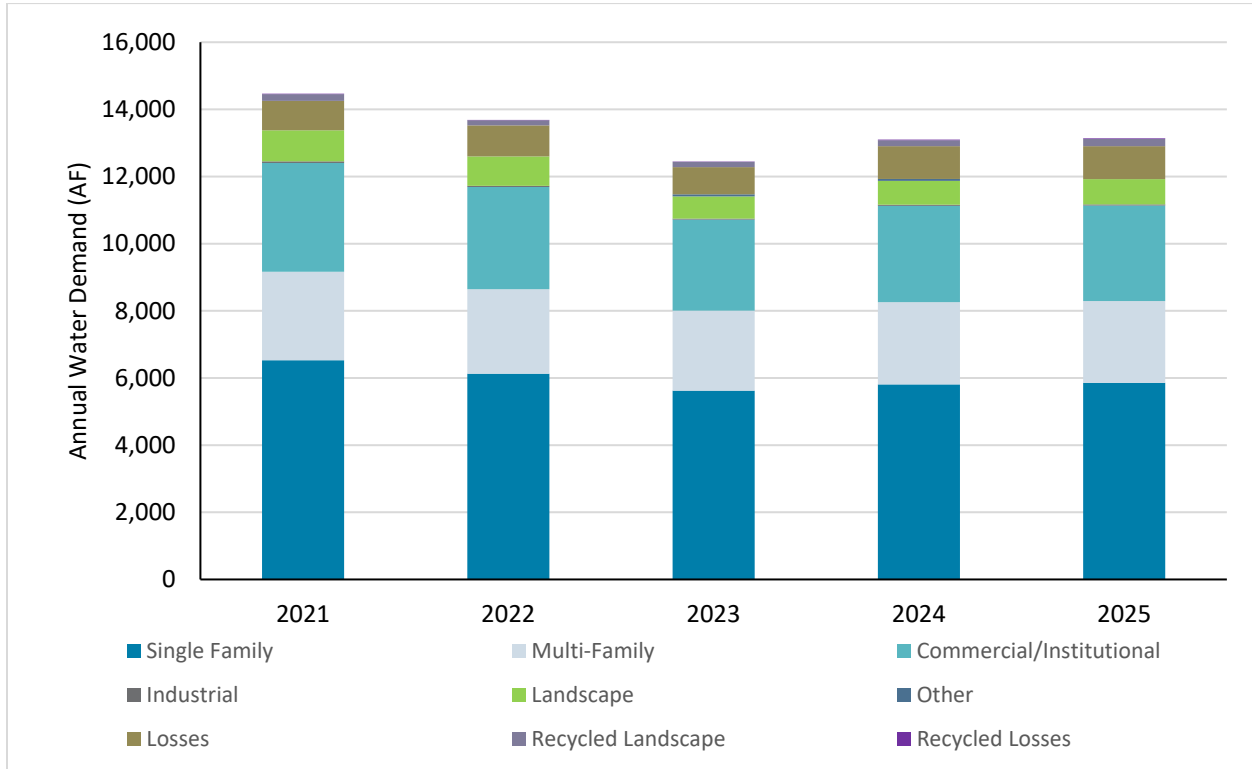


Figure 4-1 Annual Total Water Demand by Sector

Table 4-2 Historical Water Demand and Per Capita Water Demand

Year	Population	Total Water Demand (AF)	Per Capita Water Use (GPCD)
2015	111,527	13,362	107
2016	111,833	13,633	109
2017	112,140	14,292	114
2018	112,447	14,487	115
2019	112,756	13,726	109
2020	113,066	14,482	114
2021	113,220	14,467	114
2022	113,637	13,687	108
2023	114,193	12,448	97
2024	114,388	13,097	102
2025	114,756	13,138	102

NOTES: Values in the table may differ from quantities shown in the 2015 and 2020 UWMPs due to data revisions.

4.2.2 Projected Water Use

CWC §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...

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

CWC §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 requirements 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.

CWC §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...

CWC §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.

California Health and Safety Code §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.

Table 4-3 and **Figure 4-2** show projected water uses in five-year increments through 2050. Future water uses are projected by combining forecasts of future water services with forecasts of expected water use per service. The forecasts of future services are developed in consideration of population, housing, and employment growth projections from the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved by SCAG's Regional Council in April 2024.

Baseline forecasts of expected use per service are calibrated to average usage for the previous three years. The baseline forecasts are then adjusted over the forecast period for expected changes in usage associated with:

1. **Passive water savings** primarily driven by the interaction of plumbing codes and appliance standards with the turnover of the existing stock of appliances and plumbing fixtures as well as the addition of new appliances and plumbing fixtures.
2. **Active water savings** driven by continued implementation of GSWC’s conservation programs.
3. **Behavioral responses to higher water service cost** driven by the interaction of customer responsiveness to changes in the marginal cost of water service and projected increases in the cost of water service over the forecast period.
4. **Water loss standards compliance** translated as a reduction in expected loss per service (see **Table 4-4**).

These adjustments are described in greater detail in **Section 4.3**.

Potable water uses in GSWC West Orange’s service area are projected to decrease over the forecast period. This is a consequence of low projected growth in the number of services (i.e., SCAG growth forecasts result in a service growth rate of just 0.32% per year) and continuation of the trend in lower water use per service. This downward trend in use per service more than offsets growth-induced increases in water usage. As such, it is estimated that potable water use will decrease from 12,906 AF currently to 12,449 AF in 2050, a reduction of almost 4%.

In addition to the uses of potable water, a relatively small amount of recycled water is used within GSWC West Orange’s service area. Recycled water is used exclusively for landscape irrigation. As discussed in **Section 6.5**, projected recycled water use is not anticipated to change substantially over the forecast period from the current level of usage.

Table 4-4 shows projected total per capita water use. Per capita water use is projected to decrease by 11%, from 102 to 91 GPCD, over the 25-year forecast period. Going forward, per capita demand is expected to continue declining, though at a more gradual pace than in previous decades, as many of the most accessible conservation opportunities, such as conversion of older toilets, showerheads, and clothes washers, have already largely been realized.

Table 4-3 Total Uses of Potable and Non-Potable Water - Projected (DWR Table 4-2)

Use Type	Additional Description	Projected Water Use – Volume (AF)					
		Potable or Non-Potable	2030	2035	2040	2045	2050 (Opt)
Single Family		Potable	5,700	5,644	5,622	5,619	5,629
Multi-Family		Potable	2,358	2,327	2,312	2,306	2,308
Commercial	(a)	Potable	2,753	2,723	2,705	2,697	2,695
Industrial		Potable	32	33	33	34	34
Landscape		Potable	745	752	760	767	775
Losses	(b)	Potable	944	960	975	991	1,007
Landscape	Recycled water	Non-Potable	209	212	216	219	223
Losses	Recycled water (c)	Non-Potable	16	17	17	17	18
<i>Subtotal Potable</i>			<i>12,532</i>	<i>12,439</i>	<i>12,407</i>	<i>12,414</i>	<i>12,449</i>
<i>Subtotal Non-Potable</i>			<i>226</i>	<i>229</i>	<i>233</i>	<i>237</i>	<i>241</i>
Total			12,758	12,669	12,640	12,651	12,689

NOTES:
 (a) Includes institutional water uses.
 (b) Sum of unbilled authorized consumption, apparent losses, and real losses.
 (c) Same loss rate as potable system is assumed.

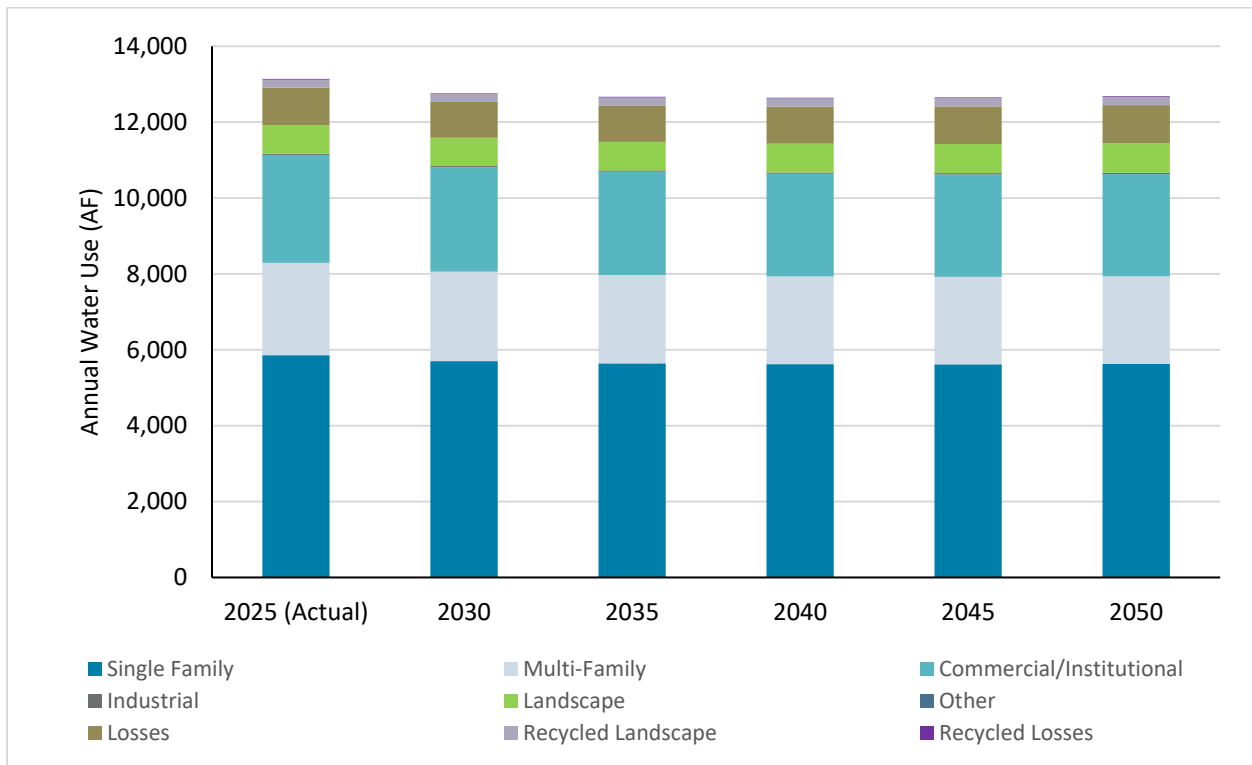


Figure 4-2 Projected Water Demand by Sector

Table 4-4 Projected Water Demand and Per Capita Water Demand

Year	Population	Total Water Demand (AF)	Per Capita Water Use (GPCD)
2025	114,756	13,138	102
2030	116,623	12,758	98
2035	118,521	12,669	95
2040	120,462	12,640	94
2045	122,435	12,651	92
2050	124,441	12,689	91

4.2.3 Adjustments to Projected Water Uses

As noted in the previous section, four adjustments were made to projected water usage:

1. **Passive water savings** primarily driven by the interaction of plumbing codes and appliance standards with the turnover of the existing stock of appliances and plumbing fixtures as well as the addition of new appliances and plumbing fixtures.
2. **Active water savings** driven by continued implementation of GSWC’s conservation programs.
3. **Behavioral responses to higher water service cost** driven by the interaction of customer responsiveness to changes in the marginal cost of water service and projected increases in the cost of water service over the forecast period.
4. **Water loss standards compliance** translated as a reduction in expected loss per service (see **Table 4-8**).

No adjustments were made to projected recycled water demand as recycled water is used for landscape irrigation only. This section describes the data and methods underlying these adjustments as well as their relative magnitudes.

Table 4-5 Inclusion in Water Use Projections (DWR Table 4-3)

Are Future Water Savings Included in Projections?	Yes
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.	Sections 4.2.3.1 to 4.2.3.5
Are Lower Income Residential Demands Included in Projections?	Yes
OPTIONAL If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	See notes
NOTES: All GSWC West Orange residential customers, regardless of income level, are metered and thus the demands of residential customers with lower incomes are part of the single- and multi-family water uses shown in Table 4-1 and Table 4-3 .	

4.2.3.1 Passive Water Savings Adjustment

CWC §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.

The passive savings adjustments reflect the effects of the following codes and regulations:

- **AB 715 (2007)** requires that any toilet or urinal sold or installed in California on or after January 1, 2014, must not exceed flush ratings of 1.28 gallons per flush (gpf) for toilets and 0.5 gpf for urinals. These standards superseded the earlier 1991 limits of 1.6 and 1.0 gpf, respectively. In response to the Governor’s Emergency Drought Response EO B-29-15, the California Energy Commission adopted new urinal standards in April 2015, reducing allowable use to 0.125 gpf—75% lower than the AB 715 standard.
- **California Appliance Efficiency Regulations (California Code of Regulations, Title 20, Sections 1601-1609)** set a two-tier standard for showerheads: a maximum flow rate of 2.0 gallons per minute (gpm) for models manufactured on or after 1 July 2016, and a maximum flow rate of 1.8 gpm for models manufactured on or after 1 July 2018.
- **Federal appliance water efficiency standards** for residential and commercial clothes washers and dishwashers are established by the U.S. Department of Energy under the Energy Policy and Conservation Act.
- **CALGreen Building Code** requirements apply to new construction and renovations in California. CALGreen includes prescriptive indoor standards limiting water consumption of plumbing fixtures and fittings, as well as an optional performance path requiring a 20% reduction in indoor water use relative to a calculated baseline using CALGreen worksheets.

- **SB 407 (2009)** mandates that all buildings constructed on or before 1 January 1994, retrofit noncompliant plumbing fixtures to meet current state efficiency standards. The law also requires sellers of single-family homes, effective 1 January 2017, to disclose in writing whether required plumbing fixture replacements have been completed. Similar disclosure requirements for multi-family and commercial properties took effect 1 January 2019. **SB 837 (2011)** reinforced these requirements by adding corresponding disclosure elements to the statutory property transfer disclosure statement.
- **Model Water Efficient Landscape Ordinance (MWELO)** was updated by the California Water Commission in 2015. MWELO (or a locally adopted equivalent) limits water use for new and rehabilitated landscapes. Under MWELO, the maximum applied water allowance (MAWA) is set at 55% of reference evapotranspiration for residential landscapes and 45% for commercial landscapes, with exceptions for special uses such as sports fields, parks, or landscapes irrigated with recycled water.
- **AB 1572 (2023)**, effective January 2024, prohibits the use of potable water for irrigating nonfunctional turf on commercial, industrial, and institutional (CII) properties—excluding cemeteries—as well as on properties managed by homeowners’ associations, common interest developments, and similar entities. The prohibition does not extend to other types of landscaping, such as drought-tolerant plantings.

The passive savings adjustments were estimated with the Alliance for Water Efficiency’s *Water Conservation Tracking Tool* (AWE Tracking Tool), a quantitative model widely used by water utilities to assess both active and passive water savings.⁶

4.2.3.2 Active Savings Adjustment

Active savings refers to water savings resulting from GSWC West Orange’s implementation of water conservation programs, education programs, and the offering of financial incentives (e.g., rebates). GSWC West Orange’s current and planned active conservation programs, or (Demand Management Measures (DMM)), are discussed in **Section 9**.

The active savings adjustment is based on continuation of GSWC West Orange’s current programs at the average level of implementation for the previous five years, as reported to the CPUC in annual filings.

As with passive savings, the cumulative effects of these programs on future demand were estimated with the AWE Tracking Tool.

4.2.3.3 Customer Price Response Adjustment

The AWE Tracking Tool was also used to calculate customer price response adjustments. The adjustment assumes a sustained 0.5% annual rate of increase above general price inflation in the marginal cost of water service.

The AWE Tracking Tool’s default demand elasticities were used to adjust baseline demands over the forecast period in response to the real increases in marginal water service costs. The demand elasticities estimate the expected percentage change in water use given a 1% inflation-adjusted increase in marginal water cost. For example, an elasticity of -0.1 implies that demand will decrease, on average, by 0.1% given a 1% increase in marginal water cost.

⁶AWE’s Tracking Tool is available at: <https://allianceforwaterefficiency.org/resource/water-conservation-tracking-tool/>

The default elasticities used by the AWE Tracking Tool are as follows:

- Single-Family: -0.15
- Multi-Family: -0.075
- CII: -0.15
- Irrigation: -0.25

Because higher water service cost encourages conservation program participation, the AWE Tracking Tool’s default elasticities are purposely conservative (i.e., small in magnitude) to reduce the likelihood of double counting water savings.

4.2.3.4 Water Loss Standards Compliance

The water loss standards compliance adjustment is based on the difference between current real and apparent water loss, as reported in GSWC West Orange’s most recent water loss report (see **Table 4-8**), and the corresponding standards (**Section 4.3.2**). Water use per service is reduced by this difference in 2028, the deadline for compliance with the standards.

4.2.3.5 Summary of Demand Adjustments

Table 4-6 and **Figure 4-3** show the impact of the demand adjustments on projected water use. In total, the adjustments reduce projected 2050 water use by 9.7% relative to the baseline forecast. Most of the reduction is associated with passive water savings (6.9%), followed by customer price response (1.5%), and active water savings (1.3%). There are no adjustments associated with water loss standards compliance.

Table 4-6 Projected Baseline and Adjusted Potable Water Demand (DWR Optional 4-4)

Water Conservation Type)	Projected Potable Water Demand (AF)				
	2030	2035	2040	2045	2050 (Opt)
Baseline Potable Water Demand	12,911	13,121	13,336	13,554	13,776
Potable Demand Adjustments					
Passive Conservation	290	510	684	827	948
Active Conservation	48	90	122	151	176
Water Service Cost	41	81	122	163	204
Water Loss Standards Compliance	0	0	0	0	0
<i>Subtotal Adjustments</i>	<i>379</i>	<i>682</i>	<i>928</i>	<i>1,140</i>	<i>1,328</i>
Projected Potable Demand	12,532	12,439	12,407	12,414	12,449

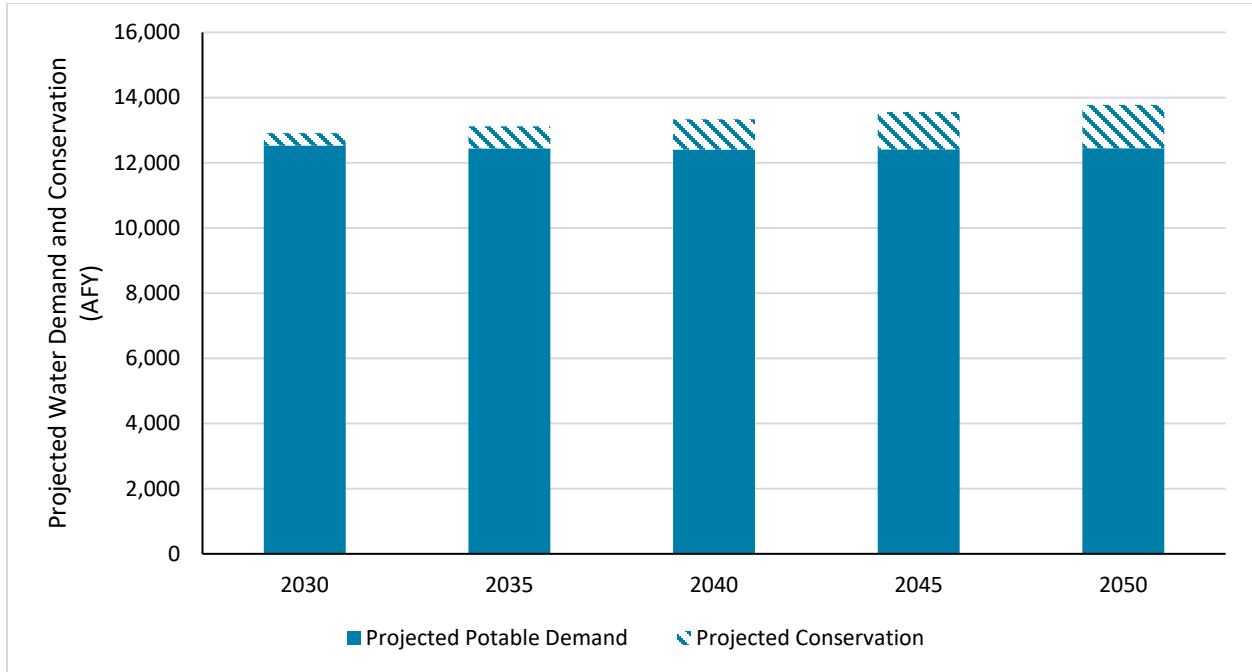


Figure 4-3 Projected Baseline and Adjusted Potable Water Demand

4.3 Distribution System Water Loss

CWC §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 1 July 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

Since 2016, urban retail water suppliers have been required under CWC §10608.34 and CCR §638.1 et seq to quantify distribution system water losses using the American Water Works Association (AWWA) Free Water Audit Software (referred to as “water loss audit reports”). **Table 4-7** summarizes the water loss audit reports submitted to the DWR since 2020.

Table 4-7 Water Loss Audit Reporting (DWR Table 4-5)

PWS ID # Reported in DWR Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
CA3010022	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
NOTES: Submitted water loss audit reports are available at: https://wuedata.water.ca.gov/ .		

4.3.2 Progress Toward Meeting the Water Loss Performance Standard

In 2022, the SWRCB adopted new performance standards for urban retail water suppliers that would reduce water loss by nearly 35%. Effective starting in 2023, the SWRCB provided a volumetric standard to each urban retail water supplier that sets cost-effective levels of achievable water loss given each water system’s characteristics and budgets. Suppliers will be required to start meeting individual volumetric loss standards over a three-year period beginning January 2028. This water loss is one component of the MCCWL.

CWC §10631 (3)(c) requires that this UWMP demonstrate whether the distribution loss standards enacted by the SWRCB pursuant to CWC §10608.34 have been met. **Table 4-8** demonstrates GSWC West Orange’s progress towards meeting the 2028 water loss standard. Real water loss is currently compliant with its respective 2028 water loss standard, though apparent water loss currently exceeds its respective 2028 standard. GSWC West Orange has been making steady progress reducing system loss and expects to be compliant with the standards by the 2028 deadline.

Table 4-8 Progress Towards 2028 Water Loss Standard (DWR Table 4-6)

PWS ID #	Did the SWRCB Calculate a Water Loss Standard for this PWS?	Real Water Loss					Apparent Water Loss				
		SWRCB Standard		Most Recent AWWA Loss Audit			SWRCB Standard		Most Recent AWWA Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss (b)	Number of Units	Volume of Total Real Loss (AF)	Real Water Loss per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss (a)	Number of Connections	Volume of Total Apparent Loss (AF)	Apparent Water Loss per Unit per Day
CA3010022	YES	22.90	GPSCD	28,832	718	22.2	6.80	GPSCD	28,832	232	7.2

NOTES:

(a) GPSCD = Gallons per service connection per day.

4.4 Climate Change Considerations

CWC §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.

CWC §10635(b)

(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.

Potential climate change impacts are described in greater detail in **Section 3.2**. Changing climate can affect water demands, as extreme and higher temperatures can lead to increases in water use. Pursuant to the CWC requirements and the 2025 UWMP Guidebook, this Plan incorporates climate change considerations into the water demand projections provided in this section.

4.5 Characteristic Five-Year Water Use

CWC §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...

*(3) A comparison of the total water supply sources available to the water supplier with **the total projected water use for the drought period.** (Emphasis added).*

(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.

In accordance with CWC §10635(b)(3), UWMPs must provide a five-year Drought Risk Assessment (see **Section 7.5**). As a first step, DWR suggests that water suppliers estimate their unconstrained water demand for the next five years (2026-2030). Unconstrained water demand is water use in the absence of drought water use restrictions. These numbers can then be adjusted to estimate the five-years' cumulative drought effects. The Drought Risk Assessment presented in **Section 7.5** accounts for this increase in unconstrained water demand.

As part of the sales forecasting process for General Rate Cases (GRC) before the CPUC, GSWC conducts econometric modeling to evaluate the sensitivity of water sales to variations in weather conditions. These models were used to simulate the difference between projected water use under normal weather conditions versus use under multiple dry-year conditions. For this analysis, weather data from the multiple dry periods of 1929–1934, 1987–1991, and 2013–2016 were applied. The results indicate that GSWC West Orange annual water use in a multiple dry-year scenario would increase by an average of approximately 1%, relative to normal conditions. The relatively modest increase reflects the highly urbanized and densely developed character of GSWC West Orange's service area, where a low proportion of total water use is weather-sensitive.

Table 4-9 shows unconstrained demands for 2026-2030 for normal weather and multiple-dry-year scenarios.

Table 4-9 Characteristic Five-Year Water Use

Weather Scenario	Water Use – Volume (AF)				
	2026	2027	2028	2029	2030
Normal	12,884	12,847	12,814	12,784	12,758
Multi-Year Dry	12,986	12,948	12,915	12,885	12,858

NOTES: This table shows unconstrained demand (i.e., demand in the absence of drought water use restrictions).

4.6 Coordinating Water Use Projections

CWC §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.

GSWC West Orange purchases water from MWDOC and the City of Seal Beach. As noted in **Section 6.1.1.2**, GSWC is currently installing a transmission main that will change the regular use interties from the City of Seal Beach to emergency interties; therefore, purchased supplies from the City of Seal Beach are no longer anticipated in future normal years.

As part of the coordination effort for the UWMP, and in compliance with CWC §10631(h), GSWC West Orange supplied MWDOC with its water demand projections through 2050.

5 SB X7-7 BASELINE, 2020 TARGET, AND 2025 REPORTING

SB X7-7, 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 (2020 Target), contributing to the State’s collective efforts. Because the CWC does not set an end date for reporting progress in meeting the 2020 Target, this section of the UWMP demonstrates GSWC West Orange’s compliance with SB X7-7 in 2020.

5.1 Demonstration of Compliance with 2020 Target in 2020

CWC §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.

CWC §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.

GSWC West Orange achieved its 2020 Target in 2020. The data used to calculate GSWC West Orange’s 2020 Target and demonstrate compliance are documented in GSWC West Orange’s 2020 UWMP. **Table 5-1** below summarizes GSWC West Orange’s 2020 Target and actual 2020 GPCD, confirming that GSWC West Orange met the SB X7-7 compliance requirements.

Table 5-1 SB X7-7 2020 Target Progress (DWR Table 5-1)

<input type="checkbox"/> Supplier was not an Urban Water Supplier during or before the 2020 reporting cycle.							
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target?	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020		
					Was Supplier part of a merger or consolidation since 2020?	Actual 2025 GPCD	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	141	111	Yes			N/A

5.2 Nexus to SWRCB Urban Water Use Objectives

CWC § 10609.20

(a) Each urban retail water supplier shall calculate its urban water use objective no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year.

CWC § 10609.22

(a) An urban retail water supplier shall calculate its actual urban water use no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use for the previous calendar or fiscal year.

CWC § 10609.24

(a) An urban retail water supplier shall submit a report to the department no later than January 1, 2024, and by January 1 every year thereafter. The report shall include all of the following:

(1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.

(2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.

(3) Documentation of the implementation of the performance measures for CII water use.

(4) A description of the progress made towards meeting the urban water use objective.

(5) The validated water loss audit report conducted pursuant to Section 10608.34.

(b) The department shall post the reports and information on its internet website.

(c) The board may issue an information order or conservation order to, or impose civil liability on, an entity or individual for failure to submit a report required by this section.

In July 2024, California adopted the MCCWL regulation, implementing SB 606 and AB 1668 to support long-term conservation and drought resilience. The regulation establishes annual UWUOs for urban water suppliers and introduces Performance Measures for CII water users.

The UWUO is a water-budget-based framework tailored to each supplier. It consists of the following components:

1. Residential indoor water use standard,
2. Residential outdoor water budget,
3. CII landscape outdoor water use standard (for landscapes with dedicated irrigation meters),
4. Water loss standard,
5. Variance, and
6. Potable reuse bonus.

Beginning in 2027, suppliers must annually assess whether the sum of their regulated water uses (i.e., residential indoor and outdoor, dedicated irrigation meter use, and water loss) is at or below their UWUO. The state standards for residential indoor and outdoor water use and for CII outdoor use will become increasingly stringent over time, potentially requiring additional conservation efforts to achieve compliance.

Urban retail water suppliers must report annually to the state on their water use relative to their UWUOs. GSWC West Orange’s UWUO submissions are available through DWR’s WUE Data Portal.⁷

The MCCWL regulation uses the SB X7-7 2020 Target as a backstop for the supplier’s UWUO. If the supplier’s UWUO is greater than its 2020 Target-based water use, after adjusting for excluded demands, its UWUO is adjusted down to its 2020 Target-based adjusted water use.

Although UWUO compliance projections are not required as part of an UWMP, they can provide valuable insight into the potential need and timing for additional conservation measures. For this reason, GSWC has elected to develop preliminary UWUO projections for its service areas and to compare these projections to projected regulated water uses.

Table 5-2 summarizes GSWC West Orange’s anticipated UWUO compliance through 2050. The table compares projected regulated water demand with projected UWUOs based on:

- Projected residential population and associated landscape area,
- Projected CII landscape area with dedicated irrigation meters,
- Projected real and apparent water losses consistent with the water loss standards in **Table 4-8**, and
- Projected potable reuse credits.⁸

These estimates indicate that GSWC West Orange’s water use is expected to remain below its UWUO through 2050.

Table 5-2 GSWC West Orange UWUO and Regulated Demand Projections

Year	Service Area Population (a)	Water Demand Subject to UWUO Compliance (AF) (b)	UWUO Projections (AF)	Over (+)/Under (-) UWUO (AF)
2025	114,756	10,215	11,991	-1,777
2030	116,623	9,933	11,406	-1,473
2035	118,521	9,872	10,855	-982
2040	120,462	9,861	10,599	-738
2045	122,435	9,879	10,782	-903
2050	124,441	9,918	10,968	-1,050

NOTES:

(a) From **Table 3-2**.

