

2025 Water Shortage Contingency Plan

FINAL DRAFT / May 2026





2025 Water Shortage Contingency Plan

May 2026 / FINAL DRAFT

Prepared By:

Carollo Engineers, Inc.
707 Wilshire Boulevard, Suite 3920
Los Angeles, California 90017
Phone: 213.489.1587
<https://www.carollo.com>

Prepared For:

City of Orange
189 S. Water Street
Orange, California 92866
Phone: 714.288.2475
<https://www.cityoforange.org>

In collaboration with:



MADDAUS WATER MANAGEMENT
Making a Difference in the World of Water™

Contents

SECTION 1	INTRODUCTION AND WATER SHORTAGE CONTINGENCY PLAN OVERVIEW	1
1.1	Water Shortage Contingency Plan Requirements and Organization	1
1.2	Integration with Other Planning Efforts	2
SECTION 2	BACKGROUND INFORMATION	3
2.1	City Service Area	4
2.2	Relationship with Wholesalers	5
2.3	Relationship with Wholesaler Water Shortage Planning	6
2.3.1	MET Water Surplus and Drought Management Plan	6
2.3.2	MET Water Supply Allocation Plan	8
2.3.3	MWDOC Water Supply Allocation Plan	9
SECTION 3	WATER SHORTAGE CONTINGENCY PREPAREDNESS AND RESPONSE PLANNING	10
3.1	Water Supply Reliability Analysis	11
3.2	Annual Water Supply and Demand Assessment Procedures	11
3.2.1	Decision-Making Process	11
3.2.2	Data and Methodologies	13
3.3	Six Standard Water Shortage Levels	17
3.4	Shortage Response Actions	17
3.4.1	Supply Augmentation	17
3.4.2	Demand Reduction	18
3.4.3	Operational Changes	18
3.4.4	Additional Mandatory Restrictions	18
3.4.5	Emergency Response Plan (Hazard Mitigation Plan)	18
3.4.6	Seismic Risk Assessment and Mitigation Plan	20
3.4.7	Shortage Response Action Effectiveness	20
3.5	Communication Protocols	21
3.6	Compliance and Enforcement	22
3.7	Legal Authorities	22
3.8	Financial Consequences of WSCP	23
3.9	Monitoring and Reporting	24
3.10	WSCP Refinement Procedures	24
3.11	Special Water Feature Distinction	25
3.12	Plan Adoption, Submittal, and Availability	25
SECTION 4	REFERENCES	26

Appendices

APPENDIX A	DWR SUBMITTAL TABLES	
APPENDIX B	ORANGE MUNICIPAL CODE CHAPTER 7.02 WATER CONSERVATION AND WATER SUPPLY SHORTAGE	
APPENDIX C	NOTICE OF PUBLIC HEARING (PENDING)	
APPENDIX D	ADOPTED WSCP RESOLUTION (PENDING)	

Tables

Table 1	Cross-Reference for Standard vs Supplier Shortage Levels	17
Table 2	Coordination Procedures	22
Table 3	Agency Contacts and Coordination Protocols	23

Figures

Figure 1	City of Orange Service Area	4
Figure 2	Regional Location of the City of Orange and Other MWDOC Member Agencies	6
Figure 3	Resource Stages, Anticipated Actions, and Supply Declarations	7
Figure 4	AWSDA Reporting Timeline	12
Figure 5	Water Shortage Contingency Plan AWSDA Framework	13

Abbreviations

AF	acre-foot
AWSDA	Annual Water Supply and Demand Assessment
BPP	Basin Production Percentage
City	City of Orange
DDW	Division of Drinking Water
DRA	Drought Risk Assessment
DVL	Diamond Valley Lake
DWR	Department of Water Resources
EOC	Emergency Operations Center
EOCWD	East Orange County Water District
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
FY	Fiscal Year
GRP	Groundwater Resilience Plan
GSP	Groundwater Sustainability Plan
IAWP	Interim Agricultural Water Program
IRWD	Irvine Ranch Water District
LHMP	Local Hazard Mitigation Plan
MCL	Maximum Contaminant Level
MET	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
NIMS	National Incident Management System
OC Basin	Orange County Groundwater Basin
OCWD	Orange County Water District
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PPT	parts per trillion
Producers	Groundwater Producers
SEMS	Standardized Emergency Management System
Supplier	Urban Water Supplier
SWD	Serrano Water District
SWP	State Water Project
UWMP	Urban Water Management Plan
Water Code	California Water Code
WEROC	Water Emergency Response Organization of Orange County
WSAP	Water Supply Allocation Plan

WSCP Water Shortage Contingency Plan
WSDM Water Surplus and Drought Management Plan

SECTION 1 INTRODUCTION AND WATER SHORTAGE CONTINGENCY PLAN OVERVIEW

The Water Shortage Contingency Plan (WSCP) is a strategic planning document designed to prepare for and respond to water shortages. This WSCP complies with California Water Code (Water Code) Section 10632, which requires that every Urban Water Supplier (Supplier) shall prepare and adopt a WSCP as part of its Urban Water Management Plan (UWMP). This level of detailed planning and preparation is intended to help maintain reliable supplies and reduce the impacts of supply interruptions.