(b) Water demand subject to UWUO compliance includes single family, multi-family, dedicated irrigation meter, and water loss sectors (excluding unbilled authorized consumption) and is detailed in **Table 4-3**.

⁷ DWR’s WUE Data Portal: https://wuedata.water.ca.gov/uwuo_plans

⁸ Suppliers may augment their UWUO with a bonus incentive based on the amount of potable reuse in their service area. is eligible for this bonus incentive due to its utilization of recycled water recharged into the OCGB. An estimate of this bonus incentive has been factored into the UWUO projections in the table.

6 NORMAL YEAR WATER SUPPLY CHARACTERIZATION

CWC §10631

(b) 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) [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.

This section of the UWMP provides a description of GSWC West Orange’s current and potential water supplies, as well as assessment of the energy intensity used to operate GSWC West Orange’s extraction, conveyance, treatment, and distribution systems. GSWC West Orange relies on a diverse portfolio of water resources, including purchased water, groundwater, and recycled water. The system also maintains emergency interconnections with neighboring agencies, allowing access to additional water supplies during emergency conditions.

6.1 Purchased or Imported Water

CWC §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).

GSWC West Orange purchases imported water from MWDOC, which is a member agency of MWD, and the City of Seal Beach, whose water supply is a combination of imported water from MWDOC and groundwater from the OCGB. GSWC West Orange has relied on purchased water for 3% to 40% of its total supply over the past 5 years.

6.1.1 Wholesale Agencies and Agreements

This section describes the wholesale agencies and relevant wholesale agreements.

6.1.1.1 Municipal Water District of Orange County

MWDOC (previously called the Orange County Municipal Water District) was established in 1951 to represent its service area at MWD and meet the growing needs of the region with imported water. Local water supplies such as groundwater and recycled water meet roughly half of region’s water demand. To meet the remaining demand, MWDOC purchases imported water from MWD and then delivers these

imported water supplies to its 27 member agencies, which include local municipalities, investor-owned utilities (including GSWC), and water districts.

GSWC purchases only potable imported water from MWDOC. Though GSWC does not have a direct contract for water supply purchase from MWDOC, it does not anticipate any reduction in supply availability through the 25-year planning horizon of this UWMP given the direct connection that MWDOC has with MWD in developing water supplies and making those supplies available throughout MWD’s Southern California service area (MWDOC, 2026).

6.1.1.2 City of Seal Beach

The City of Seal Beach has historically supplied water to GSWC West Orange, averaging 24 acre-feet per year (AFY) between 2021 and 2025. The City of Seal Beach’s water supply consists of imported water purchased from MWDOC and groundwater from the OCGB. GSWC is currently installing a transmission main that will convert the regular-use interties with the City of Seal Beach to emergency interties. Accordingly, the City of Seal Beach is not considered a regular purchased water supply for GSWC West Orange after 2025.

6.1.2 Imported Water Supply Sources

MWDOC acts as a secondary wholesaler, purchasing water from MWD and reselling it to GSWC for use in the GSWC West Orange service area. MWD is a wholesale water provider that serves imported water to 26 member agencies across 5,200 square miles of Southern California. MWD receives imported water conveyed from the Colorado River via the CRA and the Delta via the SWP, which are described in this section.

6.1.2.1 Colorado River

The Colorado River originates in the Rocky Mountains of Colorado and flows southwest to the Arizona-California border, then continues south into Mexico to the Colorado River Delta and ultimately to the Gulf of California. MWD diverts Colorado River water from Lake Havasu into the CRA, which has a capacity of 1.25 million AFY and is operated by MWD. The CRA then conveys water west to its terminus at Lake Mathews in Riverside County, within MWD’s service area.

MWD is entitled to 550,000 AFY of Colorado River water under contracts with the U.S. Secretary of the Interior, which is considered a portion of California’s 4.4 million AFY senior allocation under the Quantification Settlement Agreement and related agreements. In addition, MWD can access up to 662,000 AFY above California’s 4.4 million AFY if unused water from higher-priority users or conserved water through transfer programs becomes available, as well as 180,000 AFY when surplus flows are available. Additional information on the Colorado River’s future supply reliability, including ongoing drought conditions and new long-term operating plan, is provided in **Section 7.1**.

6.1.2.2 Sacramento–San Joaquin Delta Watershed

MWD began receiving water from the Delta via the SWP in the early 1970s. The SWP is owned by the State of California and operated by DWR. It is the largest state-operated water and power system in the nation and consists of a vast network of waterways that move water from Northern California through the Delta to parts of the San Francisco Bay Area, Central Valley, and Southern California.

The SWP captures snowmelt and runoff from the northeastern Sierra Nevada Mountains that has flowed to the Delta via rivers and reservoirs. From the Delta, water is pumped into the SWP to be delivered to SWP Contractors that receive allocations of SWP each year.

MWD is the largest of the 29 SWP Contractors with a long-term contract for water supply from the SWP with DWR. MWD’s contract allocation is presently 1,911,500 AFY. The SWP water supply contracts set

forth the base annual water supply entitlement that a SWP Contractor may expect to be provided under the contract, as detailed in “Table A” of the contracts. However, actual delivery varies by year, depending on hydrologic conditions, water quality and environmental conditions, SWP Contractor delivery requests, current reservoir storage, and other operational factors. Additional information on SWP supply reliability is provided in **Section 7.1**.

6.2 Groundwater

CWC §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.

Groundwater supplies constitute 58% to 95% of GSWC West Orange’s water supply portfolio during the past 5 years. GSWC West Orange relies on groundwater from the OCGB (DWR No. 8-001) for use in its service area. GSWC West Orange entirely overlies the OCGB, along with GSWC’s Placentia-Yorba Linda and Cowan Heights service areas shown in **Figure 6-1**. The OCGB is not adjudicated but is managed by OCWD under an Alternative to a Groundwater Sustainability Plan (Alternative Plan). This section describes the OCGB, groundwater management, and historical and projected pumping and supply sufficiency.

6.2.1 Orange County Groundwater Basin

The OCGB covers approximately 350 square miles and is bounded by the Coyote and Chino Hills to the north, the Santa Ana Mountains and Puente Hills to the east, and the Pacific Ocean to the southwest (OCWD, 2015). The Newport–Inglewood Uplift defines the southwestern hydrogeologic boundary, separating productive aquifer deposits from marine sediments and partially impeding seawater intrusion. Groundwater historically discharged to the Pacific Ocean through erosional channels at the Alamitos and Talbert Gaps; however, extensive pumping lowered OCGB water levels, reversing gradients and allowing seawater intrusion to occur (OCWD, 2015). Today, injection barriers maintained by the OCWD Groundwater Replenishment System (GWRS) in both the Alamitos and Talbert Gaps provide protection

against seawater intrusion. Along the northeastern edge, the Whittier Fault Zone constrains groundwater movement except through limited alluvial channels (DWR, 2004). The lower Santa Ana River watershed and the Tustin and Downey coastal alluvial plains overlie much of the OCGB.

The OCGB consists of interbedded sand, silt, and clay deposits with freshwater limited to the upper 2,000 to 4,000 feet (OCWD, 2015). OCWD recognizes three primary aquifers—the Shallow, Principal, and Deep Aquifers—while DWR identifies the Upper, Middle, and Lower Aquifer systems, with the Principal and Deep Aquifers forming subdivisions of OCWD’s Middle Aquifer. The Shallow Aquifer (0–250 feet) is composed primarily of Holocene alluvium, older alluvium, stream terraces, and the La Habra Formation; the Shallow Aquifer supports limited agricultural and small-system production. The Principal Aquifer System, ranging from approximately 200 to 1,300 feet, contains the lower Pleistocene Coyote Hills and San Pedro Formations and provides roughly 90% of all OCGB production. Throughout the aquifer systems, most wells yield 2,000–3,000 gpm. The Deep Aquifer, part of the Pliocene-age Upper Fernando Group, is 350–500 feet thick but is not currently used for production due to depth and water quality limitations. GSWC West Orange draws primarily from the Principal Aquifer.

The OCGB is hydrologically divided into the eastern Forebay and the western Pressure Zone. The Forebay, which includes the cities of Anaheim, Fullerton, and Villa Park, is characterized by highly permeable sediments that allow rapid recharge from the natural, reclaimed, and imported Santa Ana River flows and from recharge basins by OCWD (DWR, 2004). In contrast, shallow clay and silt layers in the Pressure Zone restrict direct infiltration, resulting in confined aquifer conditions with greater seasonal and interannual fluctuations. Most groundwater extraction occurs in the Pressure Zone. Four subbasins have been delineated within OCGB: the Main Basin, which dominates both the Forebay and Pressure Zone and accounts for most production; the Irvine Subbasin to the south, which contains a higher fraction of fine-grained deposits; and the smaller Yorba Linda and La Habra Subbasins, which yield limited groundwater due to elevated dissolved solids and other water quality constraints (OCWD, 2015). Average annual natural recharge to OCGB is approximately 66,000 AF, supplemented by managed recharge through more than two dozen spreading basins and the injection barrier systems.

Groundwater levels in the OCGB remain lower than those observed in 1969, with stable modern conditions in the Forebay and consistent declines near the coast. OCGB drainable storage capacity has been estimated by DWR (1967) at 38 million AF, while total storage capacity has been estimated by OCWD (2015) at 66 million AF total. Water levels reach approximately 250 feet above mean sea level near Anaheim, fall to 75 feet below sea level in the Pressure Zone, and rise to just below sea level at the coast.⁹

6.2.1.1 Orange County Groundwater Basin Management

OCWD is the principal agency charged with managing the groundwater in the OCGB. While the OCGB is not adjudicated, it operates under an Alternative Plan which was first submitted to DWR in 2017 and received final approval in 2019. This Alternative Plan is updated every five years to satisfy the Sustainable Groundwater Management Act (SGMA) requirements. The Alternative Plan was last updated in 2021 (Alternative Plan Update) documenting that the OCGB has continued to operate sustainably (OCWD, City of La Habra, and Irvine Ranch Water District, 2021). The Alternative Plan Update was approved by DWR in 2024.

The OCGB is subdivided into four management areas: La Habra-Brea, OCWD, South East, and Santa Ana Canyon Management Areas. GSWC West Orange falls within the OCWD Management Area. Under this framework, OCWD regulates groundwater use by setting production limits, managing underground

⁹ A detailed description of the OCGB is provided in DWR’s Groundwater Bulletin 118, available at: https://data.cnra.ca.gov/dataset/calgw_update2020.

storage, overseeing water banking contracts, and controlling the allocation of storage space. OCWD also administers the GWRS, which produces up to 130 million gallons per day (mgd) of advanced treated recycled water to recharge the OCGB and protect against seawater intrusion. The GWRS Final Expansion was completed in 2023, expanding the plant capacity to 130 mgd. The GWRS is the world’s largest water purification system for indirect potable reuse. In addition, OCWD captures surface water from the Santa Ana River and recharges both imported and recycled water through an extensive system of percolation basins and coastal injection barriers. These measures collectively sustain groundwater levels and provide effective protection against seawater intrusion.

OCGB management is financially structured around the Basin Production Percentage (BPP), which is the maximum portion of an agency’s demand that may be met with groundwater. OCWD annually evaluates hydrologic conditions—including Santa Ana River stormflow and baseflow, natural recharge, GWRS production, and the availability of imported and recycled water—before establishing the BPP for the following year. Historically, the BPP has ranged from 70% to 85%, with a recent (2013-2026) average of 77%, as shown in **Table 6-1**. This target balances pumping needs with overdraft and seawater intrusion risks. To promote stability, OCWD manages the BPP to avoid year-to-year fluctuations greater than 5%. Agencies that pump above their BPP are assessed both a Replenishment Assessment and a Basin Equity Assessment (BEA) to cover the costs of supplemental supplies and to maintain OCGB balance. In practice, BEAs are set by OCWD at the cost of importing water, so water producers rarely exceed their BPP and pay BEAs.

The BPP applies equally to all GSWC service areas within the OCGB, including Placentia–Yorba Linda, Cowan Heights, and West Orange. This unified management approach allows GSWC to share available OCGB supplies among its systems and to integrate imported and recycled water where needed, thereby enhancing overall supply reliability for customers across its service areas. Groundwater supply projections for all GSWC systems overlying OCGB are derived from OCWD estimates. Historical pumping values from OCGB are shown in **Table 6-2**.

Table 6-1 Historical BPP in OCGB

Water Year	BPP (as a percentage)
2013 - 2014	70%
2014 - 2015	72%
2015 - 2016	75%
2016 - 2017	75%
2017 - 2018	75%
2018 - 2019	77%
2019 - 2020	77%
2020 - 2021	77%
2021 - 2022	77%
2022 - 2023	77%, increased to 85% in February
2023 - 2024	85%
2024 - 2025	85%
2025 - 2026	85%
Average	77%

SOURCES: OCWD Engineer’s Reports, available at: <https://www.ocwd.com/what-we-do/groundwater-management/engineer-recharge-reports/>

6.2.2 Past Five Years Groundwater Pumping

GSWC West Orange has 11 wells with a total maximum pumping capacity of 11,200 gpm, or approximately 18,100 AFY. GSWC West Orange has 3 additional inactive wells with a total maximum pumping capacity of 3,000 gpm which are expected to return to operation in the next five years. **Table 6-2** shows the total volume of groundwater used by GSWC West Orange from the underlying OCGB over the past five years.

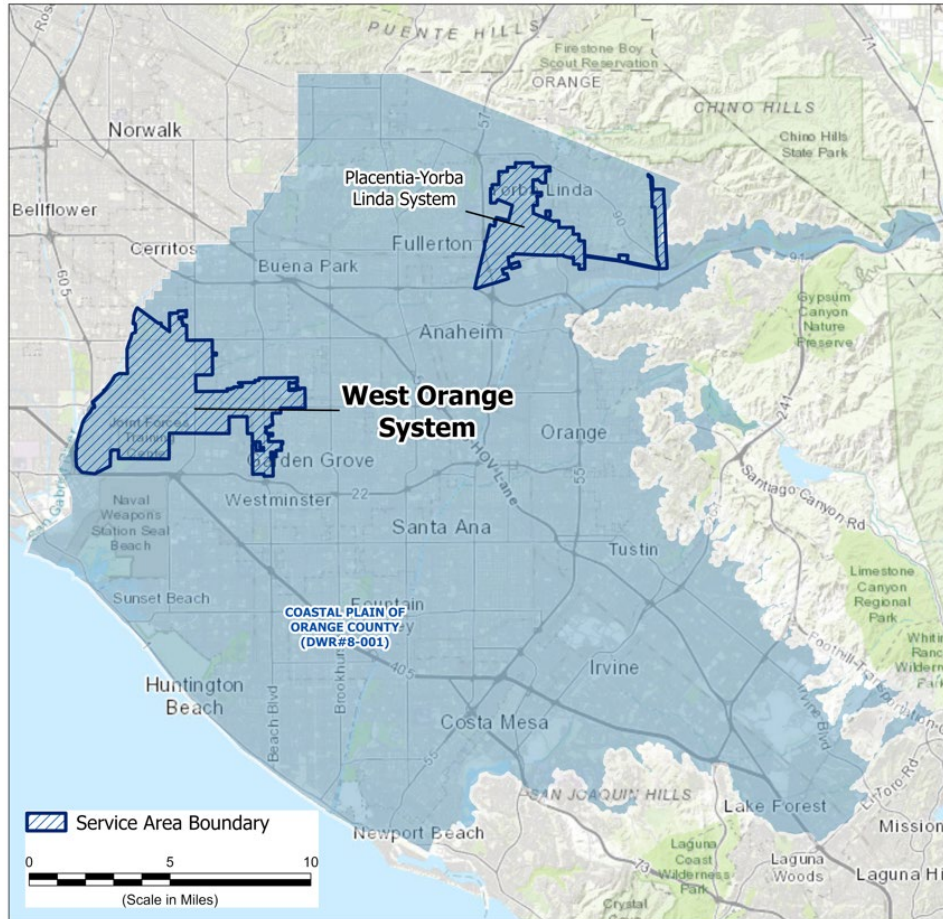


Figure 6-1 Groundwater Basins Underlying GSWC West Orange

Table 6-2 Groundwater Volume Pumped (DWR Table 6-1)

Groundwater Type		Potable or Non-Potable	Location or Basin Name	2021	2022	2023	2024	2025
Alluvial		Potable	OCGB	13,973	12,977	9,552	9,885	7,832
Total				13,973	12,977	9,552	9,885	7,832

NOTES: Volumes are in units of AF.

6.3 Surface Water

GSWC does not impound or divert surface water to meet demands in the GSWC West Orange service area.

6.4 Stormwater

GSWC does not divert stormwater for beneficial uses in the GSWC West Orange service area.

6.5 Wastewater and Recycled Water

CWC §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.

Recycling water involves treating wastewater to an acceptable level such that it can be reused for irrigation, cooling, and other non-potable applications. A key benefit of water recycling is its potential to offset the use of potable supplies (e.g., replacing potable use for landscape irrigation) and to maintain local supply (e.g., injection for seawater barriers). The regulatory requirements for recycled water are defined in the CCR, Title 22, Article 3 (Title 22) and differ for different uses (e.g., irrigation for food crops, landscape, and recreation). Because recycled water is treated wastewater, its availability is closely linked to the location and treatment capability of the wastewater treatment plant that receives and treats wastewater from a water supplier's service area. The following section describes wastewater collection and treatment for GSWC West Orange's service area, the production of recycled water, as well as existing and future uses of recycled water.

6.5.1 Recycled Water Coordination

CWC §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...

The following is a listing of the wastewater agencies and types of treatment that GSWC West Orange relies on for recycled water:

- Wastewater produced within the GSWC West Orange service area is collected by city-operated wastewater systems and conveyed to Orange County Sanitation District’s (OCSD) Plant 1 in Fountain Valley and Plant 2 in Huntington Beach for treatment. OCSD partners with OCWD to provide tertiary treatment to supply the GWRS or Green Acres Project; the remaining effluent is then discharged to the Pacific Ocean.
- Recycled water used in the GSWC West Orange service area is treated at the Los Angeles County Sanitation District’s (LACSD) Los Coyotes Water Reclamation Plant (WRP) and distributed by the City of Cerritos. GSWC West Orange does not convey or distribute any recycled water in the service area.

GSWC West Orange coordinated with these agencies during the preparation of this Plan (see **Section 2.5**).

6.5.2 Wastewater Collection, Treatment, and Disposal

CWC §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.

(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.

Wastewater generated within the GSWC West Orange service area is conveyed through local gravity sewers and lift stations maintained by the cities of Los Alamitos, Cypress, Stanton, Seal Beach, Garden Grove, La Palma, Rossmoor Community Services District, and OCSD. These flows are transported via trunk sewers to OCSD’s Plant 1 in Fountain Valley and Plant 2 in Huntington Beach, which jointly provide primary and secondary treatment but do not produce water that meets recycled water standards. OCSD partners with OCWD to provide tertiary treatment to 100% of the reclaimable wastewater flow. The recycled water supplies are blended and used for the GWRS, the world’s largest water purification system for indirect potable reuse. Through the Green Acres Project, OCWD also provides recycled water for landscape irrigation at parks, schools and golf courses; industrial uses, such as carpet dyeing; toilet flushing; and power generation cooling. Water not diverted for reuse is ultimately discharged to the Pacific Ocean through ocean outfalls that begin dispersing wastewater five miles offshore.

Estimate for GSWC West Orange wastewater quantity is shown in **Table 6-3**. Wastewater quantity is assumed to be equivalent to indoor water use, which is estimated as a percentage of residential and non-residential water demand in March 2025, the lowest-use month in 2025. The current default return factor is assumed to be 93% of potable demand (LASAN, 2024).

As summarized in **Table 6-4**, no wastewater is treated or disposed of within the UWMP service area.

Table 6-3 Wastewater Collected Within Service Area in 2025 (DWR Table 6-2)

<input type="checkbox"/>		There is no wastewater collection system.		
100%		Percentage of 2025 service area covered by wastewater collection system		
100%		Percentage of 2025 service area population covered by wastewater collection system		
Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number	Is WWTP Located Within UWMP Area?
OCSD	Estimated	8,301	OCSD Plant 1, Place ID 758392	No
Total Wastewater Received from UWMP Service Area in 2025		8,301		

Table 6-4 Wastewater Treatment and End Uses Within UWMP Service Area in 2025 (DWR Table 6-3)

<input checked="" type="checkbox"/>	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.
NOTES: Wastewater generated within the GSWC West Orange service area is either recycled for the GWRS or Green Acres Project, or discharged to the Pacific Ocean	

6.5.3 Recycled Water System Description

CWC §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.

OCSD, in partnership with OCWD, provides tertiary treatment to 100% of the local reclaimable wastewater flow from the GSWC West Orange service area. All possible water is then sent to the GWRS for groundwater recharge and seawater intrusion protection. Recycled water is also used for landscape irrigation, industrial uses, toilet flushing, and power generation cooling through the Green Acres Project. However, the GSWC West Orange service area currently does not directly use recycled water generated by OCWD and OCSD.

Recycled water is used within the GSWC West Orange service area through a separate system owned and operated by the City of Cerritos. The City of Cerritos purchases recycled water from the Los Coyotes WRP through an agreement with LACSD and operates the associated distribution system infrastructure, including a pump station at the Los Coyotes WRP and distribution pipelines. Within the GSWC West Orange service area, recycled water is used for landscape irrigation.

6.5.4 Current, Potential, and Projected Recycled Water Uses

CWC §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.

As shown in **Table 6-5** and **Table 6-6**, the GSWC West Orange service area used approximately 232 AF of recycled water in 2025 for landscape irrigation. The recycled water supply available to the GSWC West Orange service area is assumed to be 241 AF by 2050 for landscape irrigation, including distribution system losses. The City of Cerritos is assumed to continue to own and operate the recycled water distribution system within the GSWC West Orange service area.

The GSWC West Orange service area also indirectly benefits from the GWRS, which recharges the OCGB and protects it from seawater intrusion, thereby augmenting local supplies and enhancing long-term water supply reliability. However, this is not reflected in **Table 6-5** and **Table 6-6** because this recycled water supply is not directly delivered to the GSWC West Orange service area and are instead accounted for as part of the groundwater supplies from the OCGB.

Table 6-5 Recycled Water Direct Beneficial Uses Within Service Area (DWR Table 6-4)

<input type="checkbox"/> 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):						Los Coyotes WRP, Place ID 238646				
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL):						City of Cerritos				
Supplemental Water Added in 2025 (volume) (OPTIONAL):										
Source of 2025 Supplemental Water (OPTIONAL):										
Use Type	Potable or Non-Potable	Additional Information (as needed)	2025	2030	2035	2040	2045	2050 (Opt)	Potential Recycled Water Use	
									Volume (a)	Narrative page number
Landscape irrigation (e.g., golf courses)	Non-Potable		232	226	229	233	237	241		
Total (b)			232	226	229	233	237	241		
NOTES: (a) Current recycled water use from Table 4-1 , and projected recycled water from Table 4-3 . Includes both landscape irrigation and distribution system loss. (b) Volumes are in units of AF.										

Table 6-6 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual (DWR Table 6-5)

<input type="checkbox"/>	Recycled water was not used in 2025 nor projected for use in 2020. The supplier will not complete the table below.	
Use Type	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Landscape irrigation (excl. golf courses)	250	232
Total	250	232

6.5.5 Actions to Encourage and Optimize Future Recycled Water Use

The City of Cerritos supplies and distribute all the recycled water in the service area and currently does not plan to extend its distribution system within the GSWC West Orange service area. Because GSWC West Orange does not directly provide recycled water and does not have plans to implement its own recycled water system, **Table 6-7** indicates that GSWC West Orange does not have plans to expand recycled water use in the future.

Table 6-7 Methods to Encourage Future Recycled Water Use (DWR Table 6-6)

<input checked="" 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 UWMP

6.6 Desalinated Water

CWC §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.

Desalinated water supplies can come from ocean water, brackish surface water, and brackish groundwater. GSWC does not provide desalinated water for beneficial uses in the GSWC West Orange service area.

MWD, in collaboration with several of its wholesale and retail agencies, is actively evaluating and pursuing seawater desalination projects. However, desalinated supplies are anticipated to be directed to service areas outside of the GSWC West Orange system (MWD, 2024). If such supplies become available to the GSWC West Orange service area in the future, they would be conveyed through the MWDOC.

6.7 Water Exchanges and Transfers

CWC §10631

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

As described in **Section 6.1.1.2**, GSWC West Orange regularly receives water supply from the City of Seal Beach; however, GSWC is currently installing a transmission main that will change the regular use interties to emergency interties. In addition, GSWC West Orange has emergency interconnections with the GSWC Artesia system and the cities of Garden Grove and Buena Park. These interties are designed solely for contingency purposes, including service interruptions, scheduled maintenance, or other unanticipated supply disruptions.

6.8 Supply from Storage

Currently, GSWC West Orange does not remove water from either surface storage or underground storage for use.

6.9 Future Water Projects

CWC §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.

As shown in **Table 6-8**, there are no planned future water supply projects or programs that are expected to provide a quantifiable increase to GSWC West Orange’s water supply.

Table 6-8 Expected Future Water Supply Projects or Programs (DWR Table 6-7)

<input checked="" 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.
-------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6.10 Summary of Existing and Planned Sources of Water

GSWC West Orange’s water supplies consist of groundwater from the OCGB, purchased water from MWDOC and the City of Seal Beach, as well as recycled water from the City of Cerritos. **Table 6-9** summarizes the actual water supply volumes produced in 2025. As noted in **Table 6-10**, GSWC West Orange does not reduce salinity in either groundwater or surface water prior to distribution.

GSWC West Orange’s total water supply projections are shown in **Table 6-11** and in **Figure 6-2** in five-year increments through 2050. Future water supplies are anticipated to consist of purchased or imported water from MWDOC, groundwater from the OCGB, and recycled water from the City of Cerritos; purchased supplies from the City of Seal Beach are not assumed to continue in the future. In 2025, purchased water represents a larger share of total supply compared to recent historical trends. Looking ahead, it is assumed that GSWC West Orange will use groundwater up to its BPP, with remaining potable demands met through purchased water. **Appendix E** provides a detailed breakdown of supplies shared among systems to ensure that shared water supplies are appropriately allocated across GSWC systems, and that projected supplies remain within anticipated infrastructure, operational and/or entitlement capacities.

Table 6-9 Water Supplies – 2025 Actual (DWR Table 6-8)

Water Supply	Additional Description	2025		
		Potable or Non-Potable	Actual Volume (AF)	Total Entitlement (AF)
Groundwater (not desalinated)	OCGB (a)	Potable	7,832	11,232
Purchased or Imported Water	MWDOC (b)	Potable	5,365	-
Purchased or Imported Water	City of Seal Beach (c)	Potable	17	-
Recycled Water	City of Cerritos (d)	Non-Potable	205	-
<i>Subtotal Potable</i>			<i>13,214</i>	<i>(e)</i>
<i>Subtotal Non-Potable</i>			<i>205</i>	<i>(e)</i>
Total (f)			13,419	(e)

NOTES:

(a) The OCGB BPP was set at 85%; therefore, "Total Entitlement" reflects 85% of GSWC West Orange's potable water supply in 2025.

(b) GSWC does not have a direct contract with MWDOC for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.

(c) GSWC West Orange does not have a direct contract with the City of Seal Beach for purchased water, and GSWC is currently installing a transmission main that will change the regular use interties to emergency interties. Therefore, no "Reasonably Available Volume" is shown.

(d) GSWC does not have a direct contract with the City of Cerritos for recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.

(e) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent.

(f) Estimated supplies differ from estimated demands in **Table 4-1** due to metering inaccuracies and/or data errors. In addition, the recycled water value differs from **Table 6-5** and **Table 6-6** because those tables report recycled water use rather than supply.

Table 6-10 Source Water Desalination by Urban Water Supplier (DWR Table 6-8 DS)

☒	Supplier does not reduce salinity in either groundwater or surface water prior to distribution.
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Table 6-11 Water Supplies – Projected (DWR Table 6-9)

Water Supply			Projected Water Supply (AF)									
Water Supply Category	Additional Detail on Water Supply	Potable or Non-Potable	2030		2035		2040		2045		2050 (Opt)	
			Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)
Groundwater (not desalinated)	OCGB (a)	Potable	10,652	10,652	10,573	10,573	10,546	10,546	10,552	10,552	10,582	10,582
Purchased or Imported Water	MWDOC (b)	Potable	1,880	-	1,866	-	1,861	-	1,862	-	1,867	-
Recycled Water	City of Cerritos (c)	Non-Potable	226	-	229	-	233	-	237	-	241	-
<i>Subtotal Potable</i>			<i>12,532</i>	<i>(d)</i>	<i>12,439</i>	<i>(d)</i>	<i>12,407</i>	<i>(d)</i>	<i>12,414</i>	<i>(d)</i>	<i>12,449</i>	<i>(d)</i>
<i>Subtotal Non-Potable</i>			<i>226</i>	<i>(d)</i>	<i>229</i>	<i>(d)</i>	<i>223</i>	<i>(d)</i>	<i>237</i>	<i>(d)</i>	<i>241</i>	<i>(d)</i>
Total			12,758	(d)	12,668	(d)	12,640	(d)	12,651	(d)	12,690	(d)

NOTES:

- (a) The OCGB BPP is assumed will continue to be 85%; therefore, “Total Entitlement” reflects 85% of GSWC West Orange’s total projected water supply for that year.
- (b) GSWC does not have a direct contract with MWDOC for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no “Total Entitlement” is shown.
- (c) GSWC does not have a direct contract with the City of Cerritos for recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.
- (d) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent.

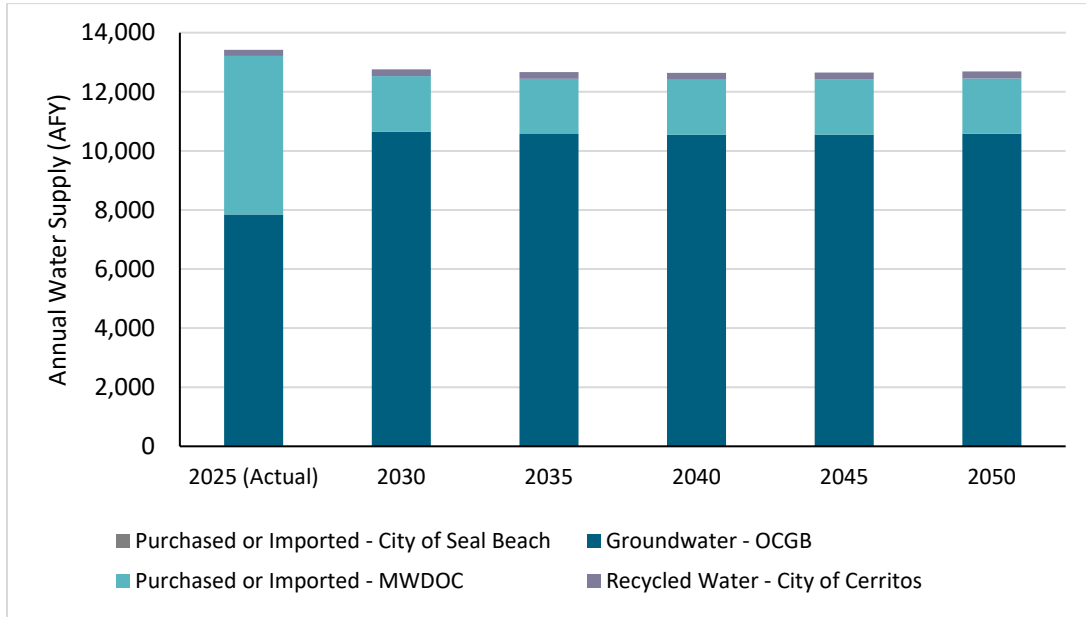


Figure 6-2 Water Supplies – Current and Projected

6.11 Special Considerations

Numerous special conditions may affect GSWC West Orange’s water supply availability and reliability, including climatological, regulatory, and other local factors.

6.11.1 Climate Change Effects

GSWC West Orange is committed to incorporating climate change into its ongoing water supply planning. **Section 3.2** of this UWMP describes plausible changes to projected demands under climate change conditions. While groundwater and recycled water may be affected by climate change impacts, imported water is the most vulnerable to climate change due to its dependence on hydrologic conditions. Both the SWP and Colorado River depend on snowpack and river flows, which are projected to become increasingly variable with shifting precipitation patterns.

GSWC West Orange considers these effects of climate change in future water supplies. As such, one of the key rate-making principles in the proposed *2025-2027 Infrastructure Investments and Water Rates* is to “mitigate the impact climate change will have on future water supplies by replacing deteriorating water infrastructure and increasing water storage.”

GSWC West Orange does not have any current plans to develop additional supply sources. If GSWC West Orange does move forward with any plans to develop supply projects, climate change impacts will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11.2 Regulatory Conditions and Project Development

Emerging regulatory conditions, such as the ongoing negotiations regarding the post-2026 operations of Lake Powell and Lake Mead on the Colorado River and issues related to the Bay-Delta Plan (**Section 7.1.1**), may affect planned future projects and the characterization of future imported water supply availability and analyses. GSWC West Orange does not have any current plans to develop additional supply sources. If GSWC West Orange does move forward with any plans to develop supply projects, emerging regulatory conditions will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11.3 Other Locally Applicable Criteria

Other locally applicable criteria may affect characterization and availability of an identified water supply, such as changes in regional water transfer rules may alter the availability of a water supply that had historically been readily available. GSWC West Orange does not have any current plans to develop additional supply sources. If GSWC West Orange does move forward with any plans to develop supply projects, locally applicable criteria will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.11.4 Wholesale and Retail Suppliers Coordination

GSWC West Orange does not have any current plans to develop additional supply sources. If GSWC West Orange does move forward with any plans to develop supply projects, it will coordinate with MWDOC and provide updated water use projections from that agency in future UWMP updates.

6.12 Energy Use

CWC §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.*

The “Total Utility Approach” as defined by DWR in the 2025 UWMP Guidebook is used to report water-related energy-consumption data for GSWC West Orange. Calendar year 2025 is selected as the one-year reporting period, and utility bills for the associated time period are used as the source for energy consumption data. Total energy consumed by GSWC West Orange during calendar year 2025 based on reported utility bills is 3,690,669 kilowatt hours (kWh) for retail potable water deliveries. **Table 6-12** shows the energy consumed for each AF of water entering the distribution system in GSWC West Orange, including energy associated with extracting and diverting, placing into storage, treating, conveying, and distributing drinking water, but not including energy associated with the treatment of wastewater. Based on this, the energy intensity is estimated to be 857 kilowatt hours per million gallons (kWh/MG), or 279 kilowatt hours per acre-foot (kWh/AF).

Table 6-12 Recommended Energy Reporting (DWR Table O-1B)

Water Delivery Product	Retail Potable Deliveries	Only for Water Delivery Products Under the Urban Water Supplier's Operational Control		
		Sum of All Water Management Processes	Non-Consequential Hydropower	
Start Date of Reporting Period	1/1/2025	Total Utility	Hydropower	Net Utility
End Date of Reporting Period	12/31/2025			
Is upstream embedded energy in the values reported?	No			
Units of Measure for Water	AF	Total Utility	Hydropower	Net Utility
Volume of Water Entering Process		13,214	-	13,214
Energy Consumed (kWh)		3,690,669	-	3,690,669
Energy Intensity (kWh/vol. converted to MG)		857	-	857

Quantity of Self-Generated Renewable Energy

0 kWh

Data Quality

Metered Data

Data Quality Narrative:

Energy consumed during calendar year 2025 is based on reported utility bills.

Narrative:

GSWC West Orange serves a combination of local groundwater pumped from the OCGB, and imported supplies from MWDOC. In 2025, a small portion of GSWC West Orange’s potable water supply also included purchased water from the City of Seal Beach. The majority of GSWC West Orange’s energy consumption to supply retail potable water is attributed to groundwater pumping and booster pumps within the distribution system.

7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

This section of the UWMP describes the reliability of GSWC West Orange’s water supplies, considering the security of both water sources and system infrastructure. The assessment considers factors that could potentially limit the expected quantity of water available from GSWC West Orange’s current and projected sources of supply through 2050.

7.1 Constraints on Water Sources Considerations

CWC §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.

CWC §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.

CWC §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.

(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.

The following sections provide a summary of potential constraints on future water supply availability, water quality, and climate change, and how these considerations may affect water management strategies and supply reliability.

7.1.1 Water Supply Availability

GSWC West Orange’s water supply portfolio includes a combination of purchased or imported supplies, groundwater, and recycled water supplies. Water supply availability can vary by source.

7.1.1.1 Purchased Water

GSWC West Orange obtains purchased water from MWDOC, a member agency of MWD, and the City of Seal Beach¹⁰. As described in **Section 6.1**, MWD’s imported water supplies are sourced from the Colorado River and the SWP, both of which are susceptible to supply reductions in dry years. MWD conducts supply reliability analyses as part of its long-term supply planning. MWD incorporates assumptions for Colorado River and Delta supply reliability into scenario planning, including assumptions related to regulations, agreements, and facility improvements. MWD’s long-term planning also incorporates assumptions for local supply availability, forecasted demand, and storage facilities. In addition, MWD incorporates the impacts and risks associated with climate change into its planning efforts for purchased or imported water through its 2020 Integrated Resource Plan and Climate Adaptation Master Plan for Water (MWD, 2026).

¹⁰ As described in **Section 6.1.1.2**, the City of Seal Beach is not considered a regular purchased water supply for GSWC West Orange after 2025.

MWD member agencies, including MWDOC, request deliveries of imported water from MWD that are received via connections to MWD’s regional distribution system. During drought periods when imported water availability is low, MWD can access its various storage facilities to continue to provide reliable supply, and if needed can request that member agencies implement water conservation measures to ensure demands can be met. MWD anticipates it has reliable water supply available to meet its member agencies’ demands in all hydrologic year types through 2050 (MWD, 2026).

Colorado River Supplies

The Colorado River has experienced drought conditions for more than two decades, resulting in development of a series of guiding documents and agreements to manage Colorado River supplies under shortage conditions. The 2007 Interim Guidelines were developed to respond to the changing river hydrology, providing coordinated operations of Lake Powell and Lake Mead, as well as the Intentionally Created Surplus program, which allows MWD to store water in Lake Mead. Due to declining water levels, the 2019 Lower Basin Drought Contingency Plan (2019 Drought Contingency Plan) was developed by United States Bureau of Reclamation (USBR) and the Colorado River Basin states to reduce the risk of Lake Mead and Lake Powell reaching critically low levels. The existing operating agreements, including the 2007 Interim Guidelines and the 2019 Drought Contingency Plan, are set to expire by the end of 2026. Negotiations for long-term operations for Lake Powell and Lake Mead after 2026 are ongoing. USBR is developing a new long-term operating plan, which requires a thorough review of environmental impacts under the National Environmental Policy Act. A draft Environmental Impact Statement was released in January 2026. In the meantime, the California agencies that depend on the Colorado River, including MWD, are discussing a framework agreement regarding how shortages will be shared. Accordingly, future drought planning and management remain subject to ongoing negotiations.

MWD has incorporated the uncertainty surrounding future Colorado River supplies into its long-term supply modeling. For the 2025 UWMP, MWD modeled Colorado River supplies consistent with USBR’s Colorado River Simulation System with an additional climate change adjustment that reduces projected inflows over time. MWD’s 2025 UWMP also assumes that current Colorado River operating agreements will remain in place throughout the planning horizon (MWD, 2026).

SWP Supplies

For SWP supplies, the Table A in water supply contracts between the SWP Contractors and DWR set forth the base annual water supply entitlement that a SWP Contractor may expect to be provided under the contract. However, actual delivery varies by year, depending on hydrologic conditions, water quality and environmental conditions,¹¹ SWP Contractor delivery requests, current reservoir storage, and other operational factors. Table A allocation percentages are publicly determined by DWR’s modeling, analyses, and operations. The SWP Contractors may also receive other supplies that are “carried over” from prior years’ entitlements or made available as hydrologic conditions warrant, above and beyond their Table A allocations (DWR, n.d.).

There are ongoing efforts aimed at increasing the long-term supply reliability of the SWP. The DCP, for example, proposes to modernize the state’s aging water conveyance infrastructure by bypassing the tracts and sloughs of the central Delta, conveying water directly from the northern Delta to the SWP pumping facilities at the south of the Delta via an underground tunnel. The DCP would reduce the vulnerability of

¹¹ The Bay-Delta Water Quality Control Plan (Bay-Delta Plan) establishes flow and water quality standards for the Delta and its tributaries. The Bay-Delta Plan was last comprehensively updated in 1995, and while amendments were made in 2018, they have not yet been implemented. The SWRCB is currently considering further updates, including a proposed Voluntary Agreement as an alternative to stricter regulatory standards, which could affect water availability for SWP Contractors.

the SWP to salinity intrusion, levee failure, and other potential impacts to SWP operations as a result of climate change, sea-level rise, and earthquakes. The DCP would also address Delta ecosystem health by reducing the timing and intensity of current pumping operations impacting flows across the Delta. Recognizing these issues, MWD’s Board of Directors voted in 2020 and 2024 to support funding its share of the DCP environmental planning and pre-construction costs necessary to advance the project (MWD, 2026). In May 2025, Governor Newsom introduced a package of legislation aiming to expedite DCP implementation (MWD, n.d.).

Sites Reservoir Project is a proposed 1.5 million AF off-stream storage reservoir in the Sacramento Valley that would require the construction of two large dams up to 310 feet high and nine smaller saddle dams. The water stored in the reservoir would be diverted from the Sacramento River during high flow events and returned to the Sacramento River during dry and critical years, thereby providing additional dry-year water for environmental flows and project partners including SWP agencies south of the Delta (MWD, 2026).

MWD has incorporated assumptions regarding SWP reliability into long term supply planning based on assumptions provided in the 2025 SWP Delivery Capability Report, which presents DWR estimates for SWP water availability under future conditions. Although the DCP and Sites Reservoir Project could provide significant potential benefits to MWD’s future supply reliability, MWD’s reliability assessment conservatively does not include any changes in supply reliability that could result from new facilities proposed under the DCP and Sites Reservoir Project (MWD, 2026).

7.1.1.2 Groundwater

As described in **Section 6.2**, GSWC West Orange’s groundwater extractions are tied to the BPP, which is the maximum portion of an agency’s demand that may be met with groundwater. OCWD sets the BPP in April, and it goes into effect in July every year. Groundwater producers are able to pump above the BPP, though they are subject to an additional BEA charge, which makes the cost of the groundwater equivalent to purchasing imported water. OCWD actively manages groundwater supply through the GWRS, which recharges the OCGB and protects it from seawater intrusion, thereby augmenting local supplies and enhancing long-term water supply reliability. The BPP is assumed to range from 70% to 85% depending on hydrologic year type, consistent **Table 6-1**, throughout the 25-year planning horizon of this UWMP.

7.1.1.3 Recycled Water

GSWC West Orange’s recycled water supply is developed by LACSD and provided by the City of Cerritos. Because recycled water is generated from consumed indoor water supplies within the region, it is considered fully reliable in all year types. The City of Cerritos currently has sufficient capacity to meet GSWC West Orange’s projected recycled water demands under all year types.

7.1.2 Water Quality

The drinking water quality of the GSWC West Orange system must comply with state and federal water quality regulations. As such, impaired water quality also has the potential to affect water supply reliability. All drinking water standards are set by the U.S. Environmental Protection Agency (USEPA) under the authorization of the Federal Safe Drinking Water Act of 1974. In California, the SWRCB, Division of Drinking Water can either adopt the USEPA standards or set more stringent standards, which are then codified in Title 22 of the CCR. There are two general types of drinking water standards:

- Primary Maximum Contaminant Levels (MCL) are health protective standards and are established using a very conservative risk-based approach for each constituent that takes into potential health effects, detectability and treatability, and costs of treatment. PWSs may not serve water that exceeds Primary MCLs for any constituent.

- Secondary MCLs are based on the aesthetic qualities of the water such as taste, odor, color, and certain mineral content, and are considered limits for constituents that may affect consumer acceptance of the water.

The water received from MWDOC is treated purchased water from MWD. GSWC West Orange’s groundwater system contains active chlorinated wells that also treat local groundwater supplies. GSWC West Orange routinely monitors the water that is treated and served to customers to ensure that water delivered to customers meets drinking water standards. The results of this testing are reported to the SWRCB Division of Drinking Water following each test and are summarized annually in Water Quality Reports (also known as “Consumer Confidence Reports”), which are provided to customers on GSWC West Orange’s website.¹²

GSWC’s monitoring, management, and treatment of its source water results in high quality drinking water that meets all applicable drinking water standards. GSWC tracks changes in constituent concentrations to proactively address water quality issues before they impact supply reliability. Although there is the potential for some regulated constituents to be present in groundwater, treatment improvements are planned to maintain reliable operation of existing well(s). If needed, GSWC will plan for equivalent replacement of well capacity to ensure continued production reliability. These improvements and potential replacement capacity needs have been incorporated into GSWC West Orange GRC planning and budgeting.

Given GSWC West Orange’s proactive management, monitoring, and treatment, water quality is not expected to impact the reliability of GSWC West Orange’s available supplies within the planning horizon (i.e., through 2050).

7.2 Water Service Reliability Assessment

CWC §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.

Per the 2025 UWMP Guidebook, the water service reliability assessment includes three unique year types:

- A normal hydrologic year represents the water supplies available under normal conditions; this could be an averaged range of years or a single representative year,
- A single dry year represents the lowest available water supply, and
- A five-consecutive year drought represents the driest five-year period in the historical record.

Quantification of all available supplies for GSWC West Orange in single dry and multiple-dry years is not compatible with **Table 7-1** due to the diversity of water supplies and variability by source. According to GSWC West Orange’s wholesaler’s 2025 UWMP, while imported supply is susceptible to reductions in dry years, no shortages of imported water are anticipated in the GSWC West Orange service area (MWDOC,

¹² Consumer Confidence Reports are available at: <https://www.gswater.com/annual-water-quality-reports>.

2026). GSWC West Orange’s groundwater supply is managed in coordination with OCWD, which sets the BPP based on projected total water demands and available groundwater supplies. The projected BPP is assumed to range from 70% to 85% depending on hydrologic year type, consistent the historical pumping allowances summarized in **Table 6-1**.

Table 7-1 Basis of Water Year Data (Reliability Assessment) (DWR Table 7-1)

Year Type	Base Year (a)	Available Supplies if Year Type Repeats	
		☒	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location: Section 7.1
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	% of Average Supply
Average Year	2023		100%
Single-Dry Year	2015		
Consecutive Dry Years 1st Year	2013		
Consecutive Dry Years 2nd Year	2014		
Consecutive Dry Years 3rd Year	2015		
Consecutive Dry Years 4th Year	2016		
Consecutive Dry Years 5th Year	2017		

NOTES: Base year per U.S. Drought Monitor for Orange County, available at <https://droughtmonitor.unl.edu/>.

7.3 Water Service Reliability Supply and Demand Assessment

CWC §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 supply and demand change during normal, single dry, and multiple dry years. The demand forecasts presented in **Section 4.2** represent expected water needs under normal hydrologic conditions. Conservative adjustments to the forecasted normal year water demand are warranted to reflect anticipated demand during drier years and to adequately address water service reliability. For purposes of this UWMP, the following adjustments are applied to account for expected changes in demand. These assumptions assume no drought stage or demand reduction measures are in place.

- Single dry year: An adjustment factor of 103.6% is applied to reflect the maximum weather adjustment associated with critically dry years in the region. This adjustment accounts for

increased landscape irrigation demand resulting from an earlier start to the irrigation season due to limited rainfall in the single driest year.

- Multiple dry years: An adjustment factor of 107.9% is applied to reflect the maximum weather adjustment associated with multi-year periods in the region (i.e., 1929-1934, 1987-1991, and 2013-2016). This adjustment accounts for increased landscape irrigation demand resulting from prolonged irrigation seasons over consecutive dry years.

The following sections compare GSWC West Orange’s projected water demands with projected water supply availability during normal years, single dry years, and multiple dry year periods.

7.3.1 Normal Year Supply and Demand Assessment

Table 7-2 compares the projected supply and demand over the 25-year planning horizon under normal conditions. As discussed in **Section 7.1**, GSWC West Orange’s imported or purchased water and recycled water are reliable in normal years. The BPP for groundwater supply from the OCGB is assumed to be 85%, consistent with the recent BPP of 85% in normal years. Accordingly, projected supply is assumed to equal projected demands through 2050, and no WSCP actions are reflected in **Table 7-2**. **Appendix E** provides a detailed breakdown of individual supplies under normal conditions through 2050 to ensure that shared water supplies are appropriately allocated across GSWC systems, and that projected supplies remain within anticipated infrastructure, operational and/or entitlement capacities.

Table 7-2 Normal Year Supply and Demand Comparison (DWR Table 7-2)

	2030	2035	2040	2045	2050 (Opt)
Supply Totals (DWR Table 6-9)	12,532	12,439	12,407	12,414	12,449
Use Totals (DWR Table 4-2 R)	12,532	12,439	12,407	12,414	12,449
Surplus/(Shortfall)	0	0	0	0	0
NOTES: Volumes are in units of AF.					

7.3.2 Single Dry Year Supply and Demand Assessment

Table 7-3 compares the projected supply and demand over the 25-year planning horizon for single dry year conditions. Compared to normal conditions, total demand is expected to increase by approximately 3.6% (i.e., 103.6% of normal year demand) during a single-dry year.

In a single dry year, GSWC West Orange’s BPP is assumed to be 72%, consistent with the BPP for water year 2014-2015 (**Table 6-1**).¹³ As discussed in **Section 7.2**, imported water and recycled water is assumed to be reliable in single dry years. Imported water, groundwater, and recycled water are collectively sufficient to meet service area demands under single dry year conditions. Accordingly, projected supply is assumed to equal projected demands through 2050, and WSCP actions are not reflected in **Table 7-3**. **Appendix E** provides a detailed breakdown of individual supplies under dry-year conditions through 2050 to ensure that shared water supplies are appropriately allocated across GSWC systems, and that projected supplies remain within anticipated infrastructure, operational and/or entitlement capacities.

¹³ Single dry year per U.S. Drought Monitor for Orange County, available at <https://droughtmonitor.unl.edu/>.

Table 7-3 Single Dry Year Supply and Demand Comparison (DWR Table 7-3)

	2030	2035	2040	2045	2050 (Opt)
Supply Totals	13,217	13,124	13,095	13,106	13,147
Use Totals	13,217	13,124	13,095	13,106	13,147
Surplus/(Shortfall)	0	0	0	0	0
NOTES: Volumes are in units of AF.					

7.3.3 Five Consecutive Dry Year Supply and Demand Assessment

Table 7-4 compares the projected supply and demand under five consecutive years of drought for the 25-year planning horizon. Compared to normal conditions, water demand is expected to increase by approximately 7.9% (i.e., 107.9% of normal year demand) in multiple-dry years.

In multiple dry year conditions, GSWC West Orange’s BPP is conservatively assumed to be the same as BPP observed during the 2013-2017 multiple dry year period (i.e., 70% for the first year, 72% for the second year, and 75% for the last three years) (**Table 6-1**).¹⁴ As discussed in **Section 7.2**, imported water and recycled water are assumed to be reliable in multiple dry years. Imported water, groundwater, and recycled water are collectively sufficient to meet service area demands under multiple dry year conditions. Accordingly, projected supply is assumed to equal projected demands through 2050, and WSCP actions are not reflected in **Table 7-4**. **Appendix E** provides a detailed breakdown of individual supplies under dry-year conditions through 2050 to ensure that shared water supplies are appropriately allocated across GSWC systems, and that projected supplies remain within anticipated infrastructure, operational and/or entitlement capacities.

¹⁴ Multiple dry year period per U.S. Drought Monitor for Orange County, available at <https://droughtmonitor.unl.edu/>.

Table 7-4 Five Consecutive Dry Years Supply and Demand Comparison (DWR Table 7-4)

		2030	2035	2040	2045	2050 (Opt)
First Year	Supply Totals	12,859	12,768	12,740	12,751	12,790
	Use Totals	12,859	12,768	12,740	12,751	12,790
	Surplus/(Shortfall)	0	0	0	0	0
Second Year	Supply Totals	12,859	12,768	12,740	12,751	12,790
	Use Totals	12,859	12,768	12,740	12,751	12,790
	Surplus/(Shortfall)	0	0	0	0	0
Third Year	Supply Totals	12,859	12,768	12,740	12,751	12,790
	Use Totals	12,859	12,768	12,740	12,751	12,790
	Surplus/(Shortfall)	0	0	0	0	0
Fourth Year	Supply Totals	12,859	12,768	12,740	12,751	12,790
	Use Totals	12,859	12,768	12,740	12,751	12,790
	Surplus/(Shortfall)	0	0	0	0	0
Fifth Year	Supply Totals	12,859	12,768	12,740	12,751	12,790
	Use Totals	12,859	12,768	12,740	12,751	12,790
	Surplus/(Shortfall)	0	0	0	0	0
NOTES: Volumes are in units of AF.						

7.4 Water Service Reliability Assessment Management Tools and Options

CWC §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.

GSWC West Orange coordinates on an ongoing basis with all relevant agencies in the region to optimize the use of regional water supplies. This includes coordination with MWDOC, OCWD, the City of Cerritos, LACSD, and other public and private entities to access local supplies (e.g., groundwater) to enhance local water resources and minimize the need to import water from other regions

7.5 Drought Risk Assessment

☑ CWC §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.

☑ CWC §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.

In addition to the long-term water service reliability assessment presented above, the Drought Risk Assessment evaluates GSWC West Orange’s supply risks under a severe drought period lasting for the next five consecutive years after the assessment is completed, i.e., from 2026 through 2030. The Drought Risk Assessment is intended to inform the DMMs and water supply projects and programs to be included in the UWMP (see **Section 9**). Suppliers may conduct an interim update or updates to this Drought Risk Assessment within the five-year cycle of its UWMP update (i.e., before the 2030 UWMP).

7.5.1 Data, Methods, and Basis for Water Shortage Condition

This evaluation considers historical drought hydrology and plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria. As a first step to the Drought Risk Assessment, GSWC West Orange estimated unconstrained water demand for the next five years (i.e., 2026-2030). Unconstrained water demand is the expected water use in the absence of drought water use restrictions. The characteristic five-year water demand is described in **Section 4.5**. The available potable water supplies assumed in the Drought Risk Assessment are based upon the same methodology and assumptions used for the long-term water service reliability assessment in **Section 7.3**. Details of how GSWC West Orange’s available supplies are then estimated as part of the Drought Risk Assessment are provided below.

7.5.2 Drought Risk Assessment Individual Water Source Reliability

While GSWC does not have a direct contract with MWD and supply purchases are discretionary, the wholesaler’s Drought Risk Assessment does not anticipate supply shortages during the 2026 and 2030 period (MWD, 2026). In addition, groundwater extractions are tied to the BPP, and historically this has ranged from 70% to 85% (**Table 6-1**). GSWC West Orange may purchase additional groundwater beyond

the BPP, subject to a BEA charge. Recycled water purchases are drought-proof, as they are generated from consumed indoor water supplies within the region and are not expected to be significantly impacted by weather conditions. Collectively, groundwater, imported water, and recycled water have been reliable during drought conditions.

7.5.3 Drought Risk Assessment Total Water Supply and Use Comparison

Table 7-5 provides a comparison of the water supply sources available to GSWC West Orange with the total projected water use for an assumed drought period of 2026 through 2030. GSWC West Orange’s supply is expected to be sufficient to meet demands in all hydrologic conditions, including an extended five-year drought period.

Table 7-5 Five-Year Drought Risk Assessment Tables (DWR Table 7-5)

2026	Total (AF)
Total Water Use	12,986
Total Supplies	12,986
Surplus/Shortfall without WSCP Action	0
2027	Total
Total Water Use	12,948
Total Supplies	12,948
Surplus/Shortfall without WSCP Action	0
2028	Total
Total Water Use	12,915
Total Supplies	12,915
Surplus/Shortfall without WSCP Action	0
2029	Total
Total Water Use	12,885
Total Supplies	12,885
Surplus/Shortfall without WSCP Action	0
2030	Total
Total Water Use	12,858
Total Supplies	12,858
Surplus/Shortfall without WSCP Action	0

8 WATER SHORTAGE CONTINGENCY PLAN

CWC §10640

(a) Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

(b) Every urban water supplier required to prepare a water shortage contingency plan shall prepare a water shortage contingency plan pursuant to Section 10632. 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.

CWC §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.

This Water Shortage Contingency Plan (WSCP) for the Golden State Water Company – West Orange System (GSWC West Orange) addresses the requirements in California Water Code (CWC) §10632 of the Urban Water Management Plan (UWMP) Act. The WSCP is incorporated into the 2025 UWMP and includes the stages of response to a water shortage caused by drought or by supply interruptions caused by infrastructure failure, regulatory mandate, or catastrophic human-caused or natural events. The primary objective of the WSCP is to ensure that GSWC West Orange has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. This WSCP consists of the following required elements:

- 1) Introduction to the WSCP
- 2) An analysis of water supply reliability
- 3) Procedures for conducting an annual water supply and demand assessment
- 4) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50% shortages and greater than 50% shortage
- 5) Shortage response actions that align with the defined shortage levels
- 6) Communication protocols and procedures
- 7) Customer compliance, enforcement, appeal, and exemption procedures
- 8) A description of legal authorities
- 9) A description of financial consequences
- 10) Monitoring and reporting requirements
- 11) Reevaluation and improvement procedures
- 12) Special water feature distinction
- 13) Plan adoption, submittal, and availability

This WSCP is a stand-alone plan, that may be adopted independently from the UWMP and may be amended or refined and readopted as needed over coming months and years independently from the UWMP (see **Section 8.12** below).

8.1 Water Supply Reliability Analysis

CWC §10632

(a)(1) The analysis of water supply reliability conducted pursuant to Section 10635.

CWC §1063.5

(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.

GSWC delivers quality, reliable water to more than 1 million customers in over 80 communities throughout California. GSWC West Orange is located in northwest Orange County and serves most of the cities of Cypress, Stanton, and Los Alamitos, portions of the cities of Seal Beach, Garden Grove and La Palma, and adjacent unincorporated areas of Orange County including the community of Rossmoor. The service area is characterized by primarily residential land use, with some commercial and industrial land use.

GSWC West Orange has three primary sources of water supply: imported water, recycled water, and groundwater. Imported water is purchased from the Municipal Water District of Orange County (MWDOC), which is a member agency of the Metropolitan Water District of Southern California (MWD). The City of Seal Beach has also historically supplied purchased water to GSWC West Orange; however, GSWC is currently installing a transmission main that will change the regular-use interties to emergency interties. Groundwater is supplied to GSWC West Orange by GSWC-owned wells in the Coastal Plain of Orange County Groundwater Basin (OCGB). The OCGB is not adjudicated but is managed by Orange County Water District (OCWD) under an Alternative to a Groundwater Sustainability Plan (see **Section 6.2.1** for details). Recycled water used in the GSWC West Orange service area is treated at the Los Angeles County Sanitation District's (LACSD) Los Coyotes Water Reclamation Plant (WRP) and distributed by the City of Cerritos.