The WSCP is the City of Orange's (City) operating manual that is used to prevent catastrophic service disruptions through proactive, rather than reactive, management. A water shortage, when the water supply available is insufficient to meet the normally expected customer water use at a given point in time, may occur due to a number of reasons, such as drought, climate change, and catastrophic events. This WSCP provides a structured guide for the City to deal with water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption. This way, if and when shortage conditions arise, the City's governing body, its staff, and the public can easily identify and efficiently implement pre-determined steps to manage a water shortage. A well-structured WSCP allows real-time water supply availability assessment and structured steps designed to respond to actual conditions, enabling efficient management of any shortage with predictability and accountability.

The WSCP also describes the City's procedures for conducting an Annual Water Supply and Demand Assessment (AWSDA) that is required by Water Code Section 10632.1 and is to be submitted to the California Department of Water Resources (DWR) on or before July 1 of each year, or within 14 days of receiving final allocations from the State Water Project (SWP), whichever is later. The City's 2025 WSCP is included as an Appendix to its 2025 UWMP, which will be submitted to DWR by July 1, 2026. However, while developed in conjunction with the UWMP, this WSCP is a standalone document and can be amended, as needed, without amending the UWMP. Furthermore, the Water Code does not prohibit a Supplier from taking actions not specified in its WSCP, if needed, without having to formally amend its UWMP or WSCP.

1.1 Water Shortage Contingency Plan Requirements and Organization

The WSCP provides the steps and water shortage response actions to be taken in times of water shortage conditions. The WSCP has prescriptive elements, such as an analysis of water supply reliability; the water shortage response actions for each of the six standard water shortage levels that correspond to water shortage percentages ranging from 10 percent to greater than 50 percent; an estimate of potential to close supply gap for each measure; protocols and procedures to communicate identified actions for any current or predicted water shortage conditions; procedures for an AWSDA; monitoring and reporting requirements to determine customer compliance; and reevaluation and improvement procedures for evaluating the WSCP.

This WSCP is organized into three main sections, with Section 3 aligned with Water Code Section 16032 requirements:

- **Section 1, Introduction and WSCP Overview**, gives an overview of the WSCP fundamentals.
- **Section 2 Background Information** provides a background on the City’s water service area.
- **Section 3 Water Shortage Contingency Preparedness and Response Planning.**
 - » **Section 3.1 Water Supply Reliability Analysis** provides a summary of the water supply analysis and water reliability findings from the 2025 UWMP.
 - » **Section 3.2 Annual Water Supply and Demand Assessment Procedures** provides a description of procedures to conduct and approve the AWSDA.
 - » **Section 3.3 Six Standard Water Shortage Stages** explains WSCP’s six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50, and more than 50 percent shortages.
 - » **Section 3.4 Shortage Response Actions** describes WSCP’s shortage response actions that align with the defined shortage levels.
 - » **Section 3.5 Communication Protocols** addresses communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.
 - » **Section 3.6 Compliance and Enforcement** describes customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions.
 - » **Section 3.7 Legal Authorities** describes the legal authorities that enable the City to implement and enforce its shortage response actions.
 - » **Section 3.8 Financial Consequences of the WSCP** provides a description of the financial consequences of and responses for drought conditions.
 - » **Section 3.9 Monitoring and Reporting** describes 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.
 - » **Section 3.10 WSCP Refinement Procedures** addresses reevaluation and improvement procedures for monitoring and evaluating the functionality of the WSCP.
 - » **Section 3.11 Special Water Feature Distinction** provides a required definition for inclusion in a WSCP per the Water Code.
 - » **Section 3.12 Plan Adoption, Submittal, and Availability** describes the process the City followed to adopt its WSCP.

1.2 Integration with Other Planning Efforts

As a retail water supplier in Orange County, the City considered other key entities in the development of this WSCP, including the Municipal Water District of Orange County (MWDOC), regional wholesale supplier, the Metropolitan Water District of Southern California (MET), regional wholesaler for Southern California and the direct supplier of imported water to MWDOC, and Orange County Water District (OCWD), Orange County Groundwater Basin (OC Basin) manager and provider of recycled water in

North Orange County. As a MWDOC member agency, the City also developed this WSCP with input from several coordination efforts led by MWDOC.