GSWC West Orange has a reliable water supply in normal, single dry and five consecutive dry years through 2050 (see **Section 7**). GSWC West Orange has a diverse water supply portfolio that allows GSWC to conjunctively use imported water and groundwater assets. In addition, GSWC has developed redundant infrastructure systems to help mitigate outages that may be due to factors beyond hydrology or regulatory constraints. For example, GSWC has emergency connections with the cities of Seal Beach, Garden Grove, and Buena Park, as well as the GSWC Artesia system. The emergency connections are subject to the availability of the respective water systems.

GSWC West Orange reliability is a result of:

- Projected reliability of MWDOC, a member agency of MWD;
- OCWD management of the OCGB to ensure reliability, including implementation of the Groundwater Replenishment System (GWRS) as described in **Section 6.2.1.1** and **Section 6.5**.
- Availability of recycled water.

Nevertheless, GSWC recognizes the fragility of California's water supply sources and systems and has created this WSCP to prepare for droughts, regulatory actions, and unforeseen man-made and natural disasters. Therefore, this WSCP addresses potential water shortage conditions resulting from any cause

(e.g., droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, catastrophic events, etc.).

8.2 AWSDA Procedures

☑ CWC §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.

☑ CWC §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.

This WSCP describes GSWC's procedural methodology for managing shortages and developing its Annual Water Supply and Demand Assessment (AWSDA) for GSWC West Orange. The AWSDA is to be submitted to DWR by July 1 each year. The AWSDA examines GSWC West Orange's water reliability for the current year and one additional dry year to determine what, if any, water shortages stages may be triggered during the required period. The AWSDA will be used by GSWC decision-makers to prepare for and initiate implementation of any needed response actions, as well as to inform customers, the general public, interested parties, and local, regional, and state governments entities to prepare for such required actions, if necessary.

8.2.1 Decision-Making Processes

GSWC West Orange plans to conduct its AWSDA according to the following timeline and process:

- By February 1: Initial data collection and analysis
- By March 1: Preliminary draft AWSDA subject to internal review
- By April 1: Draft AWSDA and results briefing for GSWC decision-makers

- By May 1: Approval of AWSDA by GSWC decision-makers
- By June 1: Public release of the AWSDA and public notifications
- By June 15: Submit the AWSDA to DWR in advance of July 1 deadline

8.2.2 Data and Methodologies

GSWC West Orange will prepare its AWSDA using the following key data and analytical methods:

- Prepare supply estimates for each water source (e.g. imported water, groundwater) on a monthly basis for the analysis period.
- Update unconstrained customer demand and estimate anticipated actual water use on a monthly basis for the analysis period.
- Update infrastructure assessment, including estimated water supply production capability on a monthly basis for the analysis period.
- Identify and quantify of any locally applicable factors that may influence or disrupt supplies during the analysis period.

For the purposes of conducting the AWSDA, GSWC’s definition of “dry year” mimics of a single dry year as defined in **Section 7.3.2**.

8.2.3 Submittal Procedure

GSWC will submit its AWSDA to DWR via the Water Use Efficiency (WUE) Data Portal by June 15 each year, but in no case later than July 1 each year.

8.3 Six Standard Water Shortage Levels

CWC §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.

The WSCP requires water suppliers to adopt six water shortage stages, which correspond to progressively severe water shortage conditions (up to 10%, 20%, 30%, 40%, 50%, and greater than 50% shortage) as compared to the normal reliability condition. These water shortage stages have been standardized to allow for a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. Reduction of available water supply by the indicated percentages, whether loss of physical supply or mandated water supply reductions, will trigger an appropriate water shortage stage. GSWC West Orange will then implement the response actions as specified below. GSWC West Orange will adopt the six standard water shortage stages for this 2025 WSCP as shown in **Table 8-1**.

Table 8-1 Cross-reference for Standard vs Supplier Shortage Levels (DWR Table 8-1)

☒	Supplier Uses the Standard Six Levels of Water Shortage. The supplier will not complete this table.
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8.4 Shortage Response Actions

☑ CWC §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.

☑ CWC §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.

The WSCP is required to identify locally appropriate shortage response actions that align with the defined water shortage stages and include demand reduction actions, supply augmentation actions, system operational changes, and mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions. For each response action the WSCP is to provide an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

8.4.1 CPUC Role in Implementation

GSWC is an investor-owned public utility that is subject to California Public Utilities Commission (CPUC) jurisdiction. CWC §357 requires that suppliers subject to regulation by the CPUC secure their approval before imposing water consumption regulations and restrictions required by water supply shortage emergencies. Implementation of the actions is dependent upon approval of the CPUC. Prior to declaration of mandatory rationing, a utility may request the addition of a Schedule 14.1 – Staged Mandatory Water Rationing tariff, via a Tier 2 advice letter with full justification. The utility may not add the Schedule 14.1 until it has been authorized to do so by the CPUC as delegated to the Division of Water and Audits (DWA) or other staff authorized by the CPUC.

GSWC Rule 14.1 “Water Conservation and Rationing Plan” (Rule 14.1) has specific criteria that must be integrated with the WSCP implementation procedures. Rule 14.1 requires each GSWC service area to “elect to activate voluntary conservation” or prepare a Schedule 14.1 to implement Staged Mandatory Water Conservation and Rationing. Schedule 14.1 may only be prepared as a direct response to an acute water shortage situation, and it requires CPUC deliberation and approval. Rule 14.1 has 16 voluntary

conservation criteria in place that may be exercised by each GSWC system without CPUC approval should GSWC elect to do so. Alternatively, in order for GSWC to engage in mandatory water rationing, GSWC must prepare a Schedule 14.1 and submit a Tier 2 Advice Letter, with full justification for the water rationing action. Additionally, GSWC must prepare a Schedule 14.1 and submit a Tier 2 Advice Letter and receive CPUC approval to move from one water shortage stage to another and implement many of the shortage response actions associated with each water shortage stage and conduct a public hearing.

8.4.2 GSWC WSCP – Activation Overview

As described above, GSWC must receive approval from the CPUC before it can activate demand reduction measures that impact customers. Several steps must first occur before GSWC can impose measures to reduce customer water demands. Steps are taken in the context that each water shortage condition triggering stages of action is different and unique. The WSCP information below represents the proposed response for GSWC West Orange and can be updated as needed. The typical steps for activating GSWC water shortage response are as follows:

Step 1: GSWC determines water shortage conditions exist for GSWC West Orange based on the results of the AWSDA, supply shortfalls, state cutbacks, or emergency conditions.

Step 2: GSWC requests CPUC approval of Rule 14.1 to establish three (3) broad categories of conservation policy as follows:

- Rule 14.1 A. Conservation-Non-Essential or Unauthorized Water Use – Voluntary – GSWC authorized to implement without additional CPUC advice.
- Rule 14.1 A. Conservation-Non-Essential or Unauthorized Water Use – Mandatory but without fines or surcharge tariff – GSWC required to file Tier 1 Advice Letter requesting authorization to institute a Schedule 14.1 Stage.
- Rule 14.1 B. Staged Mandatory Rationing of Water Usage – Includes authorization of fines and surcharge tariff. GSWC required to file Tier 2 Advice Letter requesting authorization to institute a Schedule 14.1 Stage.

Step 3: GSWC receives CPUC approval of Schedule 14.1 and begins implementation of the response actions based on water shortage conditions and need. GSWC will request approval of Schedule 14.1 as deemed necessary to meet actual shortage condition or water use reduction targets.

Step 4: GSWC would deactivate Schedule 14.1 in effect if water shortage conditions or need no longer exist by filing a Tier 1 Advice Letter.

8.4.3 Staged Response

GSWC has grouped the actions to be taken during a water shortage condition into six water shortage stages, providing flexibility to address water shortages up to and in excess of the 50% shortage level condition. The following is an overview of the staged response GSWC could follow during a given water shortage condition including sequential water shortage stages (1-6) based on shortage severity, relative supply conditions for each water shortage stage, necessity of Schedule 14.1 policy activation, and percent shortage reduction levels. The water shortage stages would be implemented based on specific conditions and need to meet water service and system revenue requirements. A water shortage declaration would be made by resolution of the American States Water Company Board (Board), delegating to GSWC officers the authority to make decisions regarding the need to activate Schedule 14.1 or change water shortage stages. Alternatively, an authorized government official or state agency may issue water use reduction mandates, which would be implemented by a resolution of the Board to activate an appropriate water shortage stage. The actions to be undertaken during each water shortage stage cannot be implemented

until necessary Board and CPUC approvals have been executed. The following six (6) water shortage stages list the shortage response actions:

Stage 1 (0 to 10% shortage) – Stage 1 is a “Water Alert” where voluntary conservation is encouraged. GSWC explains the drought situation to the public and governmental bodies relying on GSWC water. GSWC explains the possible subsequent water shortage stages in order to forecast possible future actions for the customer base. The activities performed by GSWC during this stage include:

- Implement Voluntary Water Conservation Measures authorized under Rule 14.1;
- Establish a voluntary demand reduction target for each water system;
- Inform public of water shortage conditions or demand reduction targets through some or all of the following: distribution of literature, public meetings, website updates, bill inserts, digital media, conservation messages printed in local newspapers, and educational programs in schools;
- Initiate a Conservation Hotline, a toll-free number with trained Conservation Representatives to answer customer questions about conservation and water use efficiency;
- Identify the year to be used for establishing the customer baseline water use; and
- Recommend voluntary customer outdoor irrigation between the hours of 7 PM and 8 AM per the following schedule. If a city, county, or other public agency adopts restrictions on the number of days or hours of the day that customers may irrigate, GSWC, at its discretion, may adopt and enforce those restrictions.

Addresses Ending In:	Watering Days
Even Numbers (0, 2, 4, 6, 8)	Sunday, Wednesday, Friday
Odd Numbers (1, 3, 5, 7, 9)	Tuesday, Thursday, Saturday

Stage 2 (10 to 20% shortage) – Stage 2 is a “Moderate Shortage” and will be implemented if the Stage 1 restrictions are deemed insufficient to achieve necessary demand reductions due to water supply shortages or to achieve identified water usage goals established by an authorized government agency or official. Stage 2 will include all actions undertaken in Stage 1. GSWC will require mandatory conservation under this stage. The activities performed by GSWC during this stage include:

- Implement all measures in Stage 1;
- Restrict outdoor irrigation to between the hours of 7 PM and 8 AM per the following schedule. If a city, county, or other public agency adopts restrictions on the number of days or hours of the day that customers may irrigate, GSWC, at its discretion, may adopt and enforce those restrictions;

Addresses Ending In:	Watering Days
Even Numbers (0, 2, 4, 6, 8)	Sunday and Wednesday
Odd Numbers (1, 3, 5, 7, 9)	Tuesday and Saturday

- Calculate customer conservation allocation based upon the year identified in Stage 1, less 20%;
- For residential customers no allocation will be set less than eight hundred cubic feet (CCF) per monthly billing period or 16 CCF per bi-monthly billing period, unless directed otherwise by an authorized government agency;

- Water usage in excess of customer baseline may be charged at regular rate plus a drought emergency surcharge of up to \$2.50 per CCF; and
- Installation of a flow restrictor for repeated violation of water use restrictions under Rule No. 14.1, C.3., as listed in **Section 8.4.7**.

Stage 3 (20– 30% shortage) – Stage 3 is a “Severe Shortage” that will be implemented if the Stage 2 restrictions are deemed insufficient to achieve reductions due to water supply shortages or to achieve identified water usage goals established by an authorized government agency or official. Stage 3 will include all actions undertaken in Stage 2. GSWC will require mandatory conservation under this stage. The activities performed by GSWC during this stage include:

- Implement all measures in Stage 2;
- Calculate customer conservation allocation based upon the year identified in Stage 1, less 30%;
- For residential customers no allocation will be set less than eight CCF per monthly billing period or 16 CCF per bi-monthly billing period, unless directed otherwise by an authorized government agency;
- Water usage in excess of customer baseline may be charged at regular rate plus a drought emergency surcharge of up to \$5 per CCF; and
- Installation of a flow restrictor for repeated violation of water use restrictions under Rule 14.1 C.3., and as listed in **Table 8-3** below.

Stage 4 (30 - 40% shortage) – Stage 4 is a “Critical Shortage” that will be implemented if the Stage 3 restrictions are deemed insufficient to achieve reductions due to water supply shortages or to achieve identified water usage goals established by an authorized government agency or official. Stage 4 will include all actions undertaken in Stage 3. GSWC will require mandatory conservation under this stage. The activities performed by GSWC during this stage include:

- Implement all measures in Stage 3;
- Calculate customer conservation allocation based upon the year identified in Stage 1, less 40%;
- For residential customers no allocation will be set less than eight CCF per monthly billing period or 16 CCF per bi-monthly billing period, unless directed otherwise by an authorized government agency;
- Water usage in excess of customer baseline may be charged at regular rate plus a drought emergency surcharge of up to \$7.50 per CCF; and
- Installation of a flow restrictor for repeated violation of water use restrictions under Rule No. 14.1 C.3, and as listed in **Table 8-3** below.

Stage 5 (40 - 50% shortage) – Stage is a “Shortage Crisis” that will be implemented if the Stage 4 restrictions are deemed insufficient to achieve necessary demand reductions due to water supply shortages or to achieve identified water usage goals established by an authorized government agency or official. Stage 5 will include all actions undertaken in Stage 4. The activities performed by GSWC during this stage include:

- Implement all measures in Stage 4;
- Calculate customer conservation allocation based upon the year identified in Stage 1, less 50%;

- For residential customer no allocation will be set less than eight CCF per monthly billing period or 16 CCF per bi-monthly billing period, unless directed otherwise by an authorized government agency;
- Water usage in excess of customer baseline to be charged at regular rate plus a drought emergency surcharge of up to \$10 per CCF; and
- Installation of a flow restrictor for repeated violation of water use restrictions under Rule No. 14.1 C.3, and as listed in **Table 8-3** below.

Stage 6 (50 % or greater shortage) – Stage 6 is an “Emergency Shortage” condition that will be implemented if the Stage 5 restrictions are deemed insufficient to achieve necessary demand reductions due to water supply shortages or to achieve identified water usage goals established by an authorized government agency or official. Stage 6 will include all actions undertaken in Stage 5. GSWC will require mandatory conservation under this stage. The activities performed by GSWC during this stage include:

- Implement all measures in Stage 5;
- Calculate customer conservation allocation based upon the year identified in Stage 1, less 55%;
- For residential customers no allocation will be set less than eight CCF per monthly billing period or 16 CCF per bi-monthly billing period, unless directed otherwise by an authorized government agency;
- Water usage in excess of customer baseline to be charged at regular rate plus a drought emergency surcharge of up to \$15 per CCF; and
- Installation of a flow restrictor for repeated violation of water use restrictions under Rule No. 14.1 C.3, and as listed in **Table 8-3** below.

GSWC may update current water shortage condition response measures based on CPUC approvals and direction, state policy directives, emergency conditions, or to improve customer response.

8.4.4 Demand Reduction

GSWC has identified a range of available and feasible customer demand reduction actions that can be used interdependently and adaptably and implemented with a progressively greater intensity to meet the supply shortage challenges faced under each water shortage stage. These response actions are identified by the associated water shortage stage in which they may be implemented. Other response actions may also be identified and implemented, subject to CPUC approval. The potential effectiveness of these demand reduction actions has been estimated by GSWC based on previous experience with their implementation. **Appendix F** provides the Demand Reduction Actions (DWR Table 8-3) aligned with each identified water supply stage, including the anticipated shortage gap reduction.

8.4.4.1 Landscape Irrigation

Landscape irrigation reductions focus on less watering and reducing or avoiding water waste during irrigation. Landscape irrigation reductions may vary by user class or customer type depending on water shortage conditions and ability to meet overall water use reduction targets. Water allocation or budget concepts may be applied by GSWC to equitably reduce landscape water use while minimizing customer impact. Priority will be given to irrigation of mature landscape trees, both public and private property. Any landscape irrigation reduction policies require approval by the CPUC before GSWC can implement such measures.

8.4.4.2 Commercial, Industrial, and Institutional

The CII category of customers is diversified and may require a tailored approach for meeting specified water use reduction targets. This could include focusing on large landscape irrigation, process water, business practices, or other means to meet CII water use reduction targets. The ability of CII customers to conserve water during a water shortage condition would be considered depending on which water shortage stage has been triggered and how much water use has already been reduced during previous stages. GSWC would work collaboratively with CII customers since water use cutbacks can impact business operations and solvency.

8.4.5 Supply Augmentation

As described in **Table 8-2**, GSWC West Orange will not use supply augmentation to mitigate shortfalls. Short-term shortfalls (e.g., natural disasters) may be mitigated with emergency supply interties with adjacent water supply systems.

Table 8-2 Supply Augmentation and Other Actions (DWR Table 8-2)

Yes	Is the Supplier completing this table using the standard six levels? (yes/no)		
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap? Include units used (Percentage)	Additional Explanation or Reference (Opt)
Up to 10%	N/A	0%	GSWC West Orange will not use supply augmentation to mitigate shortfalls. Short-term shortfalls may be mitigated with emergency supply interties with adjacent water supply systems.
10-20%	N/A	0%	
20-30%	N/A	0%	
30-40%	N/A	0%	
40-50%	N/A	0%	
>50%	N/A	0%	

8.4.6 Operational Changes

The following water system operational changes may be used as response actions for the appropriate water shortage stage. GSWC is permitted to operate its water systems at no less than 40 pounds per square inch (psi) under rules established by the CPUC. Operations in specific service areas that exceed the 40 psi minimum operating pressure may have opportunity to reduce system pressures in order to improve dry year water supply availability. GSWC West Orange could reduce system operating pressures to improve water supply availability if needed. Any action to reduce pressures must be in accordance with CPUC operating guidelines.

8.4.7 Mandatory Prohibitions

This section is required to identify any mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions. Given that GSWC is an investor-owned entity, it does not have the authority to pass any ordinance enacting specific prohibitions or penalties. In order to enact or rescind any prohibitions or penalties, GSWC would seek approval from CPUC to enact or rescind Rule No. 14.1, Mandatory Conservation and Rationing, and Rule No.11, which prohibits the waste of water. When Rule No.14.1 has expired or is not in effect, mandatory conservation and rationing measures will not be in place.

Rule No. 14.1 details the various prohibitions and sets forth water use violation fines, charges for removal of flow restrictors, as well as establishes the period during which mandatory conservation and rationing measures will be in effect. The prohibitions on various wasteful water uses, include, but are not limited to, the hose washing of sidewalks and driveways using potable water, and cleaning for filling decorative fountains (see **Table 8-3**). In addition to prohibitions during water supply shortage events requiring a voluntary or mandatory program, GSWC will make available to its customers water conservation kits as required by GSWC’s Rule No. 20. GSWC will notify customers of the availability of conservation kits and literature.

Table 8-3 Mandatory Water Use Restrictions

Water Use Restriction Under Rule No. 14.1, C.3 (a)	
1	The application of potable water to outdoor landscapes in a manner that causes runoff onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures
2	The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use
3	The use of potable water for washing buildings, structures, sidewalks, walkways, patios, tennis courts, or other hard-surfaced, non-porous areas
4	The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system
5	The use of potable water for watering outside plants, lawn, landscape, and turf area during certain hours prohibited by applicable laws or rules, during and up to 48 hours after measurable rainfall (0.1” or more)
6	GSWC will promptly notify customers when aware of leaks within the customer’s control; the failure to repair any leaks, breaks, or other malfunction resulting in water waste in a customer’s domestic or outdoor water system within forty-eight (48) hours of notification by the utility, unless other, specific arrangements are made with and agreed to by the utility
7	The serving of water, other than upon request, in eating and drinking establishments, including but not limited to restaurants, hotels, cafes, bars, or other public places where food or drink are served and/or purchased
8	Hotels/motels must provide guests with the option of choosing not to have towels and linens laundered daily and prominently display notice of this option
9	The use of potable water for irrigation of ornamental turf on public street medians
10	The use of potable water for irrigation outside of newly constructed homes and buildings that is not delivered by drip or micro spray systems
11	Commercial, industrial, and institutional (CII) properties, such as campuses, golf courses, and cemeteries, shall immediately implement water efficiency measures to reduce potable water use in an amount consistent with the mandated reduction
12	Further reduction in or the complete prohibition of any other use of water declared non-essential, unauthorized, prohibited, or unlawful by an authorized government or regulatory agency or official

13	Use of potable water for watering streets with trucks, or other vehicles, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public
14	The outdoor irrigation restriction does not apply to trees or edible vegetation watered solely by drip or micro spray systems
15	The use of potable water is prohibited for the irrigation of non-functional turf at CII sites
NOTE: (a) The State Water Resources Control Board established the mandatory restrictions listed in this table for all water users. No Customer shall use utility-supplied water for non-essential or unauthorized uses as defined in this table.	

8.4.8 Emergency Response Plan for Catastrophic Water Shortages

This section identifies actions to be undertaken by GSWC to prepare for, and implement during, a catastrophic interruption of water supplies. A catastrophic interruption could result from any event (either natural or man-made) that causes a water shortage severe enough to trigger a Stage 1-6 water supply shortage condition.

In order to prepare for catastrophic events, GSWC has prepared an Emergency Response Plan (ERP) in accordance with other state and federal regulations. The purpose of the ERP is to design actions necessary to minimize the impacts of supply interruptions due to catastrophic events.

The ERP coordinates overall GSWC response to a disaster in any and all of its systems. In addition, the ERP requires each system to have a local disaster plan that coordinates emergency responses with other agencies in the area. The ERP also provides details on actions to be undertaken during specific catastrophic events. **Table 8-4** is a summary of actions cross-referenced against specific catastrophes for three of the most common possible catastrophic events: regional power outage (such as Public Safety Power Shutoff or “PSPS” events), natural disasters (such as earthquake, flood or storm damage, or fire), and malevolent acts.

Table 8-4 Summary of Actions for Catastrophic Events

Possible Catastrophe	Summary of Actions
Regional Power Outage or PSPS Events	<ul style="list-style-type: none"> Isolate areas that will take the longest to repair and/or present a public health threat and arrange to provide emergency water. Establish water distribution points and ration water if necessary. If water service is restricted, attempt to provide potable water tankers or bottled water to the area. Make arrangements to conduct bacteriological tests, in order to determine possible contamination. Utilize backup power supply to operate pumps in conjunction with elevated storage.
Natural Disaster	<ul style="list-style-type: none"> Assess the condition of the water supply system. Complete the damage assessment checklist for reservoirs, water treatment plants, wells and boosters, system transmission and distribution. Coordinate with the California Emergency Management Agency (Cal EMA) utilities group or fire district to identify immediate firefighting needs.

Possible Catastrophe	Summary of Actions
	<ul style="list-style-type: none"> • Isolate areas that will take the longest to repair and/or present a public health threat and arrange to provide emergency water. • Prepare report of findings, report assessed damages, advise as to materials of immediate need and identify priorities including hospitals, schools and other emergency operation centers. • Take actions to preserve storage. • Determine any health hazard of the water supply and issue any “Boil Water Order” or “Unsafe Water Alert” notification to the customers. • Cancel the order or alert information after completing comprehensive water quality testing. • Make arrangements to conduct bacteriological tests, in order to determine possible contamination.
Malevolent Acts	<ul style="list-style-type: none"> • Assess threat or actual intentional contamination of the water system. • Notify local law enforcement to investigate the validity of the threat. • Get notification from public health officials if potential water contamination • Determine any health hazard of the water supply and issue any “Boil Water Order” or “Unsafe Water Alert” notification to the customers, if necessary. • Assess any structural damage from an intentional act. • Isolate areas that will take the longest to repair and or present a public health threat. Arrange to provide emergency water.

In addition to specific actions to be undertaken during a catastrophic event, GSWC performs maintenance activities, such as annual inspections for earthquake safety, and budgets for emergency items, such as auxiliary generators, to prepare for potential events.

8.4.9 Seismic Risk Assessment and Mitigation Plan

CWC §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.

CWC §10632.5 mandates urban water suppliers include in their UWMP 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. This requirement can be met by submittal of a copy of the most recent adopted local hazard mitigation plan (LHMP) or multi-hazard mitigation plan under the federal Disaster Mitigation Act

of 2000 (Public Law 106-390) if the local hazard mitigation plan or multi-hazard mitigation plan addresses seismic risk.

For GSWC West Orange, GSWC intends to submit a copy of the 2019 Orange County Regional Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan (HMP),¹⁵ which addresses seismic risk for the area in which the system is located. The HMP indicates that the area surrounding GSWC West Orange is seismically active and that it is reasonable to expect that a major event (5.0 magnitude or higher) and possibly even more severe will occur within a 30-year timeframe. The HMP identifies probable earthquake magnitudes for the Whittier Fault, passing through surrounding GSWC West Orange service area, to be in the range of 6.0 to 7.2. An update to the HMP is currently underway.

8.4.10 Other Shortage Response Actions

Other shortage response actions may be considered by GSWC as required to meet specific water shortage conditions and will be incorporated into the Schedule 14.1 as needed. Before these actions can be implemented, an amendment to this WSCP and approval by the CPUC may be required.

8.5 Communication Protocols

CWC §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.

GSWC will engage in specific communication protocols in developing and implementing the WSCP to inform the CPUC, GSWC's customers, and neighboring public agencies. Some communication protocols are required by applicable CPUC Rules and others are broader efforts that are meant to inform GSWC's customers and neighboring public agencies of the voluntary and mandatory water conservation activities.

8.5.1 Rule 14.1 Communications

Rule 14.1 requires GSWC to prepare notifications at various stages of implementing its WSCP. The following list identifies the required communications:

- When GSWC activates the voluntary conservation under Rule 14.1, GSWC must:
 - Notify the Director of the CPUC's DWA with a letter delivered in both hard-copy and email;
 - Notify GSWC's customers through a bill insert or direct mailing; and

¹⁵ Orange County Regional Water and Wastewater Multi-Jurisdictional HMP is available at:
<https://www.westminster-ca.gov/departments/public-works/water-division/hazard-mitigation>

- Notify GSWC’s customers of the availability of water conservation kits with a bill insert or direct mailing.
- In the event that GSWC seeks to implement conservation actions (voluntary or mandatory) by discouraging or prohibiting non-essential or unauthorized water use, GSWC must notify customers in writing to repair “broken or defective plumbing, sprinkler, water or irrigation system.” This notification must include a “warning” that states, in relevant part, “in the event a customer does not comply with the notification, a flow restricting-device may be installed.” Any GSWC customer that seeks a variance from the notification and warning, must notify GSWC “in writing, explaining in detail the reasons for such a variation.” GSWC must “respond to each such request in writing.”
- Where GSWC seeks to implement a Schedule 14.1 – Staged Mandatory Water Conservation and Rationing tariff, per Rule 14.1, and issues a Tier 2 advice letter, then GSWC must complete all of the following:
 - Notify customers of the availability of water conservation kits;
 - Notify customers through a bill insert or direct mailing of the Tier 2 advice letter number with a brief description and the opportunity to participate in a public hearing, including date, time, and place of public hearing;
 - Provide a copy of the Schedule 14.1 to each customer via bill insert or direct mailing;
 - Publish in a newspaper the Tier 2 advice letter number with a brief description and public hearing date, time, and place per CWC §352;¹⁶
 - Notify customers who seek “a variance from any of the provisions of... mandatory rationing plan” and respond “in writing” where a customer seeks such a variance; and
 - Provide, during the period that a stage of Schedule 14.1 is activated, “customers with updates in at least every other bill, regarding its water supply status and the results of the customer’s conservation efforts.”

8.5.2 Additional Communication Protocols

GSWC will seek to engage customers and provide notice with locally relevant actions that further the voluntary or mandatory water conservation actions permitted by Rule 14.1. These locally relevant actions may include:

- Publishing information on GSWC’s website;
- Establishing a telephone hotline;
- Providing bill inserts and direct mailings above and beyond those legally required;
- Directly calling customers;
- Developing materials for non-English speaking customers;
- Preparing social media posts to communicate GSWC actions;
- Advertising actions on other local audio and video media; and
- Coordinating voluntary and mandatory water conservation activities with other local and regional governing bodies.

¹⁶ Rule 14.1, Section E, 2 has a typographical error in citing CWC section 351 for public hearing guidance.

Taken together, all of these communication actions will result in a more effective implementation of GSWC's WSCP.

8.6 Compliance and Enforcement

CWC §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.

In addition to prohibitions, Rule No. 14.1 provides penalties and charges for excessive water use. The enactment of these penalties and charges is contingent on approval of Rule 14.1 implementation by the CPUC. When the rule is in effect, violators receive one verbal and one written warning after which a flow-restricting device may be installed on the violator's service connection for a reduction of up to 50% of normal flow or six CCF per month, whichever is greater. The notification protocols identified in **Section 8.5** will be adhered to.

8.7 Legal Authorities

CWC §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.

(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.

CWC §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.

GSWC is empowered to implement and enforce its shortage response actions specified in this section through the following legal authorities: CWC §350-359 and GSWC Rule 11, Rule 20 and Rule 14.1. In accordance with CWC §350, GSWC shall declare a water shortage emergency when it determines that its customer demands cannot be satisfied without depleting the water supply to the extent that there would be insufficient water for human consumption, sanitation, and fire protection. GSWC shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, listed in **Table 10-1** of GSWC West Orange's 2025 UWMP.