Some of the key planning and reporting documents that were used to develop this WSCP are:

- **MWDOC's 2025 UWMP** provides the basis for the projections of the imported supply availability over the next 25 years for the City's service area.
- **MWDOC's 2025 WSCP** provides a water supply availability assessment and structured steps designed to respond to actual conditions that will help maintain reliable supplies and reduce the impacts of supply interruptions.
- **MWDOC's 2023 Orange County Water Reliability Study** is a planning document to help guide planning for future water supply reliability for water providers in Orange County and provide input on regional water supply issues for MET.
- **2025 Orange County Water Demand Projection Model Technical Memorandum** is a collaborative effort amongst MWDOC, OCWD, and all retail water suppliers in Orange County that developed water demand projections to produce regionally consistent forecasts across all Orange County water agencies.
- **OCWD's 2025 Groundwater Resilience Plan (GRP)** is an adaptive strategies management plan outlining strategic projects to secure reliable future water supplies in the Orange County Basin.
- **MET's 2025 UWMP** uses assumptions that fall within the plausible futures contemplated in MET's Integrated Water Resources Plan to evaluate MET's future imported water supply reliability.
- **MET's 2025 WSCP** provides a water supply availability assessment and guide for MET's intended actions during water shortage conditions.
- **OCWD's 2023 to 2024 Engineer's Report** provides information on the groundwater conditions, water supply, and basin utilization of the OC Basin.
- **OCWD's 2022 Basin 8-1 Alternative** is an alternative to the Groundwater Sustainability Plan (GSP) for the OC Basin, which provides significant information related to sustainable management of the basin in the past and hydrogeology of the basin, including groundwater quality and basin characteristics, and addresses DWR's recommendations to ensure long-term basin sustainability.
- **City of Orange's 2025 Local Hazard Mitigation Plan (LHMP)** provides the basis for the seismic and other natural disaster risk analysis of the water system facilities.
- **City of Orange Capital Improvement Plan** provides information on water infrastructure planning projects and plans to address any required water system improvements.

SECTION 2 BACKGROUND INFORMATION

Incorporated in 1888, under the general laws of the State of California, the City is situated at an average elevation of 195 feet above mean sea level and covers an area of approximately 27 square miles. The City is located in the north-central portion of Orange County, adjacent to the cities of Anaheim, Tustin, and Santa Ana. The City is governed by a seven-member City Council that provides policy direction for the City and enacts all municipal legislation. The City Council serves in a quasi-judicial role on certain

administrative appeals and directs the administration of its policy decisions through the City Manager for delegation to appropriate City staff.

2.1 City Service Area

The City's 61.9 square mile sphere of influence extends east to the Cleveland National Forest. Within the sphere of influence is the City's 37.2 square mile planning area and the Water Division's 24.3 square mile water service area lying within the planning area, as shown in Figure 1. The 24.3 square mile Water Division's service area does not follow the same boundary as the City limits. The Water Division service area extends outside of City limits and excludes several small areas inside City limits, which are served by other water purveyors, as described below:

- Areas served by the Water Division outside the City limits include:
 - » Some County Islands.
 - » Small area in the City of Anaheim (Along Imperial Highway north of Via Escala).
 - » Irvine Regional Park.
- Other water purveyors that serve areas within the City limits include:
 - » Irvine Ranch Water District (IRWD).
 - » Serrano Water District (SWD).
 - » East Orange County Water District (EOCWD).
 - » Golden State Water Company.
 - » City of Santa Ana.

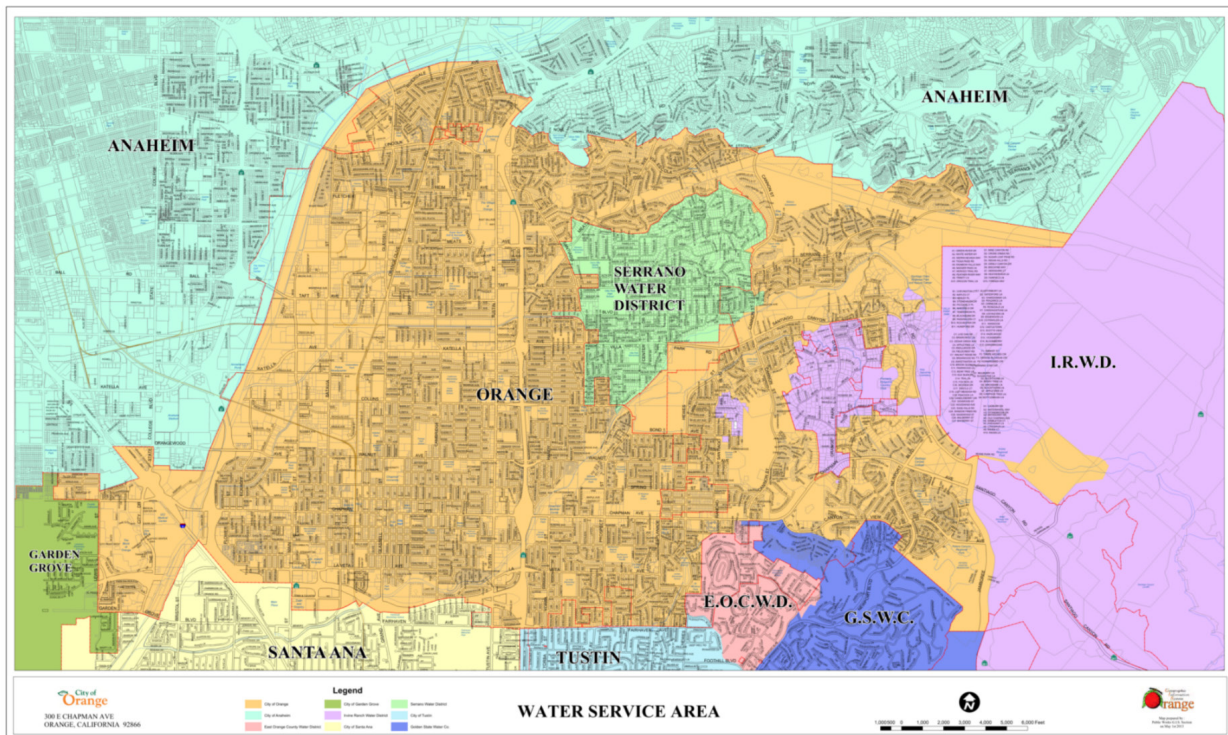


Figure 1 City of Orange Service Area

2.2 Relationship with Wholesalers

The Metropolitan Water District of Southern California : MET is the largest water wholesaler for domestic and municipal uses in California, serving approximately 19 million customers. MET wholesales imported water supplies to 26 member cities and water districts in six Southern California counties. Its service area covers the Southern California coastal plain, extending approximately 200 miles along the Pacific Ocean from the City of Oxnard in the north to the international boundary with Mexico in the south. This encompasses 5,200 square miles and includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Approximately 85 percent of the population from the aforementioned counties reside within MET's boundaries.

MET is governed by a Board of Directors comprised of 38 appointed individuals with a minimum of one representative from each of MET's 26 member agencies. The allocation of directors and voting rights is determined by each agency's assessed valuation. Each member of the Board shall be entitled to cast one vote for each ten million dollars of assessed valuation of property taxable for district purposes, in accordance with Section 55 of the Metropolitan Water District Act. Directors can be appointed through the Chief Executive Officer of the member agency or by a majority vote of the governing board of the agency. Directors are not compensated by MET for their service.

MET is responsible for importing water into the region through its operation of the Colorado River Aqueduct and its contract with the State of California for SWP supplies. Member agencies receive water from MET through various delivery points and pay for service through a rate structure made up of volumetric rates, capacity charges, and readiness to serve charges. Member agencies provide estimates of imported water demand to MET annually in April regarding the amount of water they anticipate they will need to meet their demands for the next five years.

The Municipal Water District of Orange County: In Orange County, MWDOC and the cities of Anaheim, Fullerton, and Santa Ana are MET member agencies that purchase imported water directly from MET. Furthermore, MWDOC purchases both treated potable and untreated water from MET to supplement its retail agencies' local supplies.

The City is one of MWDOC's 27 member agencies purchasing imported water from MWDOC. The City's location within MWDOC's service area is shown in Figure 2.