With regard to GSWC's authority to implement and enforce its shortage response actions, CWC §357 requires that suppliers subject to regulation by the CPUC secure its approval before imposing water consumption regulations and restrictions required by water supply shortage emergencies. Accordingly, implementation of the actions identified in this section is dependent upon approval of the CPUC.

8.8 Financial Consequences of WSCP

CWC §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.

Implementation of this WSCP will likely have financial impacts to GSWC. Specifically, in accordance with CPUC guidelines and principles, GSWC has established water rates that support its capital projects as well as its operation and maintenance activities. The rates are tied to GSWC’s customers’ normal water consumption activities that may be reduced through voluntary or mandatory water conservation activities. In this way, there may be revenue reductions to GSWC. In addition to the revenue reductions, GSWC may also see an increase in expenses resulting from augmented communication actions, increased enforcement activities, and overall water shortage management actions. This section addresses aspects of revenue reduction, expense increases, and additional costs that may arise during implementation of this WSCP.

8.8.1 Revenue and Expenditure Impacts

The UWMP Act requires an analysis of the impacts of each of the actions taken for conservation and water restriction on the revenues and expenditures of the water supplier. Because GSWC is an investor-owned water utility and, as such, is regulated by the CPUC, the CPUC authorizes it to establish memorandum accounts (i.e., rate stabilization accounts) to track expenses and revenue shortfalls caused by both mandatory rationing and voluntary conservation efforts.

Utilities with CPUC-approved water management plans are authorized to implement a surcharge to recover revenue shortfalls recorded in their drought memorandum accounts.

Table 8-5 provides a summary of actions with associated revenue reductions.

Table 8-5 Summary of Actions and Conditions that Impact Revenue

Type	Anticipated Revenue Reduction
Reduced Sales	Reduction in revenue will be based on the decline in water sales and the corresponding quantity tariff rate
Recovery of Revenues with CPUC-Approved Surcharge	Higher rates may result in further decline in water usage and further reduction in revenue

Table 8-6 provides a summary of actions and conditions that impact expenditures.

Table 8-6 Summary of Actions and Conditions that Impact Expenditures

Category	Anticipated Cost
Increased Staff Cost	Salaries and benefits for new hires required to administer and implement water shortage program
Increased O&M Cost	Operating and maintenance costs associated with alternative sources of water supply
Increased Cost of Supply and Treatment	Purchase and treatment costs of new water supply

Table 8-7 summarizes the proposed measures to overcome revenue impacts.

Table 8-7 Proposed Measures to Overcome Revenue Impacts

Name of Measures	Summary of Effects
Obtain CPUC-Approved Surcharge	Allows for recovery of revenue shortfalls brought on by water shortage conditions
Penalties For Excessive Water Use	Obtain CPUC approval to use penalties to offset portion of revenue shortfall

Table 8-8 provides a summary of the proposed measures to overcome expenditure impacts.

Table 8-8 Proposed Measures to Overcome Expenditure Impacts

Name of Measures	Summary of Effects
Obtain CPUC-Approved Surcharge	Allows for recovery of increased expenditures brought on by water shortage conditions
Penalties For Excessive Water Use	Obtain CPUC approval to use penalties to offset portion of increased expenditures

Any CPUC approved rate surcharges are imposed based on specific conditions and need and are deactivated when the condition no longer exists and/or is no longer needed.

8.8.2 Drought Rate Structure and Surcharges

GSWC can pursue CPUC approval of drought surcharges if water shortage conditions persist and the demand reductions needed are significant enough to warrant special rate increases to meet system revenue requirements. GSWC received CPUC approval of drought surcharges during the most recent extended drought condition. These drought surcharge revenues allowed GSWC to meet system revenue requirements while meeting demand reduction targets. Drought surcharges would be discontinued when triggered water shortage conditions are deactivated and no longer in effect.

8.8.3 Use of Financial Reserves

Being a regulated utility under the CPUC, GSWC is not allowed a financial reserve account. GSWC has General Rate Cases (GRC) approved covering three years of rate schedules that include the cost of providing service in each water system, accounting for operation and maintenance, repair and replacement, and capital improvement costs required to meet all regulations and provide sustainable water service to customers. For extended water shortage conditions, GSWC would likely request CPUC approval of Memorandum Accounts to track emergency or unforeseen costs during the extended demand reduction period. The tracked costs would later be reviewed by the CPUC and recovered through drought surcharges to generate additional revenues during extended demand reduction periods. Per CPUC rate making policy, GSWC financial reserves are not allowed to be addressed in the CPUC GRC process.

8.9 Monitoring and Reporting

CWC §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.

GSWC is committed to providing detailed monitoring and reporting updates in implementing the WSCP for the CPUC, GSWC management, and GSWC customers. Applicable CPUC rules require GSWC to determine when “water supplies are again sufficient to meet normal demands, and mandatory rationing measures are no longer necessary.” In order to make this determination, GSWC must aggregate data, assess GSWC monitoring actions, and determine WSCP implementation effectiveness. Moreover, GSWC must continually update its customers in its communication protocols with the “water supply status and results of customers’ conservation efforts.”

GSWC’s monitoring and reporting actions may include the following, as locally necessary:

- Gathering monthly or bi-weekly customer water use data;
- Preparing technical assessments of customer water use and identifying deficiencies;
- Analyzing trends in water supply availability, including meteorological events, regional water supply coordination actions, and statewide regulatory trends;
- Assessing water conservation activities and the effectiveness of enforcement actions, as applicable to achieving conservation objectives; and
- Preparing written reports and presentations, as necessary, for GSWC management meetings and other public meetings summarizing key information and data.

All of these monitoring and reporting actions will be used to continually update GSWC’s customers on the status of water supplies, voluntary water conservation, and mandatory water conservation activities.

8.10 WSCP Refinement Procedures

CWC §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.

GSWC will continually review and assess its procedures for implementing the WSCP. Specifically, GSWC will use the monitoring and reporting protocols identified above as a quality assurance and quality control measure to understand the effectiveness of water conservation activities. These re-evaluation and improvement procedures will include developing reports, memoranda, and presentations that assess the effectiveness of water conservation actions and the WSCP. These protocols will be continually assessed and updated by GSWC management staff.

8.11 Special Water Feature Distinction

CWC §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.

For purposes of water shortage contingency planning and implementation within GSWC West Orange, GSWC defines as “special water features” those that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains. Such special water features are considered distinct from swimming pools and spas (as defined in subdivision (a) of Section 115921 of the Health and Safety Code). Special water feature use and management will be addressed in each service area’s Schedule 14.1 in implementing a mandatory water conservation and rationing plan.

Water shortage response actions would focus on health and safety issues and tempering these uses based on the severity of the water shortage condition. The relative total water use from these sources would be a consideration for how special water features and swimming pool uses could be curtailed during specific water shortage conditions. Generally swimming pool filling and refilling would be impacted in the later stages of a water shortage condition. GSWC has determined that special water features are a relatively small discretionary use but would be restricted during a Stage 2 or higher water shortage condition.

8.12 Plan Adoption, Submittal, Availability and Amendment Procedures

CWC §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.

CWC §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.

CWC §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].

CWC §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.

The WSCP has been adopted, submitted, and is available as required by the UWMP Act. As a stand-alone document, the WSCP is also subject to the following separate adoption, submittal, and availability processes, and whenever it is separately amended or revised in the future. GSWC may refine each service area’s WSCP through GSWC’s governing procedures and CPUC rules and regulations in altering each service area’s WSCP. GSWC has followed all applicable law in adopting the WSCPs. The current adopted

WSCP for GSWC West Orange shall be available to its customers and to the cities counties, or other entities listed in **Table 10-1** within 30 days of its adoption. A copy of the current WSCP is available for public inspection during business hours at GSWC's office and posted on GSWC's website and available for download here: <https://www.gswater.com/urban-water-management-plan>.

9 DEMAND MANAGEMENT MEASURES

CWC §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 measures 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.

GSWC West Orange centrally administers its conservation programs. For purposes of this section, these programs have been grouped in accordance with the DMM categories in the CWC §10631(e). The following are descriptions of the conservation programs GSWC West Orange operates within each of these DMM categories.

9.1 Water Waste Prevention Ordinances

GSWC West Orange has adopted water waste prevention measures to reduce unnecessary or inefficient water use within its service area. These measures are intended to discourage water waste, improve overall water use efficiency, and support compliance with statewide conservation requirements.

As an investor-owned public utility, GSWC does not have rule-making authority. However, it supports member agencies and local cities in efforts to adopt ordinances that will reduce water waste. For GSWC, this provision is implemented through CPUC-approved rules, including Rule No. 14.1 (Water Conservation and Reduction Plan), Rule 20 (Water Conservation), and Rule 11 (Discontinuance and Restoration of Service).¹⁷

CPUC’s methodology for water utilities to implement Rule No. 14.1 is documented in Standard Practice U-40-W, “Instructions for Water Conservation, Rationing, and Service Connection Moratoria.” Rule 14.1 sets forth water use violation fines, charges for removal of flow restrictors, and the period during which mandatory conservation and rationing measures will be in effect. Water conservation restrictions include:

- Use of potable water for more than minimal landscaping
- Use through a broken or defective water meter

¹⁷ CPUC-approved rules are available at: <https://www.gswater.com/post/rules>.

- Use of potable water which results in flooding or runoff in gutters or streets
- Use of potable water for washing private cars or commercial aircrafts, cars, buses, boats, or trailers, except at a fixed location where water is properly maintained to avoid wasteful use
- Use of potable water for washing buildings, structures, driveways, street cleaning or other hard-surfaced areas
- Use of potable water to irrigate turf, lawns, gardens, or ornamental landscaping
- Use of potable water for construction purposes
- Use of potable water for filling or refilling of swimming pools

Rule No. 20 (approved by the CPUC in 2015) discourages wasteful use of water and promotes use of water saving devices. The stated purpose of the rule is to “ensure that water resources available to the utility are put to a reasonable beneficial use and that the benefits of the utility’s water supply and service extend to the largest number of persons.” Together, Rules 11, 14.1 and 20 prohibit negligent or wasteful use of water, create a process for mandatory conservation and rationing, and promote the use of water-saving devices.

These water waste prevention measures apply on an ongoing basis and may be expanded or enforced more stringently during declared water shortage conditions, as described in the WSCP (**Section 8**).

9.2 Metering

CWC §526

(a) Notwithstanding any other provision 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.

CWC §527

(a) An urban water supplier that is not subject to Section 526 shall do both of the following:

(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

CWC §527(a) requires meters to be installed on all customer services by 2025. Metering provides the basis for accurately measuring water use, billing customers, and tracking water demand by customer class. Presently, all customers in Region III, which includes GSWC West Orange, are metered and billed by volume monthly. GSWC follows the requirements of CPUC General Order 103-A which prescribes minimum water system design, and operation and maintenance (O&M) standards for water utilities including specifications for meter calibration, testing, and replacement activities.

GSWC will continue meter maintenance practices in accordance with CPUC General Order 103-A. More than 50% of the meters in Region III, which includes GSWC West Orange, Placentia-Yorba Linda, Arcadia, and South San Gabriel, are less than 10 years old.

9.3 Conservation Pricing

All metered customers in Region II, including those metered customers served by GSWC West Orange, are charged volumetrically for water service. Starting on 1 September 2009, GSWC implemented a tiered

conservation pricing rate structure for residential customers as approved by the CPUC for its Region III Rate Making Area that includes the GSWC West Orange. The current rate structure for residential customers has a fixed charge as well as volumetric escalating pricing tiers, depending on customer usage. In contrast, non-residential customers are charged a fixed service charge and a constant volumetric rate.

The implementation of this tiered pricing policy is the result of GSWC's collaboration with CPUC to implement conservation tiered rates for residential customers of investor-owned utilities. Tiered rates are consistent with the CPUC's 2010 Water Action Plan.

GSWC is scheduled to submit a GRC filing with the CPUC in July 2026 that includes proposed rates over the next three years based on volumetric charges for customers in the Region III Rate Making Area that includes GSWC West Orange. If approved, this rate decision will allow GSWC to adjust volumetric revenues and maintain a conservation-oriented rate structure that encourages efficient water use today and in the future.

The GRC process is thorough and generally lasts 18 months with oversight from CPUC's Public Advocates Office, a division of the CPUC that scrutinizes the filing on behalf of customers. The utilities' customers have an opportunity to participate in the GRC process by attending Public Participation Hearings and/or testifying in a public proceeding before an Administrative Law Judge.

9.4 Public Education and Outreach

Public education and outreach programs in the GSWC West Orange service area consist of information distributed via a variety of public information systems, school education programs, and community workshops.

9.4.1 Public Information Systems

GSWC provides water conservation information to customers in the GSWC West Orange service area through a variety of public information systems. These systems are intended to provide customers with access to information regarding water conservation practices, available programs, and applicable water use requirements.

Per the 2023 GRC, GSWC is allowed to spend up to \$34,500 annually on conservation outreach and \$37,500 annually on conservation promotional items in Region III, which includes GSWC West Orange, for the 2025-2027 rate cycle. Outreach efforts in the GSWC West Orange service area include providing free conservation literature and brochures in the customer service area office, water conservation advertisements in local publications, and participation in conservation events, as applicable.

Customers may also access rebates and other conservation information on GSWC's website (gswater.com), which provides information on conservation programs and links to regional resources like MWD.

GSWC customer outreach efforts include online platforms such as its website and social media. Conservation messaging is provided periodically throughout the year, including during the spring and early summer months, when customers may be preparing for increased seasonal water use. Information shared with customers includes available rebate programs and general water conservation tips.

GSWC reviews customer outreach activities within the scope of programs and budgets approved by the CPUC. Public information measures include direct mail, participation in community events, website-based information, and media advertisements to promote water conservation messaging and available conservation programs. This category is capped, per the previous 2023 GRC decision.

9.4.2 School Education Programs

GSWC conducted school conservation education programs for an estimated 15,525 students within its entire customer base. The GSWC school education program reaches over 6,000 students in Region III elementary schools each year. GSWC sponsors the WaterWise school education program in elementary schools with a CPUC-approved budget of \$96,320 annually from 2025-2027

9.4.3 Community Workshops

GSWC will sponsor community workshops to help educate both in-person and on-line customers in a hands-on environment about achieving water use efficiencies in their landscapes and homes. The curriculum will include landscape planning, efficient irrigation concepts, and proper turf reduction or removal.

9.5 Programs to Assess and Manage Distribution System Real Loss

As discussed in **Section 4.3**, reducing distribution system losses is an important component of the State's MCCWL regulations, and suppliers will be required to start meeting individual volumetric loss standards over a three-year period beginning January 2028. GSWC West Orange conducts annual distribution system audits using AWWA M36 Standard Water Audit methodology. The approach consists of a component analysis of metered water sources, metered water demands, quantification of water losses (apparent and real), and calculation of non-revenue water as a percentage of total system flows.

Results of GSWC West Orange's most recent water loss audit report are included in **Table 4-8**. While GSWC West Orange's apparent water loss exceeded the standard enacted by the SWRCB, GSWC West Orange has been making steady progress reducing system loss and expects to be compliant with the standards by the 2028 deadline. GSWC maintains an active Water Loss Control Program, and the Operations Engineering Department monitors GSWC West Orange distribution system water losses by reviewing the annual water loss audit reports. When the Operations Engineer determines that a leak detection survey is needed, GSWC will contract with a qualified leak detection company to perform the survey using the most current leak detection technology. GSWC also maintains a comprehensive work order management system that documents leak locations and repair history, which provides a solid foundation for future water loss control actions.

9.6 Water Conservation Program Coordination and Staffing Support

GSWC maintains a Water Use Efficiency Department with a companywide Water Use Efficiency Manager and a Senior Water Use Efficiency Specialist who collectively develop and manage programs for all the GSWC systems, including GSWC West Orange. GSWC utilizes several consultants and contractors to support program development and implementation on an as-needed basis.

9.7 Other Demand Management Measures

GSWC West Orange participates in partnership conservation programs with MWDOC, MWD, and the California Water Efficiency Partnership (CalWEP) to promote regional conservation programs, take advantage of grant funding, and help lower conservation program costs through economies of scale. In addition to regional offerings, GSWC implements other DMM programs in the GSWC West Orange service area that complement those offered by its regional partners and that are consistent with the structures approved by the CPUC. Per GSWC's 2023 GRC for the 2025 – 2027 rate cycle, program offerings in the GSWC West Orange service area through 2027 include:

- **GSWC Residential Programs.** These programs include: 1) free indoor/outdoor water-use surveys to help customers understand water use and receive suggestions to use water more efficiently,

and 2) indoor water conservation kits that include a high efficiency showerhead, a kitchen aerator, a bath aerator, and leak test tablets and instructions.

- **GSWC Residential Rebates.** In partnership with CalWEP, these rebates include: 1) Flume water flow monitoring devices that attach to water meters and provide single-family customers almost real time data on their water use and detect leaks, and 2) Rachio weather-based irrigation smart controllers.
- **Regional Rebates.** In partnership with MWDOC and MWD, these programs and incentives are available to residential customers and can be found at www.BeWaterWise.com. A wide range of rebate programs is offered, including, but not limited to, high-efficiency clothes washers, weather-based irrigation controllers, and water flow monitoring devices. Funding is limited, and programs offers are subject to change or close without notice.
- **GSWC Commercial/Institutional and Large Landscape Programs.** GSWC participates with regional partners to offer a variety of programs and incentives, which customers can explore and apply for through www.socalwatersmart.com. Programs include rebates and customized water efficiency incentives through the Water Savings Incentive Program. Residential, commercial, and institutional sites larger than 1 acre are eligible to receive a free landscape survey.

Additional information on conservation programs offered to the GSWC West Orange service area is available at: <https://www.gswater.com/los-alamitos>.

Once the 2026 GRC is approved by the CPUC, GSWC will review their prioritized water use efficiency program and implementation schedule for all customer service areas focusing on systems that do not appear to be consistently meeting water use reduction targets. Specific conservation activities will be implemented that are locally cost-effective and/or cost-effective to implement on a GSWC-wide basis

9.8 Implementation to Achieve Water Use Targets

CWC §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.

As described in **Section 5**, the DMMs described above have contributed to GSWC West Orange’s compliance with its 2020 Target. GSWC West Orange’s conservation programs are subject to review and approval by the CPUC through a GRC, which typically occurs every three years. Through the GRC process, conservation programs and associated funding levels are evaluated and approved by the CPUC, and any modifications to program scope, implementation, or budgets are subject to CPUC review and authorization. The CPUC approved GSWC’s 2023 GRC in January 2025 for the 2025 – 2027 rate cycle, and GSWC anticipates filing its 2026 GRC with the CPUC in July 2026 for the 2028 – 2031 rate cycle. These programs will continue to support GSWC West Orange in complying with MCCWL requirements, including achieving its UWUO, and in advancing long-term water conservation.

10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

This section provides information on a public hearing and adoption process for the GSWC West Orange UWMP and WSCP, as well as submittal requirements for the adopted plans. It also outlines plan implementation and the process for amending the adopted UWMP or WSCP.

10.1 Inclusion of All 2025 Data

Because GSWC West Orange reports on a calendar year basis, this UWMP includes complete water use and planning data for the entire 2025 calendar year, per the 2025 UWMP Guidebook. All data reported herein reflects the finalized 2025 information necessary to meet UWMP requirements.

10.2 Notice of Plan Preparation

CWC §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.

Section 2.5 describes GSWC West Orange’s initial outreach for the 2025 UWMP update, including distribution of the 60-Day Notice on 3 September 2026. The 60-Day Notice was provided more than 60 days prior to the public hearing and informed applicable entities that the Plan would be reviewed and updated. Agencies that received the 60-Day Notice are listed in **Table 10-1**, and correspondence is provided in **Appendix C**.

10.3 Notice of Public Hearing

CWC §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.

CGC §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.

GSWC West Orange also provided a Public Hearing Notice to the entities listed in **Table 10-1** notifying them of the UWMP and WSCP public hearing with the specific date, time, and location of the public hearing. The Public Hearing Notice also provided instructions on how to view the Draft UWMP and WSCP prior to the hearing, the revision schedule, and contact information of the UWMP and WSCP preparer. In addition, GSWC West Orange published the Public Hearing Notice in the Orange County Register at least two weeks in advance, once a week for two consecutive weeks, with at least five days between the

respective publication dates. The Public Hearing Notice was first noticed in the local paper on 13 May 2026, and again on 20 May 2026. The Public Hearing Notices, including correspondence with entities and publications, can be found in **Appendix C**.

Table 10-1 Notification to Cities and Counties (DWR Table 10-1)

City Name	60 Day Notice	Notice of Public Hearing
Buena Park	X	X
Cypress	X	X
Garden Grove	X	X
La Palma	X	X
Los Alamitos	X	X
Seal Beach	X	X
Stanton	X	X
County Name	60 Day Notice	Notice of Public Hearing
Orange	X	X
Other Agencies	60 Day Notice	Notice of Public Hearing
MWDOC	X	X
OCWD	X	X

10.4 Public Hearing and Adoption

CWC §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.

CGC §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.

GSWC West Orange maintained a copy of the Draft UWMP and WSCP in its office and website (<https://www.gswater.com/2025-urban-water-management-plan>) prior to the public hearing for public review. The deadline for public comments on the UWMP and WSCP was 27 May 2026. GSWC West Orange held a virtual public hearing on 27 May 2026 at 11 AM to present the UWMP and WSCP.

The final Plan was formally adopted by GSWC West Orange’s Vice President on **[to be added following Public Hearing]** 2026. A copy of the signed Resolution of Plan Adoption is included in **Appendix G**. **Appendix C** also contains letters sent to and received from various agencies regarding this Plan, and correspondence between GSWC West Orange and participating agencies.

10.5 Plan Submittal and Public Availability

CWC §10621

(e) Each urban water supplier shall update and submit its 2025 plan to the department by 1 July 2026...

CWC §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.

CWC §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. 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.

(a)(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

CWC §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.

This UWMP and WSCP were submitted to DWR electronically through the WUE Data Portal within 30 days of adoption and by the 1 July 2026 deadline. The adopted UWMP and WSCP were also sent to the California State Library and to the cities and counties listed in **Table 10-1** no later than 30 days after adoption.

On *[to be added following Public Hearing]* 2026, an electronic version of the final UWMP and WSCP were made available for public review by visiting: <https://www.gswater.com/2025-urban-water-management-plan>.

10.6 Notification of Public Utilities Commission

CWC §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.

GSWC West Orange is an urban water supplier regulated by the CPUC. GSWC included GSWC West Orange's UWMP and WSCP as part of its GRC filings.

10.7 Plan Implementation

CWC §10643

An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

The implementation of this UWMP shall be carried out as described unless significant changes occur between the adoption of this UWMP and the 2030 UWMP. If such significant changes do occur, GSWC West Orange will amend and readopt the UWMP as required by the CWC.

10.8 Amending an Adopted UWMP or WSCP

CWC §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).

CWC §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.

(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.

If the UWMP or WSCP are amended, each of the steps for notification, public hearing, adoption and submittal (i.e., **Section 10.2** through **Section 10.7**) will also be followed for the amended document.

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Appendix A: UWMP Act Checklist

Retail (x = required)	Wholesale (x = required)	Order	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	x	1	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and overview	n/a	Chapter 1
x	x	1	Chapter 1	10630.5	Each plan shall include a simple description of the Supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a Supplier may also choose to include a simple description at the beginning of each chapter.	Plan preparation	n/a	Chapter 1
x	x	2.1	Section 2.1	10620(b)	Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier.	Plan preparation	n/a	Section 2.1
x	n/a	2.5	Section 2.5	10644	Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP.	Plan preparation	2-1	Section 2.1
x	x	2.5	Section 2.5	10644	Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance.	Plan preparation	2-2	Section 2.2
x	x	2.5	Section 2.5	10644	Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes.	Plan preparation	2-3	Section 2.3
x	x	2.4	Section 2.4	10642	Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan preparation	n/a	Section 2.5.2
x	x	2.4	Section 2.4.2	10620(d)(3)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other Suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan preparation	n/a	Section 2.5.2

x	n/a	2.4	Section 2.4.1	10631(h)	Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source.	Plan preparation	2-4 R	Section 2.5.1
n/a	x	2.4	Section 2.4.1	10631(h)	Wholesale Suppliers will provide their Suppliers with identification and quantification of the existing and planned sources of water available from the Wholesale Supplier to the Supplier during various water year types.	Plan preparation	2-4 W	
x	x	3	Chapter 3.0	10631(a)	Describe the Supplier service area.	System description	n/a	Section 3.1
x	x	3.3	Section 3.3	10631(a)	Describe the climate of the Supplier's service area.	System description	n/a	Section 3.2
x	x	3.4	Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	System description	3-1	Section 3.3
x	x	3.4	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the Supplier's water management planning.	System description	n/a	Section 3.3
x	x	3.5	Section 3.5	10631(a)	Describe the land uses within the service area... include the current and projected land uses within the existing or anticipated service area affecting the Supplier's water management planning. Describe the land uses within the service area.	System description and baselines	n/a	Section 3.4
x	Optional	4.2	Sections 4.2.3 and 4.2.4	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System water use	4-1 and 4-2	Section 4.2
x	Optional	4.3	Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the five years preceding the plan update.	System water use	4-5	Section 4.3.1

x	n/a	4.3	Section 4.3.2	10631(d)(3)(C)	Retail Suppliers shall provide data to show the distribution loss standards were met.	System water use	4-6	Section 4.3.2
x	n/a	4.2	Section 4.2.5.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the Supplier.	System water use	4-3	Section 4.2
x	n/a	4.2	Section 4.2.5.3	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System water use	4-3	Section 4.2.3
x	n/a	4.2	Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System water use	4-3	Section 4.2.3
x	n/a	4.2	Section 4.2.5.3	10631(d)(4)(B)(ii)	To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall... 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.	System water use	4-3	Section 4.2.3
x	x	4.2	Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System water use	n/a	Section 7.5.1
n/a	x	5.1	Section 5.1	10608.36	Wholesale Suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their Retail Suppliers achieve targeted water use reductions.	Baselines and targets	n/a	
x	n/a	5.2	Section 5.2	10608.4	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: - Was considered an urban retail water supplier in 2020, - Met its 2020 target in 2020, or - Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of	Baselines and targets	5-1	Section 5.1
x	x	6.1	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System supplies	n/a	Chapter 6.1

x	x	6.1	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change.	System supplies	n/a	Section 7.3.1 - Section 7.3.3
x	x	6.2	Section 6.2.2	10631(b)(4)(C)	Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water... (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	Water supplies and recycled water	6-1	Section 6.2.2
x	x	6.2	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System supplies	n/a	Section 6.2
x	x	6.2	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System supplies	n/a	Section 6.2.1
x	x	6.2	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the Supplier has the legal right to pump.	System supplies	n/a	Section 6.2.1.2
x	x	6.2	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins... (include) information as to whether DWR has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin...	Water supplies and recycled water	n/a	n/a
x	x	6.2	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins... describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	Water supplies and recycled water	n/a	n/a
x	x	6.2	Section 6.2.2.	10631(b)(4)(C)	If groundwater is identified as an existing or planned source of water... (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	System supplies	n/a	Section 6.2.2
x	x	6.2	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System supplies	6-9	Section 6.2.2

x	x	6.1	Section 6.1	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050.	System supplies	6-8 and 6-9	Section 6.10
x	x	6.2	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System supplies	n/a	Section 6.7
x	n/a	6.2	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the Supplier's service area with quantified amount of collection and treatment and the disposal methods.	System supplies (recycled water)	6-2	Section 6.5.2
x	x	6.2	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System supplies (recycled water)	6-3	Section 6.5.2
x	x	6.2	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the Supplier's service area.	System supplies (recycled water)	6-4	Section 6.5.3
x	x	6.2	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System supplies (recycled water)	6-4	Section 6.5.4
x	x	6.2	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the Supplier's service area at the end of 5, 10, 15, and 20 years, and describe the actual use of recycled water in comparison to uses previously projected.	System supplies (recycled water)	6-4 and 6-5	Section 6.5.4
x	x	6.2	Section 6.2.5	10633(f)	Describe the actions that 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.	System supplies (recycled water)	6-6	Section 6.5.5
x	x	6.2	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the Supplier's service area.	System supplies (recycled water)	n/a	Section 6.5.5

x	x	6.2	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System supplies	6-7	Section 6.6
x	x	6.2	Section 6.2.10	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water Supplier to address water supply reliability in average, single-dry, and for a period of drought lasting five consecutive water years.	System supplies	6-7	Section 6.9
x	x	6.3	Section 6.3 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a Supplier can readily obtain.	System suppliers, energy intensity	O-1A, O-1B, O-1C, and O-2	Section 6.12
x		7.1	Section 7.1	10634	Provide information on the quality of existing sources of water available to the Supplier and the manner in which water quality affects water management strategies and supply reliability.	Water supply reliability assessment	n/a	Section 7.1.2
x	x	7.2	Section 7.2	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the Supplier with the total projected water use over the next 20 years.	Water supply reliability assessment	7-2, 7-3, and 7-4	Section 7.3.1 - Section 7.3.3
x	x	7.2	Section 7.2.3	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water supply reliability assessment	n/a	Section 7.4
x	x	7.3	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water supply reliability assessment	n/a	Section 7.5
x	x	7.3	Section 7.3	10635(b)(1)	Include 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 years.	Water supply reliability assessment	n/a	Section 7.5.1
x	x	7.3	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water supply reliability assessment	n/a	Section 7.5.2