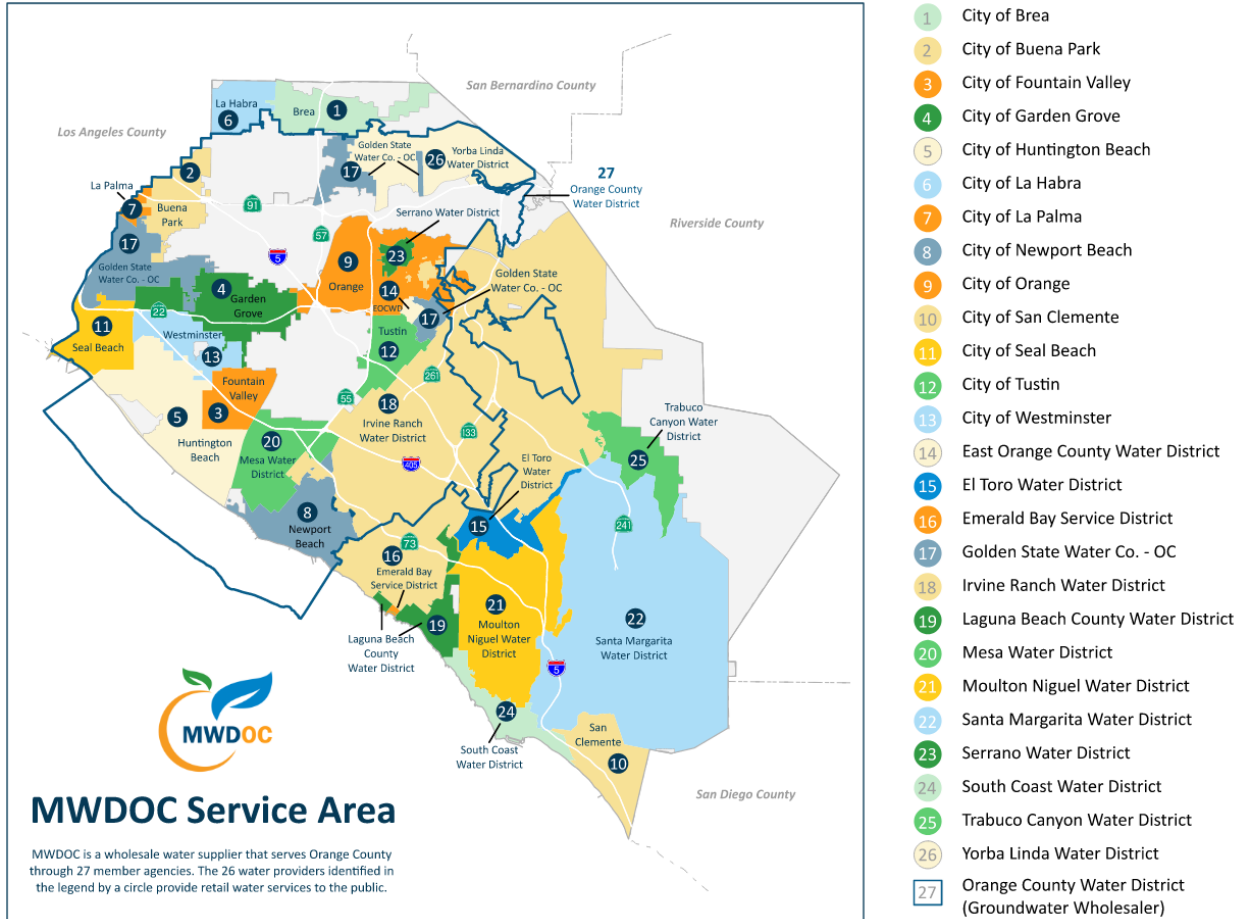


Figure 2 Regional Location of the City of Orange and Other MWD OC Member Agencies

2.3 Relationship with Wholesaler Water Shortage Planning

The WSCP is designed to be consistent with MET’s Water Surplus and Drought Management (WSDM) Plan, MWD OC’s Water Supply Allocation Plan (WSAP), and other emergency planning efforts as described below. MWD OC’s WSAP is integral to the WSCP’s shortage response strategy in the event that MET or MWD OC determines that supply augmentation (including storage) and lesser demand reduction measures would not be sufficient to meet a projected shortage levels needed to meet demands.

2.3.1 MET Water Surplus and Drought Management Plan

MET evaluates the level of supplies available and existing levels of water in storage to determine the appropriate management stage annually. Each stage is associated with specific resource management actions to avoid extreme shortages to the extent possible and minimize adverse impacts to retail customers should an extreme shortage occur. The sequencing outlined in the WSDM Plan reflects anticipated responses towards MET’s existing and expected resource mix.