x	x	7.3	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the Supplier with the total projected water use for the drought period.	Water supply reliability assessment	7-5	Section 7.5.3
x	x	7.3	Section 7.3	10635(b)(4)	Include 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.	Water supply reliability assessment	n/a	Section 7.5.1
x	x	8	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water shortage contingency planning	n/a	Chapter 8
x	x	8	Chapter 8	10632(a)(1)	Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP.	Water shortage contingency planning	n/a	Section 8.1
x	x	8.2	Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the Supplier will use each year to determine its water reliability.	Water shortage contingency planning	n/a	Section 8.2
x	x	8.2	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the Supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water shortage contingency planning	n/a	Section 8.2
x	x	8.3	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10%, 20%, 30%, 40%, 50% shortage, and greater than 50% shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water shortage contingency planning	n/a	Section 8.3
x	x	8.3	Section 8.3	10632(a)(3)(B)	Suppliers with an existing WSCP that uses different water shortage levels must cross reference their categories with the six standard categories.	Water shortage contingency planning	8-1	Section 8.3
x	x	8.4	Section 8.4	10632(a)(4)(A)	Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water shortage contingency planning	8-2	Section 8.4.5

x	x	8.4	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water shortage contingency planning	8-3	Section 8.4.4
x	x	8.4	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water shortage contingency planning	8-2	Section 8.4.6
x	x	8.4	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to State-mandated prohibitions are appropriate to local conditions.	Water shortage contingency planning	Table 8-3	Section 8.4.7
x	x	8.4	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water shortage contingency planning	8-2 and 8-3	Section 8.4
x	x	8.4	Section 8.4.6	10632.5	The UWMP shall include a seismic risk assessment and mitigation plan.	Water shortage contingency plan	n/a	Section 8.4.9
x	x	8.5	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water shortage contingency planning	n/a	Section 8.5
x	x	8.5	Section 8.5	10632(a)(5)(B), 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water shortage contingency planning	n/a	Section 8.5
x	n/a	8.6	Section 8.6	10632(a)(6)	Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water shortage contingency planning	n/a	Section 8.6
x	x	8.7	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the Supplier to enforce shortage response actions.	Water shortage contingency planning	n/a	Section 8.7

x	x	8.7	Section 8.7	10632(a)(7)(B)	Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. <i>Water Shortage Emergencies</i> .	Water shortage contingency planning	n/a	Section 8.7
x	x	8.7	Section 8.7	10632(a)(7)(C)	Provide a statement that the Supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water shortage contingency planning	n/a	Section 8.7
x	x	8.8	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	n/a	Section 8.8.1
x	x	8.8	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	n/a	Section 8.8
x	n/a	8.8	Section 8.8	10632(a)(8)(C)	Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, <i>Excessive Residential Water Use During Drought</i> .	Water shortage contingency planning	n/a	Section 8.8
x	n/a	8.9	Section 8.9	10632(a)(9)	Retail Suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data are collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water shortage contingency planning	n/a	Section 8.9
x	x	8.10	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water shortage contingency planning	n/a	Section 8.10
x	n/a	8.11	Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water shortage contingency planning	n/a	Section 8.11
x	x	8.12	Section 8.12	10632(c)	Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan.	Water shortage contingency planning	n/a	Section 8.12

x	n/a	9.1	Sections 9.1	10631(e)(1)	Retail Suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand management measures	n/a	Section 9.1-9.7
n/a	x	9.2	Sections 9.2	10631(e)(2)	Wholesale Suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and Supplier assistance program.	Demand management measures	n/a	
x	n/a	10	Chapter 10	10608.26(a)	Retail Suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan adoption, submittal, and implementation	n/a	Chapter 10
x	x	10.2	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the Supplier provides water that the Supplier will be reviewing the UWMP and considering amendments or changes to the plan.	Plan adoption, submittal, and implementation	10-1	Section 10.3
x	x	10.4	Section 10.4	10621(f)	Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 2026.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	x	10.2	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the Supplier made the UWMP and WSCP available for public inspection, published notice of the public hearing, and held a public hearing about the UWMP and WSCP.	Plan adoption, submittal, and implementation	n/a	Section 10.4 and 10.5
x	x	10.2	Section 10.2.2	10642	The Supplier is to provide the time and place of the hearing to any city or county within which the Supplier provides water.	Plan adoption, submittal, and implementation	10-1	Section 10.3
x	x	10.3	Section 10.3.2	10642	Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified.	Plan adoption, submittal, and implementation	n/a	Section 10.4
x	x	10.4	Section 10.4	10644(a)	Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library.	Plan adoption, submittal, and implementation	n/a	Section 10.5

x	x	10.4	Section 10.4	10644(a)(1)	Provide supporting documentation that the Supplier has submitted their UWMP to any city or county within which the Supplier provides water no later than 30 days after adoption.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	x	10.4	Sections 10.4.1 and 10.4.2	10644(a)(2)	The UWMP, or amendments to the UWMP, submitted to DWR shall be submitted electronically.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	x	10.7	Section 10.7.2	10644(b)	If revised, submit a copy of the WSCP to DWR within 30 days of adoption.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	x	10.5	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its UWMP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	n/a	Section 8.12
x	x	10.5	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its WSCP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	x	10.6	Section 10.6	10621(c)	If Supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan adoption, submittal, and implementation	n/a	Section 10.6

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 (AF)
Add additional rows as needed			
CA3010022	Golden State Water Company - West Orange	29,065	13,138
Total		29,065	13,138
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: Volume of water supplied in 2025 includes recycled water supplied by Upper District.			

Submittal Table 2-2: Plan Identification

Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
<input checked="" 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:

Submittal Table 2-3: Supplier Identification

Type of Supplier (select one or both)

- Supplier is a wholesale supplier
- Supplier is a retail supplier

Fiscal or Calendar Year (select one)

- UWMP Tables are in calendar years
- 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	AF
------	----

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

**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

Municipal Water District of Orange County

City of Seal Beach (a)

NOTES:

(a) As noted in Section 6.1.1.2, while the City of Seal Beach has historically supplied water to GSWC West Orange, GSWC is currently installing a transmission main that will change the regular-use interties to emergency interties. The City of Seal Beach is therefore not considered a wholesaler for GSWC West Orange after 2025.

**Submittal Table 3-1 Retail: Population - Current and Projected
Water Code Section 10631(a)**

Population Served	2025	2030	2035	2040	2045	2050(opt)
	114,756	116,623	118,521	120,462	122,435	124,441

NOTES:

OPTIONAL TO USE THIS IN PLACE OF TABLE 4-1R

Use Type		Historical Water Use - Volume					
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUE data online submittal tool	Additional Description (as needed)	Level of Treatment When Delivered (OPTIONAL) Drop down list	2021	2022	2023	2024	2025
		Single Family	Potable	6,526	6,129	5,624	5,808
Multi-Family	Potable	2,639	2,515	2,380	2,450	2,432	
Commercial	Potable	3,241	3,044	2,713	2,871	2,847	
Industrial	Potable	44	33	32	31	32	
	Included in Commercial	Potable	0	0	0	0	0
Landscape		Potable	926	877	662	708	752
		Potable	0	0	59	59	0
Distribution System Water Loss		Potable	877	926	810	977	984
Landscape	Recycled water	Non-Potable	201	153	157	178	214
Distribution System Water Loss	Recycled water	Non-Potable	13	11	11	15	18
Total			14,467	13,688	12,448	13,097	13,137

**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 (AF)
Add additional rows as needed			
Single Family		Potable	5,858
Multi-Family		Potable	2,432
Commercial	(a)	Potable	2,847
Industrial		Potable	32
Landscape		Potable	752
Distribution System Water Loss	(b)	Potable	984
Landscape	Recycled water	Non-Potable	214
Distribution System Water Loss	Recycled water (c)	Non-Potable	18
Subtotal Potable			12905
Subtotal Non-Potable			232
Total			13,137

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:

- (a) Includes institutional water uses.
- (b) Sum of unbilled authorized consumption, apparent losses, and real losses.
- (c) Same loss rate as potable system is assumed.

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)					
		Potable or Non-Potable (OPTIONAL) Drop down list	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 opt (AF)
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							
Add additional rows as needed.							
Single Family		Potable	5,700	5,644	5,622	5,619	5,629
Multi-Family		Potable	2,358	2,327	2,312	2,306	2,308
Commercial	(a)	Potable	2,753	2,723	2,705	2,697	2,695
Industrial		Potable	32	33	33	34	34
	(a)	Potable	0	0	0	0	0
Landscape		Potable	745	752	760	767	775
		Potable	0	0	0	0	0
Distribution System Water Loss	(b)	Potable	944	960	975	991	1,007
Landscape	Recycled water	Non-Potable	209	212	216	219	223
Distribution System Water Loss	Recycled water (c)	Non-Potable	16	17	17	17	18
		Subtotal Potable	12,532	12,439	12,407	12,414	12,448
		Subtotal Non-Potable	225	229	233	236	241
		Total	12,757	12,668	12,640	12,650	12,689

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:

- (a) Includes institutional water uses.
- (b) Sum of unbilled authorized consumption, apparent losses, and real losses.
- (c) Same loss rate as potable system is assumed.

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)	Yes
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.	Section 4.2.3.1 to 4.2.3.5
Are Lower Income Residential Demands Included In Projections? Drop down list (y/n)	Yes
<i>Optional</i> If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	See notes
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES: All GSWC West Orangel residential customers, regardless of income level, are metered and thus the demands of residential customers with lower incomes are part of the single- and multi-family water uses shown in Table 4-1 and Table 4-3.	

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 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 opt (AF)
Add additional rows as needed					
Passive Water Savings	290	510	684	827	948
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: Passive conservation water savings based on the AWE Tracking Tool.					

**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.
Add rows as needed**

CA3010022	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes

DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.

NOTES: Submitted water loss audit reports are available at:
<https://wuedata.water.ca.gov/>. Reports are submitted on a fiscal year basis.

**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 (a)			State Water Board Standard		Most Recent AWWA Water Loss Audit (a)		
		2028 Real Water Loss Standard per Unit per day (b)	Units for Real Water Loss <small>Drop down list</small>	Number of Units (Connections or Miles corresponding with units selected) (c)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)	Real Water Loss Per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections (c)	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
CA3010022	Yes	22.90	Gallons per Service Connection per Day (GPSCD)	28,832	718	22.2	6.8	Gallons per Service Connection per Day (GPSCD)	28,832	232	7.2

[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:

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress
Water Code Section 10608.40

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?
No	Individual Target	141	111	Yes		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:

Submittal Table 6-1 Retail: Groundwater Volume Pumped
Water Code Section 10631(4) and 10631(4)(c)

Check the box if the Supplier does not pump groundwater. Proceed to the next table.

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 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
-----------------------------------------------------------------------------------	------------------------------------------------------------	------------------------	-----------	-----------	-----------	-----------	-----------

Add additional rows as needed

Alluvial Basin	Potable	OCGB	13,973	12,977	9,552	9,885	7,832
Total			13,973	12,977	9,552	9,885	7,832

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:

<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 (AF)	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				
OCSD	Estimated	8,301	OCSD Plant 1, Place ID 758392	No
Total Wastewater Received from UWMP Service Area in 2025:		8,301		
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:				

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area
Water Code Section 10633(b)

<input checked="" type="checkbox"/>	Check the box if no wastewater is treated or disposed of within the UWMP service area. Proceed to the next table.													
Wastewater Treatment Plant Name and Place ID Number Drop down list	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) Drop down list	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (AF)	Total 2025 Volume of Water Treated (AF)	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area (enter data as applicable)		Water Recycled Outside of UWMP Service Area (enter data as applicable)		Effluent Discharge that is not a Permitted Recycled Water Use (enter data as applicable)		Required Discharge for Instream Flow (enter data as applicable)		Delivered to Another Entity for Additional Treatment (enter data as applicable)		
				Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list
Add additional rows as needed														
		0												
Total		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.														
IPR: Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down.														
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.														
NOTES: Wastewater generated within the GSWC West Orange service area is either recycled for the GWRS or Green Acres Project, or discharged to the Pacific Ocean.														

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area
Water Code Section 10633 (c),(d),(e)

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) : Los Coyotes WRP, Place ID 238646

Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) : City of Cerritos

Volume of Supplemental Water Added in 2025 (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 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	Potential Recycled Water Use	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
Landscape irrigation (exc golf courses)	Non-Potable		232	226	229	233	237	241		
Subtotal Potable			0	0	0	0	0	0	0	
Subtotal Non-Potable			232	226	229	233	237	241	0	
Total			232	226	229	233	237	241	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: Current recycled water use from Table 4-1, and projected recycled water from Table 4-3 includes both landscape irrigation and distribution system loss.

**Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection
Compared to 2025 Actual
Water Code Section 10633(e)**

Check the box if recycled water was not used in 2025 nor previously projected for use in 2020.
Proceed to the next table.

Use Type Drop Down list	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Add additional rows as needed		
Landscape irrigation (exc golf courses)	250	232
Total	250	232

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:

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use
Water Code Section 10633 (f)

<input checked="" type="checkbox"/>	Check the box if the 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 (AF)
Add additional rows as needed			
Total (AF)			0
Unit Conversion to AF			0

DWR NOTES:
Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
The unit conversion to Acre Feet addresses the Water Code's requirement that this value be provided in acre-feet.

NOTES:

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs
Water Code Section 10631(f)

Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table.

Check the box if 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)	Potable or Non-Potable (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) (AF)
	Drop Down List (yes/no)	If Yes, Supplier Name					

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 reported in Submittal Table 2-3.

NOTES:

**Submittal Table 6-8 Retail: Water Supplies — Actual
Water Code Section 10631 (b)**

Water Supply		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		Additional Description (as needed)	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (AF)
Add additional rows as needed				
Groundwater (not desalinated)	OCGB (a)	Potable	7,832	11,232
Purchased or Imported Water	MWDOC (b)	Potable	5,365	-
Purchased or Imported Water	City of Seal Beach (c)	Potable	17	-
Recycled Water	City of Cerritos (d)	Non-Potable	205	-
Subtotal Potable			13,214	(e)
Subtotal Non-Potable			205	(e)
Total			13,419	(e)

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:

(a) The OCGB BPP was set at 85%; therefore, "Total Entitlement" reflects 85% of GSWC West Orange's potable water supply in 2025.

(b) GSWC does not have a direct contract with MWDOC for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.

(c) GSWC West Orange does not have a direct contract with the City of Seal Beach for purchased water, and GSWC is currently installing a transmission main that will change the regular use interties to emergency interties. Therefore, no "Reasonably Available Volume" is shown.

(d) GSWC does not have a direct contract with the City of Cerritos for recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.

(e) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent.

(f) Estimated supplies differ from estimated demands in Table 4 1 due to metering inaccuracies and/or data errors. In addition, the recycled water value differs from Table 6 5 and Table 6 6 because those tables report recycled water use rather than supply.

Optional Table 6-8DS: Source Water Desalination by Urban Water Supplier

<input checked="" type="checkbox"/> Check the box if the 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 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)	
Add additional rows as needed											
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:											

**Submittal Table 6-9 Retail: Water Supplies — Projected
Water Code Section 10631 (b)**

Water Supply	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 (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed												
Groundwater (not desalinated)	OCGB (a)	Potable	10,652	10,652	10,573	10,573	10,546	10,546	10,552	10,552	10,582	10,582
Purchased or Imported Water	MWDOC (b)	Potable	1,880	-	1,866	-	1,861	-	1,862	-	1,867	-
Recycled Water	City of Cerritos (c)	Non-Potable	226	-	229	-	233	-	237	-	241	-
Subtotal Potable			12,532	(d)	12,439	(d)	12,407	(d)	12,414	(d)	12,449	(d)
Subtotal Non-Potable			226	(d)	229	(d)	233	(d)	237	(d)	241	(d)
Total			12,758	(d)	12,668	(d)	12,640	(d)	12,651	(d)	12,690	(d)

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:
(a) The OCGB BPP is assumed will continue to be 85%; therefore, "Total Entitlement" reflects 85% of GSWC West Orange's total projected water supply for that year.
(b) GSWC does not have a direct contract with MWDOC for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.
(c) GSWC does not have a direct contract with the City of Cerritos for recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.
(d) Total entitlement values are not provided because certain supplies do not have a fixed annual entitlement and are demand-dependent.

Optional Submittal Table O-1B: Recommended Energy Reporting - SINGLE DELIVERY PRODUCT - TOTAL UTILITY APPROACH				
Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	Only for Water Delivery Products Under the Urban Water Supplier's Operational Control		
Start Date of Reporting Period	1/1/2024	Sum of All Water Management Processes	Non-Consequential Hydropower	
End Date of Reporting Period	12/31/2024		Total Utility See DWR NOTES	Hydropower
Is upstream embedded energy in the values reported?	No			
Units of Measure for Water	AF			
Volume of Water Entering Process	13,214	-	13,214	
Energy Consumed (kWh)	3,690,669	-	3,690,669	
Energy Intensity (kWh/vol. converted to MG)	857	-	857	
DWR NOTES: Total Utility: The volume of water entered in the "Total Utility" column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.				
Quantity of Self-Generated Renewable Energy				
0 kWh				
Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)				
Metered Data				
Data Quality Narrative: Energy consumed during calendar year 2025 is based on reported utility bills.				
Narrative: GSWC West Orange serves a combination of local groundwater pumped from the OCGB, and imported supplies from MWDOC. In 2025, a small portion of GSWC West Orange's potable water supply also included purchased water from the City of Seal Beach. The majority of GSWC West Orange's energy consumption to supply retail potable water is attributed to groundwater pumping and booster pumps within the distribution system.				
NOTES:				

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.

10631.2 (b) The Department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems.

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 checked="" type="checkbox"/>	Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location: Section 7.1
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	% of Average Supply
Average Year	2023		100%
Single-Dry Year	2015		
Consecutive Dry Years 1st Year	2013		
Consecutive Dry Years 2nd Year	2014		
Consecutive Dry Years 3rd Year	2015		
Consecutive Dry Years 4th Year	2016		
Consecutive Dry Years 5th Year	2017		

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 "Note" 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: Base year per U.S. Drought Monitor for Orange County, available at <https://droughtmonitor.unl.edu/>.

**Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison
Water Code Section 10635 (a)**

	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	12,532	12,439	12,407	12,414	12,448
Use totals (autofill from Submittal Table 4-2 R)	12,532	12,439	12,407	12,414	12,448
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: Volumes are in units of AF.

**Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison
Water Code Section 10635(a)**

	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals	13,217	13,124	13,095	13,106	13,147
Use totals	13,217	13,124	13,095	13,106	13,147
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: Volumes are in units of AF.					

**Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison
Water Code Section 10635(a)**

		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	12,859	12,768	12,740	12,751	12,790
	Use totals	12,859	12,768	12,740	12,751	12,790
	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	12,859	12,768	12,740	12,751	12,790
	Use totals	12,859	12,768	12,740	12,751	12,790
	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	12,859	12,768	12,740	12,751	12,790
	Use totals	12,859	12,768	12,740	12,751	12,790
	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	12,859	12,768	12,740	12,751	12,790
	Use totals	12,859	12,768	12,740	12,751	12,790
	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	12,859	12,768	12,740	12,751	12,790
	Use totals	12,859	12,768	12,740	12,751	12,790
	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: Volumes are in units of AF.

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	Total
Total Water Use (AF)	12,986
Total Supplies (AF)	12,986
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2027	Total
Total Water Use (AF)	12,948
Total Supplies (AF)	12,948
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2028	Total
Total Water Use (AF)	12,915
Total Supplies (AF)	12,915
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2029	Total
Total Water Use (AF)	12,885
Total Supplies (AF)	12,885
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2030	Total
Total Water Use (AF)	12,858
Total Supplies (AF)	12,858
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
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:	

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels
Water Code Section 10632(a)(3)(B)

<input checked="" type="checkbox"/>	Check the box if the Supplier uses the Standard six levels of water shortage. Proceed to the next table.
-------------------------------------	-------------------------------------------------------------------------------------------------------------

Standard Shortage Levels	Percent Shortage Range	Suppliers Shortage Levels	Percent Shortage Range

NOTES:

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions
Water Code Section 10632(a)(4)(A),(C) and (E)

Yes					Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier		How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)				
	Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)					
Add additional rows as needed									
Up to 10%			Percentage	0	See notes				
10-20%			Percentage	0	See notes				
20-30%			Percentage	0	See notes				
30-40%			Percentage	0	See notes				
40-50%			Percentage	0	See notes				
>50%			Percentage	0	See notes				

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES: GSWC West Orange will not use supply augmentation to mitigate shortfalls. Short-term shortfalls may be mitigated with emergency supply interties with adjacent water supply systems.

Submittal Table 8-3 Retail: Demand Reduction Actions
Water Code Section 10632(a)(4)(B),(D), and (E)

No	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 List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
Add additional rows as needed					
1	Provide rebates on plumbing fixtures and devices	Percentage	10%	Encourage customers to take advantage of the City's free conservation and rebate programs.	No
1	Expand public information campaign	Percentage	5%	Provision of Technical Information to customers on means to promote water use efficiency including customer scorecard, residential assistance, and surveys.	No
2	CII - Restaurants may only serve water upon request	Percentage	1%	Water served upon request at restaurants.	Yes
2	Pools and Spas - Require covers for pools and spas	Percentage	2%	Require covers for pools and spas.	Yes
2	Expand Public Information Campaign	Percentage	2%	Expand Public Information Campaign regarding water shortages such as websites, e-mails, presentations, business placards, school education.	No
2	Implement or Modify Drought Rate Structure or Surcharge	Percentage	4%	Water shortage pricing.	Yes
2	Reduce System Water Loss	Percentage	2%	Reduce System Water Loss.	No
2	CII - Lodging establishment must offer opt out of linen service	Percentage	1%	Lodging establishment must offer opt out of linen service.	Yes
2	Other water feature or swimming pool restriction	Percentage	1%	Draining of pools or refilling shall be done only for health or safety reasons.	Yes
2	Other	Percentage	1%	Reduce indoor and outdoor water use by specified percentage as determined (based on Shortage Stage). Contact the City for additional tips and techniques to reduce water use.	Yes
2	Landscape - Other Landscape Restriction or Prohibition	Percentage	2%	Irrigation of parks, school ground areas, and road median landscaping will not be permitted more than twice a week and only if necessary.	Yes
2	Other - Prohibit use of potable water for construction and dust control	Percentage	<1%	The use of potable water for sanitation, irrigation, and construction purposes, including, but not limited to, dust control, settling of backfill, flushing of plumbing lines, and washing of equipment, buildings, and vehicles, shall be prohibited in all cases where the manager has determined that use of reclaimed, recycled, or other forms of non-potable water use is a feasible alternative.	Yes
2	Decrease line flushing	Percentage	<1%	Main flushing only on complaint basis.	Yes
3	CII - Commercial kitchens required to use pre-rinse spray valves	Percentage	1%	Prohibit operation of non-water conservation pre-rinse nozzle in a food preparation establishment such as a restaurant or cafeteria.	Yes
3	Other water feature or swimming pool restriction	Percentage	1%	No filling of pools or aesthetic water features.	Yes
3	Landscape - Other Landscape Restriction or Prohibition	Percentage	3%	Require large landscapes to adhere to water budgets.	Yes
3	Landscape - Other Landscape Restriction or Prohibition	Percentage	2%	Whether irrigated with potable or non-potable water, limit all irrigation to two days per week for no more than 10 minutes per station per day.	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	1%	Require large users to audit premises and repair leaks.	Yes
3	Increase Water Waste Patrols	Percentage	1%	Implement Water Waste Patrols.	No
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Percentage	1%	Washing of personal vehicles at home (including autos, trucks, trailers, motor homes, boats, or others) is prohibited.	Yes
4	Other	Percentage	1%	No new construction meters will be issued.	No

4	Implement or Modify drought rate structure or surcharge	Percentage	3%	Water Emergency tiered pricing will be implemented pursuant to requirements of Proposition 218 in accordance with California Law.	Yes
4	Other	Percentage	2%	Modify customer indoor water use budgets. No outdoor water use budget.	Yes
4	Other	Percentage	2%	Water use for public health and safety purposes only. Customer rationing may be implemented.	Yes
4	Landscape - Other Landscape Restriction or Prohibition	Percentage	2%	All landscape and non-essential outdoor water use for all Customers in all areas of the City's water service area shall be prohibited.	Yes
5	Other	Percentage	>5%	The City Council may impose any water rationing requirement that it deems appropriate to protect public health, safety, welfare, comfort, and convenience.	Yes

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

- (a) If a water shortage progresses through multiple levels, all demand reduction actions in the previous level(s) are implemented in addition to current level actions.
- (b) Reduction in the shortage gap is estimated and can vary significantly.

**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		
Buena Park	Yes	Yes
Cypress	Yes	Yes
Garden Grove	Yes	Yes
La Palma	Yes	Yes
Los Alamitos	Yes	Yes
Seal Beach	Yes	Yes
Stanton	Yes	Yes
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		
Orange County	Yes	Yes

NOTES:
(a) Other agencies notified: MWDOC and OCWD.

Appendix B: Reduced Delta Reliance

GOLDEN STATE WATER COMPANY WEST ORANGE SYSTEM

Reduced Reliance on the Delta

DRAFT | April 2026
EKI C40261.00

The purpose of this document is to demonstrate compliance with the Sacramento-San Joaquin Delta Reform Act of 2009. The Sacramento-San Joaquin Delta Reform Act of 2009 is described below, followed by an analysis of Golden State Water Company – West Orange System’s (GSWC West Orange) reduced reliance in accordance with State protocols and expected outcomes for reduced reliance on the Sacramento-San Joaquin Delta (Delta).

1 SACRAMENTO-SAN JOAQUIN DELTA REFORM ACT OF 2009

Under the Sacramento-San Joaquin Delta Reform Act of 2009, state and local public agencies proposing a “covered action” in the Sacramento-San Joaquin Delta (Delta) must submit a written certification of consistency to the Delta Stewardship Council as to whether the covered action is consistent with applicable Delta Plan policies. Covered actions include a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Delta. Anyone may appeal a certification of consistency, and if the Delta Stewardship Council grants the appeal, the covered action may not be implemented until the agency proposing the covered action submits a revised certification of consistency, and either no appeal is filed, or the Delta Stewardship Council denies the subsequent appeal.

An urban water supplier that anticipates participating in or receiving water from a proposed covered action is required to provide information in their 2015 and subsequent Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).

WR P1 details what is needed for a covered action to demonstrate consistency with reduced reliance on the Delta and improved regional self-reliance. WR P1 subsection (a) states that:

- (a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:*
 - (1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
 - (2) That failure has significantly caused the need for the export, transfer, or use; and*
 - (3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above.

- (c)(1) Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:*
 - (A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;*
 - (B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and*
 - (C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable*

reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).

The analysis and documentation provided below include all of the elements described in WR P1(c)(1) that need to be included in a water supplier’s UWMP to support a certification of consistency for a future covered action. Including this document as an appendix in the 2015 and subsequent UWMPs fulfills the requirements of WR P1 subsection (c)(1) Paragraph A.

2 REDUCED RELIANCE ANALYSIS

GSWC West Orange obtains a portion of its supplies through purchases from Municipal Water District of Orange County (MWDOC), which is a member agency of the Metropolitan Water District of Southern California (MWD). MWDOC acts as a secondary wholesale water agency, purchasing water from MWD and reselling it to agencies in Orange County, including GSWC West Orange. MWD supplies imported water sourced from the Delta via the State Water Project (SWP) and the Colorado River via the Colorado River Aqueduct (CRA). Additionally, MWD supports the Delta Conveyance Project (DCP), which is a covered action under the Delta Reform Act. Therefore, GSWC has prepared a Regional Self Reliance and Reduced Delta Reliance analysis conservatively assuming that all purchased imported water supplies are sourced from the Delta.

The methodology used to determine GSWC West Orange’s reduced Delta reliance and improved regional self-reliance is consistent with the approach detailed in Appendix C of Department of Water Resources’ (DWR) Urban Water Management Plan Guidebook 2025 (Guidebook Appendix C) issued in January 2026, including the use of narrative justifications for the accounting of supplies and the documentation of specific data sources. Some of the key assumptions underlying GSWC West Orange’s demonstration of reduced reliance include:

- All data were obtained from the current 2025 UWMP or previously adopted UWMPs and represent average or normal water year conditions.
- All analyses were conducted at the service area level, focusing on GSWC West Orange’s demands and supplies.
- No projects or programs that are described in the UWMPs as “Projects Under Development” were included in the accounting of supplies.

Tables 1 through 4 present the analysis of GSWC West Orange’s reduced Delta reliance using DWR’s spreadsheet tool and fulfill the requirements of WR P1 subsection (c)(1) Paragraph C. Descriptions of the various inputs of the analysis are provided below:

- **Baseline (2010) and 2015-2050 Conditions** – The analysis uses a normal water year representation of 2010 as the baseline, which is consistent with the approach described in DWR’s Guidebook. Data for the 2010 baseline were taken from the 2010 UWMP. To evaluate conditions relative to the baseline, actual conditions for 2015, 2020, and 2025 of the corresponding UWMPs are presented. Normal year projections for 2030 through 2050 from the 2025 UWMP are then subsequently used.

- **Service Area Water Demands with Water Use Efficiency Accounted For** – These values reflect GSWC West Orange’s actual and projected water use.
- **Non-Potable Water Demands** – This item includes recycled water, untreated water demands, raw water losses, and/or water placed in storage, if applicable to the system.
- **Water Supplies Contributing to Regional Self-Reliance**
 - **Water Use Efficiency** – This amount is calculated by DWR’s spreadsheet tool based on GSWC West Orange’s baseline demand, actual demands, and expected future demands. The value shown is the reduction in per capita water demand from the baseline (2010) multiplied by the projected population for each.
 - **Water Recycling** – This is wastewater that is treated to an acceptable level such that it can be reused for irrigation, cooling, and other non-potable applications.
- **Water Supplies from the Delta Watershed**
 - **CVP/SWP Contract Supplies** – GSWC West Orange derives a portion of its supplies from the MWDOC, which are member agencies of MWD. MWD is a SWP Contractor that obtains a portion of its water supply from the Delta via the SWP.

3 EXPECTED OUTCOMES FOR REDUCED RELIANCE ON THE DELTA

As stated in WR P1(c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for measurable reduction in Delta reliance and improved regional self-reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta.

The following provides a summary of the near-term (2030) and long-term (2050) expected outcomes for GSWC West Orange’s Delta reliance and regional self-reliance based on the assumptions described in the previous section and DWR’s analysis tool.

Expected Outcomes for Regional Self-Reliance

- Near-term (2030) – Normal water year regional self-reliance is expected to increase by 21.3% from the 2010 baseline (see Table 3).
- Long-term (2050) – Normal water year regional self-reliance is expected to increase by 22.1% from the 2010 baseline (see Table 3).

Expected Outcomes for Percent of Water Supplies from the Delta Watershed

- Near-term (2030) – Normal water year reliance on supplies from the Delta watershed is expected to decrease by 21.3% relative to the 2010 baseline (see Table 4).
- Long-term (2050) – Normal water year reliance on supplies from the Delta watershed is expected to decrease by 22.1% relative to the 2010 baseline (see Table 4).

The results indicate that GSWC West Orange is measurably reducing reliance on the Delta and improving regional self-reliance, based on the percentage of GSWC West Orange’s water supplies from the Delta Watershed. Additionally, the regional analysis prepared by the MWD (2025 UWMP Appendix 10), which supplies water to MWDOC, demonstrates that, at a regional scale, reliance on Delta supplies is projected

to decrease over the planning horizon as a result of continued investments in supply diversification, conservation, and storage. Accordingly, while reductions are limited at the local level due to system constraints, GSWC West Orange contributes to and benefits from broader regional efforts to reduce Delta reliance.

Reduced Reliance Calculation - Data Template

Please refer to these resources for guidance on completing these tables:

Appendix C of the Urban Water Management Plan Guidebook 2025

[DWR Training Session #1: Demonstrating Reduced Reliance On the Delta](#)

Table C-1: Optional Calculation of Water Use Efficiency -To be completed if Water Supplier does not specifically estimate Water Use Efficiency as a supply

Service Area Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	15,287	13,440	14,173	13,138	12,758	12,669	12,640	12,651	12,689
Non-Potable Water Demands	-	-	241	232	226	229	233	237	241
Potable Service Area Demands with Water Use Efficiency Accounted For	15,287	13,440	13,932	12,906	12,532	12,439	12,407	12,414	12,449

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Population	111,418	112,131	114,235	114,756	116,623	118,521	120,462	122,435	124,441

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Per Capita Water Use (GPCD)	122	107	109	100	96	94	92	91	89
Change in Per Capita Water Use from Baseline (GPCD)	-	(15)	(14)	(22)	(27)	(29)	(31)	(32)	(33)
Estimated Water Use Efficiency Since Baseline	-	1,945	1,742	2,839	3,469	3,822	4,120	4,385	4,625

Table C-2: Calculation of Service Area Water Demands Without Water Use Efficiency

Total Service Area Water Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	15,287	13,440	14,173	13,138	12,758	12,669	12,640	12,651	12,689
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline	-	1,945	1,742	2,839	3,469	3,822	4,120	4,385	4,625
Service Area Water Demands without Water Use Efficiency Accounted For	15,287	15,385	15,915	15,977	16,227	16,491	16,761	17,035	17,314

Table C-3: Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Use Efficiency	-	1,945	1,742	2,839	3,469	3,822	4,120	4,385	4,625
Water Recycling	-	-	241	232	226	229	233	237	241
Stormwater Capture and Use	-	-	-	-	-	-	-	-	-
Advanced Water Technologies	-	-	-	-	-	-	-	-	-
Conjunctive Use Projects	-	-	-	-	-	-	-	-	-
Local and Regional Water Supply and Storage Projects	10,260	13,323	13,859	7,541	10,652	10,573	10,546	10,552	10,582
Other Programs and Projects the Contribute to Regional Self-Reliance	-	-	-	-	-	-	-	-	-
Water Supplies Contributing to Regional Self-Reliance	10,260	15,268	15,842	10,612	14,347	14,625	14,900	15,173	15,447

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	15,287	15,385	15,915	15,977	16,227	16,491	16,761	17,035	17,314

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies Contributing to Regional Self-Reliance	10,260	15,268	15,842	10,612	14,347	14,625	14,900	15,173	15,447
Change in Water Supplies Contributing to Regional Self-Reliance		5,008	5,582	352	4,087	4,365	4,640	4,913	5,187

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	67.1%	99.2%	99.5%	66.4%	88.4%	88.7%	88.9%	89.1%	89.2%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		32.1%	32.4%	-0.7%	21.3%	21.6%	21.8%	22.0%	22.1%

Table C-4: Calculation of Reliance on Water Supplies from the Delta Watershed

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
CVP/SWP Contract Supplies	5,027	117	73	5,365	1,880	1,866	1,861	1,862	1,867
Delta/Delta Tributary Diversions	-	-	-	-	-	-	-	-	-
Transfers and Exchanges	-	-	-	-	-	-	-	-	-
Other Water Supplies from the Delta Watershed	-	-	-	-	-	-	-	-	-
Total Water Supplies from the Delta Watershed	5,027	117	73	5,365	1,880	1,866	1,861	1,862	1,867

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	15,287	15,385	15,915	15,977	16,227	16,491	16,761	17,035	17,314

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies from the Delta Watershed	5,027	117	73	5,365	1,880	1,866	1,861	1,862	1,867
Change in Water Supplies from the Delta Watershed		(4,910)	(4,954)	338	(3,147)	(3,161)	(3,166)	(3,165)	(3,160)

Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Percent of Water Supplies from the Delta Watershed	32.9%	0.8%	0.5%	33.6%	11.6%	11.3%	11.1%	10.9%	10.8%
Change in Percent of Water Supplies from the Delta Watershed		-32.1%	-32.4%	0.7%	-21.3%	-21.6%	-21.8%	-22.0%	-22.1%

Appendix C: Correspondence

September 2, 2025



City of Buena Park
Mina Mikhael
6650 Beach Boulevard, First Floor
Buena Park, CA 90622

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

GSWC is currently reviewing its existing UWMP and associated WSCP, which were updated in 2021, and considering revisions to the documents. Coordination with water suppliers, cities, counties, and community organizations in the region is an important part of the preparation of GSWC's UWMP and WSCP. We invite your agency's participation in this revision process. We are available to discuss the assumptions used in the development of the plans including available water supply, water demands, land use, as well as other aspects of the plans.

A draft of the 2025 UWMP and WSCP will be made available for public review and a public hearing will be scheduled in 2026. In the meantime, if you would like more information regarding GSWC's 2020 UWMP and WSCP and the schedule for updating these documents, or if you would like to participate in the preparation of the 2025 UWMP and WSCP, please contact Lincoln Kha at:

Golden State Water Company
630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



City of Cypress
Alicia Velasco
5275 Orange Avenue P.O. Box 609
Cypress, CA 90630

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

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Golden State Water Company
630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



City of Garden Grove
Bill Murray
11222 Acacia Parkway
Garden Grove, CA 92840

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

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630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



City of La Palma
Joseph Cisneros
7822 Walker Street
La Palma, CA 90623

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

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630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



City of Los Alamitos
Chris Kelley
3191 Katella Avenue
Los Alamitos, CA 90720

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

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Golden State Water Company
630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



City of Seal Beach
Iris Lee
211 8th Street
Seal Beach, CA 90740

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

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630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



City of Stanton
Hannah Shin-Heydorn
7800 Katella Avenue
Stanton, CA 90680

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

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San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



Municipal Water District of Orange County
Alex Heide
18700 Ward Street, Unit B
Fountain Valley, CA 92708

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

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Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



Orange County
Kevin Onuma
601 N Ross St
Santa Ana, CA 92701

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Golden State Water Company (GSWC) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. The updated UWMP and WSCP are due by July 1, 2026.

GSWC is currently reviewing its existing UWMP and associated WSCP, which were updated in 2021, and considering revisions to the documents. Coordination with water suppliers, cities, counties, and community organizations in the region is an important part of the preparation of GSWC's UWMP and WSCP. We invite your agency's participation in this revision process. We are available to discuss the assumptions used in the development of the plans including available water supply, water demands, land use, as well as other aspects of the plans.

A draft of the 2025 UWMP and WSCP will be made available for public review and a public hearing will be scheduled in 2026. In the meantime, if you would like more information regarding GSWC's 2020 UWMP and WSCP and the schedule for updating these documents, or if you would like to participate in the preparation of the 2025 UWMP and WSCP, please contact Lincoln Kha at:

Golden State Water Company
630 E. Foothill Blvd.
San Dimas, CA 91773
(714) 535-7711 Ext. 231
lincoln.kha@gswater.com

Sincerely,

Lincoln Kha
Planning Engineer

September 2, 2025



Orange County Water District
John Kennedy
18700 Ward Street, Unit B
Fountain Valley, CA 92708

Re: **Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2025 Update**

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GSWC is currently reviewing its existing UWMP and associated WSCP, which were updated in 2021, and considering revisions to the documents. Coordination with water suppliers, cities, counties, and community organizations in the region is an important part of the preparation of GSWC's UWMP and WSCP. We invite your agency's participation in this revision process. We are available to discuss the assumptions used in the development of the plans including available water supply, water demands, land use, as well as other aspects of the plans.

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Appendix D: Public Hearing Notice

Text to be added after Public Hearing

Appendix E: Water Supply Projections by Source for Normal, Single Dry Year, and Multiple Dry Year Conditions

Water Supply Projections by Source for Normal Year Conditions

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2021 (Actual)	2022 (Actual)	2023 (Actual)	2024 (Actual)	2025 (Actual)	2030		2035		2040		2045		2050		Notes	
								Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)		
Region 1: GSWC Cordova																			
Groundwater	Aerojet	Potable	4,931	5,039	4,490	5,009	4,980	4,953	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	This water is extracted from the SASb by Aerojet, treated for Aerojet-related contaminants, and discharged into the American River for downstream diversion by GSWC Cordova. If additional groundwater supplies are contaminated by the Aerojet plume, there is an additional 10,200 AFY (in addition to the 5,000 AFY) of replacement water available contingent on demonstrated lack of supply attributable to Aerojet plume. This supply constitutes a replacement for a reduction in pumped groundwater due to contamination; it does not represent an increase in total potential supply. Therefore, this additional replacement water is not included in the "Total Entitlement".
Surface Water	South Fork American River	Potable	3,730	4,497	4,888	4,270	3,220	4,175	5,000	4,175	5,000	4,175	5,000	4,175	5,000	4,175	5,000	5,000	GSWC has a total surface water right of 10,000 AFY, of which 5,000 AFY leased to the City of Folsom under a 1994 agreement. The "Total Entitlement" reflects the 5,000 AFY retained by GSWC.
Groundwater	South American Subbasin	Potable	4,612	2,611	2,524	3,003	4,241	3,442	-	3,592	-	3,719	-	3,867	-	4,032	-	-	The SASb is not adjudicated, and there are no quantified groundwater allocations. Therefore, no "Total Entitlement" is shown.
Total Supply:			13,273	12,147	11,902	12,281	12,441	12,570	20,200	12,767	20,200	12,894	20,200	13,042	20,200	13,207	20,200		
Region 1: GSWC Bay Point																			
Purchased or Imported Water	Contra Costa Water District	Potable	1,871	1,699	1,613	1,645	1,690	1,621	4,932	1,587	4,932	1,593	4,932	1,606	4,932	1,624	4,932	4,932	A 2008 Asset Lease Agreement entails a lease by GSWC Bay Point from CCWD of approximately 4,932 AFY of treated water capacity at the Randall-Bold WTP. A reduction to 3,679 AFY is anticipated by 2045
Groundwater	Pittsburg Plain Basin	Potable	31	114	153	152	157	115	-	113	-	113	-	114	-	116	-	-	The Basin is not adjudicated, and there are no quantified groundwater allocations. Therefore, while supply is available, no "Total Entitlement" is shown.
Total Supply:			1,902	1,814	1,766	1,797	1,847	1,736	4,932	1,700	4,932	1,706	4,932	1,720	4,932	1,740	4,932		
(157.00)																			
Region 1: GSWC Orcutt																			
Purchased or Imported Water	Central Coast Water Authority	Potable	75	74	269	258	334	193	550	194	550	193	550	193	550	193	550	550	The "Total Entitlement" reflects GSWC's contract with CCWA.
Groundwater	Santa Maria Valley Basin	Potable	6,285	5,911	5,186	5,390	5,396	5,397	9,960	5,404	9,960	5,384	9,960	5,374	9,960	5,372	9,960	9,960	The Basin is adjudicated, but there are no Stipulated restrictions on pumping. The Stipulation recognizes GSWC's historical pumping (9,960 AFY in 1996), the right to recapture 45% of the return flows from its use of SWP water within the Subbasin, and the Twitchell Yield. However, because there are no groundwater allocations, no "Total Entitlement" is shown.
Total Supply:			6,360	5,984	5,455	5,649	5,730	5,590	10,668	5,598	10,668	5,577	10,668	5,567	10,668	5,565	10,668		
Region 1: GSWC Simi Valley																			
Purchased or Imported Water	Calleguas Municipal Water District	Potable	5,270	4,020	3,990	4,406	4,388	4,085	-	4,000	-	3,945	-	3,900	-	3,864	-	-	GSWC Simi Valley does not have a direct contract or formal allocation with Calleguas; purchases are discretionary to match demand. Therefore, while supply is available, no "Total Entitlement" is shown.
Groundwater	Simi Valley Basin	Potable	1,337	1,244	896	1,066	1,149	1,053	-	1,031	-	1,017	-	1,006	-	997	-	-	The Basin is not adjudicated, and there are no quantified groundwater allocations. Therefore, while supply is available, no "Total Entitlement" is shown.
Total Supply:			6,607	5,264	4,886	5,472	5,537	5,138	-	5,031	-	4,962	-	4,906	-	4,861	-		

Water Supply Projections by Source for Normal Year Conditions

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2021 (Actual)	2022 (Actual)	2023 (Actual)	2024 (Actual)	2025 (Actual)	2030		2035		2040		2045		2050		Notes	
								Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)		
Region 2: GSWC Artesia																			
Purchased or Imported Water	City of Cerritos	Potable	118	186	209	12	449	374	4,839	1,355	4,839	1,078	4,839	866	4,839	699	4,839	Cerritos provides water from CBMWD and assets owned by Cerritos. GSWC has an interconnection agreement with Cerritos to provide up to 3,000 gpm, or approximately 4,839 AFY, from two connections.	
Groundwater	Central Subbasin	Potable	4,538	4,274	4,139	4,439	4,033	3,970	16,439	2,927	16,439	3,146	16,439	3,314	16,439	3,448	16,439	"Total Entitlement" from the Central Subbasin is for all of GSWC's seven service areas subject to the Central Basin Third Amended Judgement, including GSWC Artesia. Volume only includes APA and does not include carryover, leased, storage, or other factors. Additional leased and stored groundwater is available if needed.	
Recycled Water	Central Basin Municipal Water District	Non-Potable	78	75	55	72	74	77	-	78	-	79	-	79	-	79	-		
Recycled Water	City of Cerritos	Non-Potable	3	3	2	5	3	4	-	4	-	4	-	4	-	4	-	GSWC does not have a direct contract with CBMWD or Cerritos for recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Total Supply:			4,738	4,538	4,404	4,528	4,560	4,425	21,278	4,364	21,278	4,307	21,278	4,263	21,278	4,230	21,278		
Region 2: GSWC Bell - Bell Gardens																			
Purchased or Imported Water	Central Basin Municipal Water District	Potable	641	692	483	590	747	589	-	576	-	565	-	556	-	550	-	GSWC does not have a direct contract with CBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Groundwater	Central Subbasin	Potable	3,790	3,673	3,700	3,535	3,479	3,397	16,439	3,321	16,439	3,257	16,439	3,208	16,439	3,168	16,439	"Total Entitlement" from the Central Subbasin is for all of GSWC's seven service areas subject to the Central Basin Third Amended Judgement, including GSWC Bell-Bell Gardens. Volume only includes APA and does not include carryover, leased, storage, or other factors. Additional leased and stored groundwater is available if needed.	
Recycled Water	Central Basin Municipal Water District	Non-Potable	113	151	105	93	108	125	-	125	-	125	-	125	-	125	-	GSWC does not have a direct contract with CBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Total Supply:			4,544	4,516	4,288	4,219	4,334	4,111	16,439	4,022	16,439	3,947	16,439	3,889	16,439	3,843	16,439		
Region 2: GSWC Culver City																			
Purchased or Imported Water	West Basin Municipal Water District	Potable	4,726	4,551	4,343	4,464	4,510	4,317	-	4,252	-	4,193	-	4,145	-	4,107	-	GSWC does not have a direct contract with WBMWD for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown. GSWC Culver City's connections to WBMWD collectively have a capacity of 22,500 gpm.	
Total Supply:			4,726	4,551	4,343	4,464	4,510	4,317	-	4,252	-	4,193	-	4,145	-	4,107	-		
Region 2: GSWC Florence Graham																			
Purchased or Imported Water	Central Basin Municipal Water District	Potable	330	296	1,852	2,501	2,864	2,825	-	1,533	-	1,504	-	1,481	-	1,463	-	GSWC does not have a direct contract with CBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown. GSWC Florence-Graham's total capacity from 3 MWD connections is 9,670 gpm, or 15,600 AFY.	
Groundwater	Central Subbasin	Potable	4,268	4,202	2,659	1,989	1,511	1,614	16,439	2,858	16,439	2,804	16,439	2,762	16,439	2,728	16,439	"Total Entitlement" from the Central Subbasin is for all of GSWC's seven service areas subject to the Central Basin Third Amended Judgement, including GSWC Florence-Graham. Volume only includes APA and does not include carryover, leased, storage, or other factors. Additional leased and stored groundwater is available if needed. Maximum pumping capacity will be approximately 4,750 gpm, or 7,662 AFY, following completion of two new wells currently under construction.	
Total Supply:			4,598	4,497	4,511	4,490	4,375	4,439	-	4,391	16,439	4,308	16,439	4,243	16,439	4,191	16,439		
Region 2: GSWC Norwalk																			
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,327	1,836	1,433	1,076	1,399	724	-	724	-	724	-	724	-	724	-	The total connection capacity of CB-35 for potable supply is anticipated to be reduced to 1 cfs, or approximately 724 AFY, starting 2029, as reflected under "Reasonably Available Volume." GSWC does not have a direct contract with CBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Groundwater	Central Subbasin	Potable	1,832	2,178	2,455	2,961	2,751	3,180	16,439	3,096	16,439	3,031	16,439	2,980	16,439	2,939	16,439	"Total Entitlement" from the Central Subbasin is for all of GSWC's seven service areas subject to the Central Basin Third Amended Judgement, including GSWC Norwalk. Volume only includes APA and does not include carryover, leased, storage, or other factors. Additional leased and stored groundwater is available if needed. Maximum pumping capacity is 5,300 gpm, or approximately 8,579 AFY.	
Recycled Water	Central Basin Municipal Water District	Non-Potable	213	176	96	121	118	95	-	95	-	95	-	95	-	95	-	GSWC does not have a direct contract with CBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Total Supply:			4,372	4,191	3,984	4,158	4,268	3,999	16,439	3,915	16,439	3,850	16,439	3,799	16,439	3,758	16,439		
Region 2: GSWC Southwest																			
Purchased or Imported Water	West Basin Municipal Water District	Potable	15,637	15,749	10,851	8,372	12,188	11,979	-	11,795	-	11,638	-	11,522	-	11,434	-		
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,036	2,387	2,134	2,467	2,458	2,190	-	2,156	-	2,128	-	2,107	-	2,091	-	GSWC does not have a direct contract with CBMWD or WBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Groundwater	West Coast Subbasin	Potable	5,164	4,773	8,221	10,716	7,135	6,869	7,502	6,763	7,502	6,673	7,502	6,607	7,502	6,557	7,502	"Total Entitlement" reflects GSWC's APA from the West Coast Subbasin and does not include carryover, leased, storage, or other factors.	
Groundwater	Central Subbasin	Potable	2,993	2,406	2,977	2,972	2,801	2,699	16,439	2,658	16,439	2,622	16,439	2,596	16,439	2,576	16,439	"Total Entitlement" reflects GSWC's APA from the Central Subbasin and does not include carryover, leased, storage, or other factors. The "Total Entitlement" reported is for all of GSWC's seven service areas subject to the Central Basin Third Amended Judgement, including GSWC Southwest.	
Recycled Water	West Basin Municipal Water District	Non-Potable	465	447	278	416	482	381	-	384	-	386	-	387	-	389	-	GSWC does not have a direct contract with WBMWD for purchased and recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Total Supply:			26,295	25,762	24,461	24,943	25,064	24,119	23,941	23,756	23,941	23,447	23,941	23,218	23,941	23,047	23,941		

Water Supply Projections by Source for Normal Year Conditions

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2021 (Actual)	2022 (Actual)	2023 (Actual)	2024 (Actual)	2025 (Actual)	2030		2035		2040		2045		2050		Notes	
								Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)	Reasonably Available Volume	Total Entitlement (Opt)		
Region 3: GSWC Placentia - Yorba Linda																			
Purchased or Imported Water	Municipal Water District of Orange County	Potable	5,894	6,002	3,869	3,105	4,632	4,471	-	4,462	-	4,466	-	4,482	-	4,508	-	GSWC does not have a direct contract with MWDOC for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Groundwater	Orange County Groundwater Basin	Potable	1,118	713	2,244	3,245	1,797	1,735	5,275	1,731	5,263	1,732	5,269	1,739	5,288	1,749	5,318	The OCGB BPP is assumed will continue to be 85%; therefore, "Total Entitlement" reflects 85% of GSWC Placentia-Yorba Linda's total projected water supply for that year.	
Total Supply:			7,012	6,715	6,113	6,350	6,429	6,206	5,275	6,192	5,263	6,198	5,269	6,221	5,288	6,257	5,318		
Region 3: GSWC South Arcadia																			
Purchased or Imported Water	City of Arcadia	Potable	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	GSWC South Arcadia does not anticipate purchasing imported water from the City of Arcadia over the planning horizon of this UWMP; therefore, no "Reasonably Available Water" is shown. GSWC South Arcadia also does not have a direct contract with the City of Arcadia for purchased water; therefore, while water supply is available, no "Total Entitlement" is shown. GSWC South Arcadia's total estimated capacity for purchased water is 3,500 gpm.	
Groundwater	Main San Gabriel Basin	Potable	3,020	2,735	2,547	2,742	2,767	2,712	4,089	2,767	4,089	2,725	4,089	2,692	4,089	2,665	4,089	The Main San Gabriel Basin is adjudicated. "Total Entitlement" reflects GSWC's Pumper's Share of 2.92105% of the OSY, which was established at 160,000 AF for fiscal year 2024-25, and 140,000 AFY for fiscal year 2025-26. Because this table is calendar year, an average OSY of 150,000 AF is assumed in 2025. The Total Entitlement is shared between the GSWC South San Gabriel system and the GSWC South Arcadia system.	
Groundwater	GSWC San Dimas	Potable	-	-	-	-	0	-	2,436	-	2,436	-	2,436	-	2,436	-	2,436	The GSWC San Dimas system is also located in the Main San Gabriel Basin and has its own Pumper's Share of 1.73984%. GSWC can transfer groundwater credits to GSWC South San Gabriel system and the GSWC South Arcadia system as needed. "Total Entitlement" reflects GSWC San Dimas' Pumper's Share assuming an average OSY of 150,000 AF for calendar year 2025 (see note above).	
Total Supply:			3,020	2,735	2,547	2,742	2,767	2,712	4,089	2,767	4,089	2,725	4,089	2,692	4,089	2,665	4,089		
Region 3: GSWC South San Gabriel																			
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	61	251	78	8	508	724	-	726	-	644	-	580	-	528	-	GSWC South San Gabriel does not have a direct contract for purchased water with Upper District. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Groundwater	Main San Gabriel Basin	Potable	2,276	1,960	2,028	2,187	1,631	1,377	4,089	1,322	4,089	1,364	4,089	1,397	4,089	1,424	4,089	The Main San Gabriel Basin is adjudicated. "Total Entitlement" reflects GSWC's Pumper's Share of 2.92105% of the OSY, which was established at 140,000 AF for fiscal year 2025-26 through 2028-29. While the OSY has historically ranged up to 240,000 AF, an OSY of 140,000 AF is conservatively assumed through 2050. The Total Entitlement is shared between the GSWC South San Gabriel system and the GSWC South Arcadia system. GSWC South San Gabriel's maximum pumping capacity is approximately 5,165 AFY.	
Transfer	GSWC San Dimas	Potable	-	-	-	-	-	-	2,436	-	2,436	-	2,436	-	2,436	-	2,436	The GSWC San Dimas system is also located in the Main San Gabriel Basin and has its own Pumper's Share of 1.73984%. GSWC can transfer groundwater credits to GSWC South San Gabriel system and the GSWC South Arcadia system as needed. "Total Entitlement" reflects GSWC San Dimas' Pumper's Share assuming an average OSY of 150,000 AF for calendar year 2025 (see note above).	
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	14	13	12	3	22	6	-	6	-	6	-	6	-	6	-	GSWC South San Gabriel does not have a direct contract for purchased water with Upper District. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Total Supply:			2,351	2,223	2,118	2,198	2,161	2,107	6,525	2,054	6,525	2,014	6,525	1,983	6,525	1,958	6,525		
Region 3: GSWC West Orange																			
Purchased or Imported Water	Municipal Water District of Orange County	Potable	236	507	2,848	2,994	5,365	1,880	-	1,866	-	1,861	-	1,862	-	1,867	-	GSWC does not have a direct contract with MWDOC for purchased water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Groundwater	Orange County Groundwater Basin	Potable	13,973	12,977	9,552	9,885	7,832	10,652	10,652	10,573	10,573	10,546	10,546	10,552	10,552	10,582	10,582	The OCGB BPP is assumed will be 85%; therefore, "Total Entitlement" reflects 85% of GSWC West Orange's total projected water supply for that year.	
Recycled Water	City of Cerritos	Non-Potable	189	153	159	189	205	226	-	229	-	233	-	237	-	241	-	GSWC does not have a direct contract with the City of Cerritos for recycled water; supplies are discretionary to match demand. Therefore, while water supply is available, no "Total Entitlement" is shown.	
Total Supply:			14,424	13,659	12,577	13,103	13,419	12,758	10,652	12,668	10,573	12,640	10,546	12,651	10,552	12,690	10,582		

Water Supply Projections by Source for Single Dry Year Conditions

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 1: GSWC Cordova								
Groundwater	Aerojet	Potable	5,000	5,000	5,000	5,000	5,000	100%
Surface Water	South Fork American River	Potable	4,237	4,237	5,000	5,000	5,000	85-100%
Groundwater	South American Subbasin	Potable	5,114	5,339	4,721	4,890	5,078	100%
Total Supply:			14,351	14,576	14,721	14,890	15,078	
Region 1: GSWC Bay Point								
Purchased or Imported Water	Contra Costa Water District	Potable	4,932	4,932	4,932	4,932	4,932	100%
Groundwater	Pittsburg Plain Basin	Potable	500	500	500	500	500	100%
Total Supply:			5,432	5,432	5,432	5,432	5,432	
Region 1: GSWC Orcutt								
Purchased or Imported Water	Central Coast Water Authority	Potable	28	28	28	28	28	5%
Groundwater	Santa Maria Valley Basin	Potable	9,960	9,960	9,960	9,960	9,960	100%
Groundwater	Santa Maria Valley Basin (return flow)	Potable	12	12	12	12	12	100%
Total Supply:			10,000	10,000	10,000	10,000	10,000	
Region 1: GSWC Simi Valley								
Purchased or Imported Water	Calleguas Municipal Water District	Potable	4,461	4,368	4,308	4,259	4,220	100%
Groundwater	Simi Valley Basin	Potable	1,053	1,031	1,017	1,006	997	100%
Total Supply:			5,514	5,399	5,325	5,265	5,217	
Region 2: GSWC Artesia								
Purchased or Imported Water	City of Cerritos	Potable	4,839	4,839	4,839	4,839	4,839	100%
Groundwater	Central Subbasin	Potable	3,970	2,927	3,146	3,314	3,448	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	80	81	81	81	81	100%
Recycled Water	City of Cerritos	Non-Potable	4	4	4	4	4	100%
Total Supply:			8,893	7,851	8,070	8,239	8,373	
Region 2: GSWC Bell - Bell Gardens								
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,790	2,790	2,790	2,790	2,790	100%
Groundwater	Central Subbasin	Potable	3,397	3,321	3,257	3,208	3,168	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	129	129	129	129	129	100%
Total Supply:			6,315	6,240	6,176	6,126	6,087	
Region 2: GSWC Culver City								
Purchased or Imported Water	West Basin Municipal Water District	Potable	13,949	13,949	13,949	13,949	13,949	100%
Total Supply:			13,949	13,949	13,949	13,949	13,949	
Region 2: GSWC Florence Graham								
Purchased or Imported Water	Central Basin Municipal Water District	Potable	5,995	5,995	5,995	5,995	5,995	100%
Groundwater	Central Subbasin	Potable	1,614	2,858	2,804	2,762	2,728	100%
Total Supply:			7,609	8,854	8,799	8,757	8,723	
Region 2: GSWC Norwalk								
Purchased or Imported Water	Central Basin Municipal Water District	Potable	724	724	724	724	724	100%
Groundwater	Central Subbasin	Potable	3,298	3,212	3,145	3,092	3,050	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	98	98	98	98	98	100%
Total Supply:			4,120	4,034	3,967	3,914	3,872	
Region 2: GSWC Southwest								
Purchased or Imported Water	West Basin Municipal Water District	Potable	14,630	14,289	13,999	13,785	13,623	100%
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,325	2,289	2,259	2,236	2,219	100%
Groundwater	West Coast Subbasin	Potable	7,502	7,502	7,502	7,502	7,502	100%
Groundwater	Central Subbasin	Potable	2,581	2,542	2,508	2,484	2,465	100%
Recycled Water	West Basin Municipal Water District	Non-Potable	393	396	398	399	401	100%
Total Supply:			27,431	27,018	26,666	26,405	26,211	