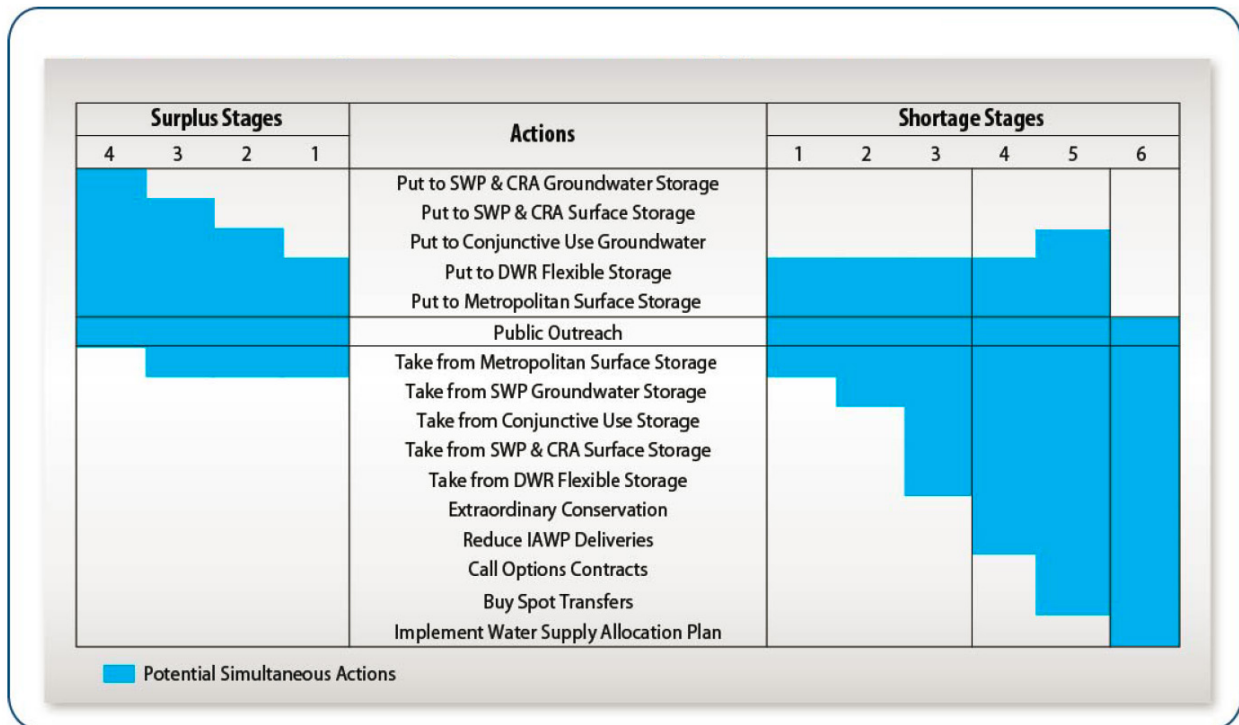
Surplus stages occur when net annual deliveries can be made to water storage programs. Under the WSDM Plan, there are four surplus management stages that provide a framework for actions to take for

surplus supplies. Deliveries in Diamond Valley Lake (DVL) and in SWP terminal reservoirs continue through each surplus stage, provided there is available storage capacity. Withdrawals from DVL for regulatory purposes or to meet seasonal demands may occur at any stage.

The WSDM Plan distinguishes between shortages, severe shortages, and extreme shortages. The differences between each term are listed below:

- **Shortage:** MET can meet full-service demands and partially meet or fully meet interruptible demands using stored water or water transfers as necessary (Stages 1-3).
- **Severe Shortage:** MET can meet full-service demands only by making withdrawals from storage, calling on its water transfers, and possibly calling for extraordinary conservation and reducing deliveries under the Interim Agricultural Water Program (IAWP) (Stages 4-5).
- **Extreme Shortage:** MET must allocate available imported supplies to full-service customers (Stage 6).

There are six shortage management stages to guide resource management activities. These stages are defined by shortfalls in imported supply and water balances in MET’s storage programs. When MET must make net withdrawals from storage to meet demands, it is considered to be in a shortage condition. Figure 3 gives a summary of actions under each surplus and shortage stage when an allocation plan is necessary to enforce mandatory cutbacks. The goal of the WSDM plan is to avoid Stage 6, an extreme shortage (MET, 2026b).



Source: MET, 2026.

Figure 3 Resource Stages, Anticipated Actions, and Supply Declarations

MET's Board of Directors adopted a Water Supply Condition Framework in June 2008 to communicate the urgency of the region's water supply situation and the need for further water conservation practices. The framework has four conditions, each calling for increasing levels of conservation. Descriptions for each of the four conditions are listed below:

- **Baseline Water Use Efficiency:** Ongoing conservation, outreach, and recycling programs to achieve permanent reductions in water use and build storage reserves.
- **Condition 1 Water Supply Watch:** Local agency voluntary dry-year conservation measures and use of regional storage reserves.
- **Condition 2 Water Supply Alert:** Regional call for cities, counties, member agencies, and retail water agencies to implement extraordinary conservation through drought ordinances and other measures to mitigate use of storage reserves.
- **Condition 3 Water Supply Allocation:** Implement MET's WSAP.

As noted in Condition 3, should supplies become limited to the point where imported water demands cannot be met, MET will allocate water through the WSAP (MET, 2026a).

2.3.2 MET Water Supply Allocation Plan

MET's imported supplies have been impacted by a number of water supply challenges as noted earlier. In case of extreme water shortage within the MET service area, the implementation of its WSAP is required.