Water Supply Projections by Source for Single Dry Year Conditions

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 3: GSWC Placentia - Yorba Linda								
Purchased or Imported Water	Municipal Water District of Orange County	Potable	4,774	4,763	4,768	4,785	4,813	100%
Groundwater	Orange County Groundwater Basin	Potable	1,852	1,848	1,850	1,856	1,867	72%
Total Supply:			6,625	6,611	6,617	6,642	6,680	
Region 3: GSWC South Arcadia								
Purchased or Imported Water	City of Arcadia	Potable	5,646	5,646	5,646	5,646	5,646	100%
Groundwater	Main San Gabriel Basin	Potable	2,794	2,851	2,808	2,774	2,746	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Total Supply:			8,440	8,496	8,453	8,419	8,391	
Region 3: GSWC South San Gabriel								
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	5,447	5,447	5,447	5,447	5,447	100%
Groundwater	Main San Gabriel Basin	Potable	1,295	1,239	1,282	1,316	1,344	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	6	6	6	6	6	100%
Total Supply:			7,066	7,010	7,053	7,087	7,115	
Region 3: GSWC West Orange								
Purchased or Imported Water	Municipal Water District of Orange County	Potable	3,635	3,608	3,599	3,601	3,611	100%
Groundwater	Orange County Groundwater Basin	Potable	9,348	9,278	9,255	9,260	9,286	72%
Recycled Water	City of Cerritos	Non-Potable	234	237	241	246	250	100%
Total Supply:			13,217	13,124	13,095	13,106	13,147	

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 1: GSWC Cordova								
Groundwater	Aerojet	Potable	5,000	5,000	5,000	5,000	5,000	100%
Surface Water	South Fork American River	Potable	4,237	4,237	5,000	5,000	5,000	85-100%
Groundwater	South American Subbasin	Potable	4,347	4,560	3,935	4,094	4,273	100%
Total Supply Year 1:			13,584	13,797	13,935	14,094	14,273	
Groundwater	Aerojet	Potable	5,000	5,000	5,000	5,000	5,000	100%
Surface Water	South Fork American River	Potable	4,237	4,237	5,000	5,000	5,000	85-100%
Groundwater	South American Subbasin	Potable	4,347	4,560	3,935	4,094	4,273	100%
Total Supply Year 2:			13,584	13,797	13,935	14,094	14,273	
Groundwater	Aerojet	Potable	5,000	5,000	5,000	5,000	5,000	100%
Surface Water	South Fork American River	Potable	4,237	4,237	5,000	5,000	5,000	85-100%
Groundwater	South American Subbasin	Potable	4,347	4,560	3,935	4,094	4,273	100%
Total Supply Year 3:			13,584	13,797	13,935	14,094	14,273	
Groundwater	Aerojet	Potable	5,000	5,000	5,000	5,000	5,000	100%
Surface Water	South Fork American River	Potable	4,237	4,237	5,000	5,000	5,000	85-100%
Groundwater	South American Subbasin	Potable	4,347	4,560	3,935	4,094	4,273	100%
Total Supply Year 4:			13,584	13,797	13,935	14,094	14,273	
Groundwater	Aerojet	Potable	5,000	5,000	5,000	5,000	5,000	100%
Surface Water	South Fork American River	Potable	4,237	4,237	5,000	5,000	5,000	85-100%
Groundwater	South American Subbasin	Potable	4,347	4,560	3,935	4,094	4,273	100%
Total Supply Year 5:			13,584	13,797	13,935	14,094	14,273	

Region 1: GSWC Bay Point								
Purchased or Imported Water	Contra Costa Water District	Potable	4,932	4,932	4,932	4,932	4,932	100%
Groundwater	Pittsburg Plain Basin	Potable	500	500	500	500	500	100%
Total Supply Year 1:			1,787	1,750	1,756	1,770	1,791	
Purchased or Imported Water	Contra Costa Water District	Potable	4,932	4,932	4,932	4,932	4,932	100%
Groundwater	Pittsburg Plain Basin	Potable	500	500	500	500	500	100%
Total Supply Year 2:			1,787	1,750	1,756	1,770	1,791	
Purchased or Imported Water	Contra Costa Water District	Potable	1,698	1,662	1,668	1,593	1,612	95%
Groundwater	Pittsburg Plain Basin	Potable	500	500	500	500	500	100%
Total Supply Year 3:			1,787	1,750	1,756	1,770	1,791	
Purchased or Imported Water	Contra Costa Water District	Potable	1,608	1,575	1,493	1,505	1,522	90%
Groundwater	Pittsburg Plain Basin	Potable	500	500	500	500	500	100%
Total Supply Year 4:			1,787	1,750	1,756	1,770	1,791	
Purchased or Imported Water	Contra Costa Water District	Potable	1,519	1,487	1,493	1,505	1,522	85%
Groundwater	Pittsburg Plain Basin	Potable	500	500	500	500	500	100%
Total Supply Year 5:			1,787	1,750	1,756	1,770	1,791	

Region 1: GSWC Orcutt								
Purchased or Imported Water	Central Coast Water Authority	Potable	83	83	83	83	83	14-15%
Groundwater	Santa Maria Valley Basin	Potable	9,960	9,960	9,960	9,960	9,960	100%
Groundwater	Santa Maria Valley Basin (Return Flow)	Potable	37	37	37	37	37	45%
Total Supply Year 1:			5,928	5,937	5,914	5,904	5,902	
Purchased or Imported Water	Central Coast Water Authority	Potable	83	83	83	83	83	14-15%
Groundwater	Santa Maria Valley Basin	Potable	9,960	9,960	9,960	9,960	9,960	100%
Groundwater	Santa Maria Valley Basin (Return Flow)	Potable	37	37	37	37	37	45%
Total Supply Year 2:			5,928	5,937	5,914	5,904	5,902	
Purchased or Imported Water	Central Coast Water Authority	Potable	83	83	83	83	83	14-15%
Groundwater	Santa Maria Valley Basin	Potable	9,960	9,960	9,960	9,960	9,960	100%
Groundwater	Santa Maria Valley Basin (Return Flow)	Potable	37	37	37	37	37	45%
Total Supply Year 3:			5,928	5,937	5,914	5,904	5,902	
Purchased or Imported Water	Central Coast Water Authority	Potable	77	77	77	77	77	14-15%
Groundwater	Santa Maria Valley Basin	Potable	9,960	9,960	9,960	9,960	9,960	100%
Groundwater	Santa Maria Valley Basin (Return Flow)	Potable	37	37	37	37	37	45%
Total Supply Year 4:			5,928	5,937	5,914	5,904	5,902	
Purchased or Imported Water	Central Coast Water Authority	Potable	-	-	-	-	-	N/A
Groundwater	Santa Maria Valley Basin	Potable	9,960	9,960	9,960	9,960	9,960	100%
Groundwater	Santa Maria Valley Basin (Return Flow)	Potable	37	37	37	37	37	45%
Total Supply Year 5:			5,928	5,937	5,914	5,904	5,902	

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 1: GSWC Simi Valley								
Purchased or Imported Water	Calleguas Municipal Water District	Potable	4,299	4,209	4,152	4,105	4,067	100%
Groundwater	Simi Valley Basin	Potable	1,109	1,086	1,071	1,059	1,049	100%
Total Supply Year 1:			5,408	5,295	5,223	5,164	5,116	
Purchased or Imported Water	Calleguas Municipal Water District	Potable	4,299	4,209	4,152	4,105	4,067	100%
Groundwater	Simi Valley Basin	Potable	1,109	1,086	1,071	1,059	1,049	100%
Total Supply Year 2:			5,408	5,295	5,223	5,164	5,116	
Purchased or Imported Water	Calleguas Municipal Water District	Potable	4,299	4,209	4,152	4,105	4,067	100%
Groundwater	Simi Valley Basin	Potable	1,109	1,086	1,071	1,059	1,049	100%
Total Supply Year 3:			5,408	5,295	5,223	5,164	5,116	
Purchased or Imported Water	Calleguas Municipal Water District	Potable	4,299	4,209	4,152	4,105	4,067	100%
Groundwater	Simi Valley Basin	Potable	1,109	1,086	1,071	1,059	1,049	100%
Total Supply Year 4:			5,408	5,295	5,223	5,164	5,116	
Purchased or Imported Water	Calleguas Municipal Water District	Potable	4,299	4,209	4,152	4,105	4,067	100%
Groundwater	Simi Valley Basin	Potable	1,109	1,086	1,071	1,059	1,049	100%
Total Supply Year 5:			5,408	5,295	5,223	5,164	5,116	

Region 2: GSWC Artesia								
Purchased or Imported Water	City of Cerritos	Potable	4,839	4,839	4,839	4,839	4,839	100%
Groundwater	Central Subbasin	Potable	3,970	2,927	3,146	3,314	3,448	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	79	80	81	81	81	100%
Recycled Water	City of Cerritos	Non-Potable	4	4	4	4	4	100%
Total Supply Year 1:			4,525	4,462	4,404	4,359	4,325	
Purchased or Imported Water	City of Cerritos	Potable	4,839	4,839	4,839	4,839	4,839	100%
Groundwater	Central Subbasin	Potable	3,970	2,927	3,146	3,314	3,448	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	79	80	81	81	81	100%
Recycled Water	City of Cerritos	Non-Potable	4	4	4	4	4	100%
Total Supply Year 2:			4,525	4,462	4,404	4,359	4,325	
Purchased or Imported Water	City of Cerritos	Potable	4,839	4,839	4,839	4,839	4,839	100%
Groundwater	Central Subbasin	Potable	3,970	2,927	3,146	3,314	3,448	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	79	80	81	81	81	100%
Recycled Water	City of Cerritos	Non-Potable	4	4	4	4	4	100%
Total Supply Year 3:			4,525	4,462	4,404	4,359	4,325	
Purchased or Imported Water	City of Cerritos	Potable	4,839	4,839	4,839	4,839	4,839	100%
Groundwater	Central Subbasin	Potable	3,970	2,927	3,146	3,314	3,448	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	79	80	81	81	81	100%
Recycled Water	City of Cerritos	Non-Potable	4	4	4	4	4	100%
Total Supply Year 4:			4,525	4,462	4,404	4,359	4,325	
Purchased or Imported Water	City of Cerritos	Potable	4,839	4,839	4,839	4,839	4,839	100%
Groundwater	Central Subbasin	Potable	3,970	2,927	3,146	3,314	3,448	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	79	80	81	81	81	100%
Recycled Water	City of Cerritos	Non-Potable	4	4	4	4	4	100%
Total Supply Year 5:			4,525	4,462	4,404	4,359	4,325	

Region 2: GSWC Bell - Bell Gardens								
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,790	2,790	2,790	2,790	2,790	100%
Groundwater	Central Subbasin	Potable	3,397	3,321	3,257	3,208	3,168	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	128	128	128	128	128	100%
Total Supply Year 1:			4,203	4,112	4,036	3,977	3,929	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,790	2,790	2,790	2,790	2,790	100%
Groundwater	Central Subbasin	Potable	3,397	3,321	3,257	3,208	3,168	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	128	128	128	128	128	100%
Total Supply Year 2:			4,203	4,112	4,036	3,977	3,929	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,790	2,790	2,790	2,790	2,790	100%
Groundwater	Central Subbasin	Potable	3,397	3,321	3,257	3,208	3,168	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	128	128	128	128	128	100%
Total Supply Year 3:			4,203	4,112	4,036	3,977	3,929	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,790	2,790	2,790	2,790	2,790	100%
Groundwater	Central Subbasin	Potable	3,397	3,321	3,257	3,208	3,168	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	128	128	128	128	128	100%
Total Supply Year 4:			4,203	4,112	4,036	3,977	3,929	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,790	2,790	2,790	2,790	2,790	100%
Groundwater	Central Subbasin	Potable	3,397	3,321	3,257	3,208	3,168	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	128	128	128	128	128	100%
Total Supply Year 5:			4,203	4,112	4,036	3,977	3,929	

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 2: GSWC Culver City								
Purchased or Imported Water	West Basin Municipal Water District	Potable	13,949	13,949	13,949	13,949	13,949	100%
Total Supply Year 1:			4,414	4,348	4,287	4,238	4,199	
Purchased or Imported Water	West Basin Municipal Water District	Potable	13,949	13,949	13,949	13,949	13,949	100%
Total Supply Year 2:			4,414	4,348	4,287	4,238	4,199	
Purchased or Imported Water	West Basin Municipal Water District	Potable	13,949	13,949	13,949	13,949	13,949	100%
Total Supply Year 3:			4,414	4,348	4,287	4,238	4,199	
Purchased or Imported Water	West Basin Municipal Water District	Potable	13,949	13,949	13,949	13,949	13,949	100%
Total Supply Year 4:			4,414	4,348	4,287	4,238	4,199	
Purchased or Imported Water	West Basin Municipal Water District	Potable	13,949	13,949	13,949	13,949	13,949	100%
Total Supply Year 5:			4,414	4,348	4,287	4,238	4,199	

Region 2: GSWC Florence Graham								
Purchased or Imported Water	Central Basin Municipal Water District	Potable	5,995	5,995	5,995	5,995	5,995	100%
Groundwater	Central Subbasin	Potable	1,614	2,858	2,804	2,762	2,728	100%
Total Supply Year 1:			4,539	4,490	4,405	4,338	4,285	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	5,995	5,995	5,995	5,995	5,995	100%
Groundwater	Central Subbasin	Potable	1,614	2,858	2,804	2,762	2,728	100%
Total Supply Year 2:			4,539	4,490	4,405	4,338	4,285	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	5,995	5,995	5,995	5,995	5,995	100%
Groundwater	Central Subbasin	Potable	1,614	2,858	2,804	2,762	2,728	100%
Total Supply Year 3:			4,539	4,490	4,405	4,338	4,285	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	5,995	5,995	5,995	5,995	5,995	100%
Groundwater	Central Subbasin	Potable	1,614	2,858	2,804	2,762	2,728	100%
Total Supply Year 4:			4,539	4,490	4,405	4,338	4,285	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	5,995	5,995	5,995	5,995	5,995	100%
Groundwater	Central Subbasin	Potable	1,614	2,858	2,804	2,762	2,728	100%
Total Supply Year 5:			4,539	4,490	4,405	4,338	4,285	

Region 2: GSWC Norwalk								
Purchased or Imported Water	Central Basin Municipal Water District	Potable	724	724	724	724	724	100%
Groundwater	Central Subbasin	Potable	3,268	3,182	3,116	3,063	3,021	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	97	97	97	97	97	100%
Total Supply Year 1:			4,089	4,003	3,937	3,884	3,843	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	724	724	724	724	724	100%
Groundwater	Central Subbasin	Potable	3,268	3,182	3,116	3,063	3,021	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	97	97	97	97	97	100%
Total Supply Year 2:			4,089	4,003	3,937	3,884	3,843	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	724	724	724	724	724	100%
Groundwater	Central Subbasin	Potable	3,268	3,182	3,116	3,063	3,021	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	97	97	97	97	97	100%
Total Supply Year 3:			4,089	4,003	3,937	3,884	3,843	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	724	724	724	724	724	100%
Groundwater	Central Subbasin	Potable	3,268	3,182	3,116	3,063	3,021	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	97	97	97	97	97	100%
Total Supply Year 4:			4,089	4,003	3,937	3,884	3,843	
Purchased or Imported Water	Central Basin Municipal Water District	Potable	724	724	724	724	724	100%
Groundwater	Central Subbasin	Potable	3,268	3,182	3,116	3,063	3,021	100%
Recycled Water	Central Basin Municipal Water District	Non-Potable	97	97	97	97	97	100%
Total Supply Year 5:			4,089	4,003	3,937	3,884	3,843	

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 2: GSWC Southwest								
Purchased or Imported Water	West Basin Municipal Water District	Potable	14,480	14,141	13,853	13,640	13,480	100%
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,290	2,255	2,225	2,202	2,186	100%
Groundwater	West Coast Subbasin	Potable	7,502	7,502	7,502	7,502	7,502	100%
Groundwater	Central Subbasin	Potable	2,611	2,572	2,538	2,513	2,494	100%
Recycled Water	West Basin Municipal Water District	Non-Potable	390	393	395	396	398	100%
Total Supply Year 1:			24,662	24,291	23,975	23,740	23,566	
Purchased or Imported Water	West Basin Municipal Water District	Potable	14,480	14,141	13,853	13,640	13,480	100%
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,290	2,255	2,225	2,202	2,186	100%
Groundwater	West Coast Subbasin	Potable	7,502	7,502	7,502	7,502	7,502	100%
Groundwater	Central Subbasin	Potable	2,611	2,572	2,538	2,513	2,494	100%
Recycled Water	West Basin Municipal Water District	Non-Potable	390	393	395	396	398	100%
Total Supply Year 2:			24,662	24,291	23,975	23,740	23,566	
Purchased or Imported Water	West Basin Municipal Water District	Potable	14,480	14,141	13,853	13,640	13,480	100%
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,290	2,255	2,225	2,202	2,186	100%
Groundwater	West Coast Subbasin	Potable	7,502	7,502	7,502	7,502	7,502	100%
Groundwater	Central Subbasin	Potable	2,611	2,572	2,538	2,513	2,494	100%
Recycled Water	West Basin Municipal Water District	Non-Potable	390	393	395	396	398	100%
Total Supply Year 3:			24,662	24,291	23,975	23,740	23,566	
Purchased or Imported Water	West Basin Municipal Water District	Potable	14,480	14,141	13,853	13,640	13,480	100%
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,290	2,255	2,225	2,202	2,186	100%
Groundwater	West Coast Subbasin	Potable	7,502	7,502	7,502	7,502	7,502	100%
Groundwater	Central Subbasin	Potable	2,611	2,572	2,538	2,513	2,494	100%
Recycled Water	West Basin Municipal Water District	Non-Potable	390	393	395	396	398	100%
Total Supply Year 4:			24,662	24,291	23,975	23,740	23,566	
Purchased or Imported Water	West Basin Municipal Water District	Potable	14,480	14,141	13,853	13,640	13,480	100%
Purchased or Imported Water	Central Basin Municipal Water District	Potable	2,290	2,255	2,225	2,202	2,186	100%
Groundwater	West Coast Subbasin	Potable	7,502	7,502	7,502	7,502	7,502	100%
Groundwater	Central Subbasin	Potable	2,611	2,572	2,538	2,513	2,494	100%
Recycled Water	West Basin Municipal Water District	Non-Potable	390	393	395	396	398	100%
Total Supply Year 5:			24,662	24,291	23,975	23,740	23,566	

Region 3: GSWC Placentia - Yorba Linda								
Purchased or Imported Water	Municipal Water District of Orange County	Potable	4,694	4,684	4,688	4,706	4,732	100%
Groundwater	Orange County Groundwater Basin	Potable	1,821	1,817	1,819	1,825	1,836	70%
Total Supply Year 1:			6,515	6,501	6,507	6,531	6,568	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	4,694	4,684	4,688	4,706	4,732	100%
Groundwater	Orange County Groundwater Basin	Potable	1,821	1,817	1,819	1,825	1,836	72%
Total Supply Year 2:			6,515	6,501	6,507	6,531	6,568	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	4,694	4,684	4,688	4,706	4,732	100%
Groundwater	Orange County Groundwater Basin	Potable	1,821	1,817	1,819	1,825	1,836	75%
Total Supply Year 3:			6,515	6,501	6,507	6,531	6,568	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	4,694	4,684	4,688	4,706	4,732	100%
Groundwater	Orange County Groundwater Basin	Potable	1,821	1,817	1,819	1,825	1,836	75%
Total Supply Year 4:			6,515	6,501	6,507	6,531	6,568	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	4,694	4,684	4,688	4,706	4,732	100%
Groundwater	Orange County Groundwater Basin	Potable	1,821	1,817	1,819	1,825	1,836	75%
Total Supply Year 5:			6,515	6,501	6,507	6,531	6,568	

Region 3: GSWC South Arcadia								
Purchased or Imported Water	City of Arcadia	Potable	5,646	5,646	5,646	5,646	5,646	100%
Groundwater	Main San Gabriel Basin	Potable	2,773	2,829	2,786	2,753	2,725	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Total Supply Year 2:			2,773	2,829	2,786	2,753	2,725	
Purchased or Imported Water	City of Arcadia	Potable	5,646	5,646	5,646	5,646	5,646	100%
Groundwater	Main San Gabriel Basin	Potable	2,773	2,829	2,786	2,753	2,725	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Total Supply Year 3:			2,773	2,829	2,786	2,753	2,725	
Purchased or Imported Water	City of Arcadia	Potable	5,646	5,646	5,646	5,646	5,646	100%
Groundwater	Main San Gabriel Basin	Potable	2,773	2,829	2,786	2,753	2,725	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Total Supply Year 4:			2,773	2,829	2,786	2,753	2,725	
Purchased or Imported Water	City of Arcadia	Potable	5,646	5,646	5,646	5,646	5,646	100%
Groundwater	Main San Gabriel Basin	Potable	2,773	2,829	2,786	2,753	2,725	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Total Supply Year 5:			2,773	2,829	2,786	2,753	2,725	

Water Supply	Additional Detail on Water Supply	Potable or Non-Potable	2030	2035	2040	2045	2050	% Available
			Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Region 3: GSWC South San Gabriel								
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	5,447	5,447	5,447	5,447	5,447	100%
Groundwater	Main San Gabriel Basin	Potable	1,316	1,260	1,303	1,337	1,365	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	6	6	6	6	6	100%
Total Supply Year 1:			2,154	2,100	2,059	2,028	2,002	
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	5,447	5,447	5,447	5,447	5,447	100%
Groundwater	Main San Gabriel Basin	Potable	1,316	1,260	1,303	1,337	1,365	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	6	6	6	6	6	100%
Total Supply Year 2:			2,154	2,100	2,059	2,028	2,002	
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	5,447	5,447	5,447	5,447	5,447	100%
Groundwater	Main San Gabriel Basin	Potable	1,316	1,260	1,303	1,337	1,365	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	6	6	6	6	6	100%
Total Supply Year 3:			2,154	2,100	2,059	2,028	2,002	
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	5,447	5,447	5,447	5,447	5,447	100%
Groundwater	Main San Gabriel Basin	Potable	1,316	1,260	1,303	1,337	1,365	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	6	6	6	6	6	100%
Total Supply Year 4:			2,154	2,100	2,059	2,028	2,002	
Purchased or Imported Water	Upper San Gabriel Valley Municipal Water District	Potable	5,447	5,447	5,447	5,447	5,447	100%
Groundwater	Main San Gabriel Basin	Potable	1,316	1,260	1,303	1,337	1,365	100%
Groundwater	GSWC San Dimas	Potable	318	318	318	318	318	100%
Recycled Water	Upper San Gabriel Valley Municipal Water District	Non-Potable	6	6	6	6	6	100%
Total Supply Year 5:			2,154	2,100	2,059	2,028	2,002	

Region 3: GSWC West Orange								
Purchased or Imported Water	Municipal Water District of Orange County	Potable	3,789	3,761	3,752	3,754	3,764	100%
Groundwater	Orange County Basin	Potable	8,842	8,776	8,754	8,758	8,783	70%
Recycled Water	City of Cerritos	Non-Potable	228	231	235	239	243	100%
Total Supply Year 1:			12,859	12,768	12,740	12,751	12,790	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	3,537	3,510	3,501	3,503	3,513	100%
Groundwater	Orange County Basin	Potable	9,094	9,027	9,004	9,009	9,034	72%
Recycled Water	City of Cerritos	Non-Potable	228	231	235	239	243	100%
Total Supply Year 2:			12,859	12,768	12,740	12,751	12,790	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	3,158	3,134	3,126	3,128	3,137	100%
Groundwater	Orange County Basin	Potable	9,473	9,403	9,379	9,384	9,411	75%
Recycled Water	City of Cerritos	Non-Potable	228	231	235	239	243	100%
Total Supply Year 3:			12,859	12,768	12,740	12,751	12,790	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	3,158	3,134	3,126	3,128	3,137	100%
Groundwater	Orange County Basin	Potable	9,473	9,403	9,379	9,384	9,411	75%
Recycled Water	City of Cerritos	Non-Potable	228	231	235	239	243	100%
Total Supply Year 4:			12,859	12,768	12,740	12,751	12,790	
Purchased or Imported Water	Municipal Water District of Orange County	Potable	3,158	3,134	3,126	3,128	3,137	100%
Groundwater	Orange County Basin	Potable	9,473	9,403	9,379	9,384	9,411	75%
Recycled Water	City of Cerritos	Non-Potable	228	231	235	239	243	100%
Total Supply Year 5:			12,859	12,768	12,740	12,751	12,790	

Appendix F: Demand Reduction Actions

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B),(D), and (E)					
No	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 List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
Add additional rows as needed					
1	Provide rebates on plumbing fixtures and devices	Percentage	10%	Encourage customers to take advantage of the City's free conservation and rebate programs.	No
1	Expand public information campaign	Percentage	5%	Provision of Technical Information to customers on means to promote water use efficiency including customer scorecard, residential assistance, and surveys.	No
2	CII - Restaurants may only serve water upon request	Percentage	1%	Water served upon request at restaurants.	Yes
2	Pools and Spas - Require covers for pools and spas	Percentage	2%	Require covers for pools and spas.	Yes
2	Expand Public Information Campaign	Percentage	2%	Expand Public Information Campaign regarding water shortages such as websites, e-mails, presentations, business placards, school education.	No
2	Implement or Modify Drought Rate Structure or Surcharge	Percentage	4%	Water shortage pricing.	Yes
2	Reduce System Water Loss	Percentage	2%	Reduce System Water Loss.	No
2	CII - Lodging establishment must offer opt out of linen service	Percentage	1%	Lodging establishment must offer opt out of linen service.	Yes
2	Other water feature or swimming pool restriction	Percentage	1%	Draining of pools or refilling shall be done only for health or safety reasons.	Yes
2	Other	Percentage	1%	Reduce indoor and outdoor water use by specified percentage as determined (based on Shortage Stage). Contact the City for additional tips and techniques to reduce water use.	Yes
2	Landscape - Other Landscape Restriction or Prohibition	Percentage	2%	Irrigation of parks, school ground areas, and road median landscaping will not be permitted more than twice a week and only if necessary.	Yes
2	Other - Prohibit use of potable water for construction and dust control	Percentage	<1%	The use of potable water for sanitation, irrigation, and construction purposes, including, but not limited to, dust control, settling of backfill, flushing of plumbing lines, and washing of equipment, buildings, and vehicles, shall be prohibited in all cases where the manager has determined that use of reclaimed, recycled, or other forms of non-potable water use is a feasible alternative.	Yes
2	Decrease line flushing	Percentage	<1%	Main flushing only on complaint basis.	Yes
3	CII - Commercial kitchens required to use pre-rinse spray valves	Percentage	1%	Prohibit operation of non-water conservation pre-rinse nozzle in a food preparation establishment such as a restaurant or cafeteria.	Yes
3	Other water feature or swimming pool restriction	Percentage	1%	No filling of pools or aesthetic water features.	Yes
3	Landscape - Other Landscape Restriction or Prohibition	Percentage	3%	Require large landscapes to adhere to water budgets.	Yes
3	Landscape - Other Landscape Restriction or Prohibition	Percentage	2%	Whether irrigated with potable or non-potable water, limit all irrigation to two days per week for no more than 10 minutes per station per day.	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	1%	Require large users to audit premises and repair leaks.	Yes
3	Increase Water Waste Patrols	Percentage	1%	Implement Water Waste Patrols.	No
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Percentage	1%	Washing of personal vehicles at home (including autos, trucks, trailers, motor homes, boats, or others) is prohibited.	Yes
4	Other	Percentage	1%	No new construction meters will be issued.	No
4	Implement or Modify drought rate structure or surcharge	Percentage	3%	Water Emergency tiered pricing will be implemented pursuant to requirements of Proposition 218 in accordance with California Law.	Yes
4	Other	Percentage	2%	Modify customer indoor water use budgets. No outdoor water use budget.	Yes
4	Other	Percentage	2%	Water use for public health and safety purposes only. Customer rationing may be implemented.	Yes

4	Landscape - Other Landscape Restriction or Prohibition	Percentage	2%	All landscape and non-essential outdoor water use for all Customers in all areas of the City's water service area shall be prohibited.	Yes
5	Other	Percentage	>5%	The City Council may impose any water rationing requirement that it deems appropriate to protect public health, safety, welfare, comfort, and convenience.	Yes

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

(a) If a water shortage progresses through multiple levels, all demand reduction actions in the previous level(s) are implemented in addition to current level actions.

(b) Reduction in the shortage gap is estimated and can vary significantly.

Appendix G: Resolution to Adopt UWMP

Text to be added after Public Hearing