MET's Board of Directors adopted the WSAP in February 2008 to fairly distribute a limited amount of water supply and apply it through a detailed methodology to reflect a range of local conditions and needs of the region's retail water consumers (MET, 2026a).

The WSAP includes the specific formula for calculating member agency supply allocations and the key implementation elements needed for administering an allocation. MET's WSAP is the foundation for the urban water shortage contingency analysis required under Water Code Section 10632 and is part of MET's 2025 UWMP.

MET's WSAP was developed in consideration of the principles and guidelines in MET's 1999 WSDM Plan with the core objective of creating an equitable "needs-based allocation." The WSAP's formula seeks to balance the impacts of a shortage at the retail level while maintaining equity on the wholesale level for shortages of MET supplies of greater than 50 percent cutbacks. The formula takes into account a number of factors, such as the impact on retail customers, growth in population, changes in supply conditions, investments in local resources, demand hardening aspects of water conservation savings, recycled water, extraordinary storage and transfer actions, and groundwater imported water needs.

The formula is calculated in three steps: (1) base period calculations; (2) allocation year calculations; and (3) supply allocation calculations. The first two steps involve standard computations, while the third step contains specific methodology developed for the WSAP.

Step 1: Base Period Calculations - The first step in calculating a member agency's water supply allocation is to estimate their water supply and demand using a historical-based period with established water supply and delivery data. The base period for each of the different categories of supply and demand is calculated using data from the two most recent non-shortage years.

Step 2: Allocation Year Calculations - The next step in calculating the member agency's water supply allocation is estimating water needs in the allocation year. This is done by adjusting the base period estimates of retail demand for population growth and changes in local supplies.

Step 3: Supply Allocation Calculations - The final step is calculating the water supply allocation for each member agency based on the allocation year water needs identified in Step 2.

To implement the WSAP, MET's Board of Directors decides on the level of the regional shortage, based on specific criteria, typically in April. The criteria used by MET include current levels of storage, estimated water supply conditions, and projected imported water demands. The allocations, if deemed necessary, go into effect in July of the same year and remain in effect for a 12-month period. The schedule is made at the discretion of the Board of Directors (MET, 2026b).

As demonstrated by the findings in MET's 2020 UWMP, both the Water Reliability Assessment and the Drought Risk Assessment (DRA) demonstrate that MET is projecting to be able to mitigate the challenges posed by hydrologic variability, potential climate change, and regulatory risk on its imported supply sources through the significant storage capabilities it has developed over the last two decades, both dry-year and emergency storage (MET, 2026b).

Although MET's 2025 UWMP forecasts that MET will be able to meet projected imported demands throughout the projected period from 2026 to 2050, uncertainty in supply conditions can result in MET needing to implement its WSAP to preserve dry-year storage and curtail demands (MET, 2026b).

2.3.3 MWDOC Water Supply Allocation Plan

To prepare for the potential allocation of imported water supplies from MET, MWDOC worked collaboratively with its 27 retail agencies to develop its own WSAP that was adopted in January 2009 and amended in 2016. The MWDOC WSAP outlines how MWDOC will determine and implement each of its retail agencies' allocation during a time of shortage.

The MWDOC WSAP uses a similar method and approach, when reasonable, as that of the MET's WSAP. However, MWDOC's plan remains flexible to use an alternative approach when MET's method produces a significant unintended result for the member agencies. The MWDOC WSAP model follows five basic steps to determine a retail agency's imported supply allocation.

Step 1: Determine Baseline Information - The first step in calculating a water supply allocation is to estimate water supply and demand using a historical base period with established water supply and delivery data. The base period for each of the different categories of demand and supply is calculated using data from the last two non-shortage years.

Step 2: Establish Allocation Year Information - In this step, the model adjusts for each retail agency's water need in the allocation year. This is done by adjusting the base period estimates for increased retail water demand based on population growth and changes in local supplies.

Step 3: Calculate Initial Minimum Allocation Based on MET's Declared Shortage Level - This step sets the initial water supply allocation for each retail agency. After a regional shortage level is established, MWDOC will calculate the initial allocation as a percentage of adjusted base period imported water needs within the model for each retail agency.

Step 4: Apply Allocation Adjustments and Credits in the Areas of Retail Impacts and Conservation -

In this step, the model assigns additional water to address disparate impacts at the retail level caused by an across-the-board cut of imported supplies. It also applies a conservation credit given to those agencies that have achieved additional water savings at the retail level as a result of the successful implementation of water conservation devices, programs, and rate structures.

Step 5: Sum Total Allocations and Determine Retail Reliability - This is the final step in calculating a retail agency's total allocation for imported supplies. The model sums an agency's total imported allocation with all of the adjustments and credits and then calculates each agency's retail reliability compared to its Allocation Year Retail Demand.

The MWDOC WSAP includes additional measures for plan implementation, including the following (MWDOC, 2016):

- **Appeal Process** - An appeal process to provide retail agencies the opportunity to request a change to their allocation based on new or corrected information. MWDOC anticipates that under most circumstances, a retail agency's appeal will be the basis for an appeal to MET by MWDOC.
- **Melded Allocation Surcharge Structure** - At the end of the allocation year, MWDOC would only charge an allocation surcharge to each retail agency that exceeded their allocation if MWDOC exceeds its total allocation and is required to pay a surcharge to MET. MET enforces allocations to retail agencies through an allocation surcharge to a retail agency that exceeds its total annual allocation at the end of the 12-month allocation period. MWDOC's surcharge would be assessed according to the retail agency's prorated share (acre-feet [AF] over usage) of the MWDOC amount with MET. Surcharge funds collected by MET will be invested in its Water Management Fund, which is used in part to fund expenditures in dry-year conservation and local resource development.
- **Tracking and Reporting Water Usage** - MWDOC will provide each retail agency with water use monthly reports that will compare each retail agency's current cumulative retail usage to their allocation baseline. MWDOC will also provide quarterly reports on its cumulative retail usage versus its allocation baseline.
- **Timeline and Option to Revisit the Plan** - The allocation period will cover 12 consecutive months, and the Regional Shortage Level will be set for the entire allocation period. MWDOC only anticipates calling for allocation when MET declares a shortage, and no later than 30 days from MET's declaration, MWDOC will announce allocation to its retail agencies.

SECTION 3 WATER SHORTAGE CONTINGENCY PREPAREDNESS AND RESPONSE PLANNING

The City's WSCP is a detailed guide of how the City intends to act in the case of actual water shortage conditions. The WSCP anticipates a water supply shortage and provides pre-planned guidance for managing and mitigating a shortage. Regardless of the reason for the shortage, the WSCP is based on adequate details of demand reduction and supply augmentation measures that are structured to match varying degrees of shortage to ensure the relevant stakeholders understand what to expect during a water shortage situation.

3.1 Water Supply Reliability Analysis

Per Water Code Section 10632 (a)(1), the WSCP shall provide an analysis of water supply reliability conducted pursuant to Water Code Section 10635, and the key issues that may create a shortage condition when looking at the City's water asset portfolio.

Understanding water supply reliability, factors that could contribute to water supply constraints, availability of alternative supplies, and what effect these have on meeting customer demands provides the City with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage. For the 2025 UWMP, the City worked collaboratively with MWDOC, OCWD, and MWDOC's other retail water agencies to produce long-term projected water use over the next 25 years, in five-year increments, for each agency (MWDOC, 2025).

The City also conducted a DRA to evaluate a drought period that lasts five consecutive water years starting from the year following when the assessment is conducted (2026-2030). An analysis of both assessments determined that the City is capable of meeting all customers' demands from 2025 through 2050 for a normal year, a single dry year, and a drought lasting five consecutive years with significant imported water supplemental dedicated drought supplies from MWDOC/MET and ongoing conversation program efforts. The City has also added reliability through receiving the majority of its water supply from groundwater from the OC Basin and supplemental supplies from MWDOC/MET. As a result, there is no projected shortage condition due to drought that will trigger customer demand reduction actions until MWDOC notifies the City of insufficient imported supplies. More information is available in the City's 2025 UWMP Sections 6 and 7 (Orange, 2026).

3.2 Annual Water Supply and Demand Assessment Procedures

Per Water Code Section 10632.1, the City will conduct an AWSDA pursuant to subdivision (a) of Section 10632 and by July 1 of each year, beginning in 2022, submit an AWSDA with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the Supplier's WSCP.

The City must include in its WSCP the procedures used for conducting an AWSDA. The AWSDA is a determination of the near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage stage response actions in the current calendar year. This determination is based on information available to the City at the time of the analysis. Starting in 2022, the AWSDA is due July 1 of every year.

This section documents the decision-making process required for formal approval of the City's AWSDA determination of water supply reliability each year, and the key data inputs and the methodologies used to evaluate the water system reliability for the coming year, while considering that the year to follow would be considered dry.

3.2.1 Decision-Making Process

The following decision-making process describes the functional steps that the City will take to formally approve the AWSDA determination of water supply reliability each year.

3.2.1.1 City Steps to Approve the AWSDA Determination

The AWSDA will be predicated on the OCWD Basin Production Percentage (BPP) and on MWDOC’s AWSDA outcomes. Figure 4 shows the AWSDA reporting timeline for the City of Orange.

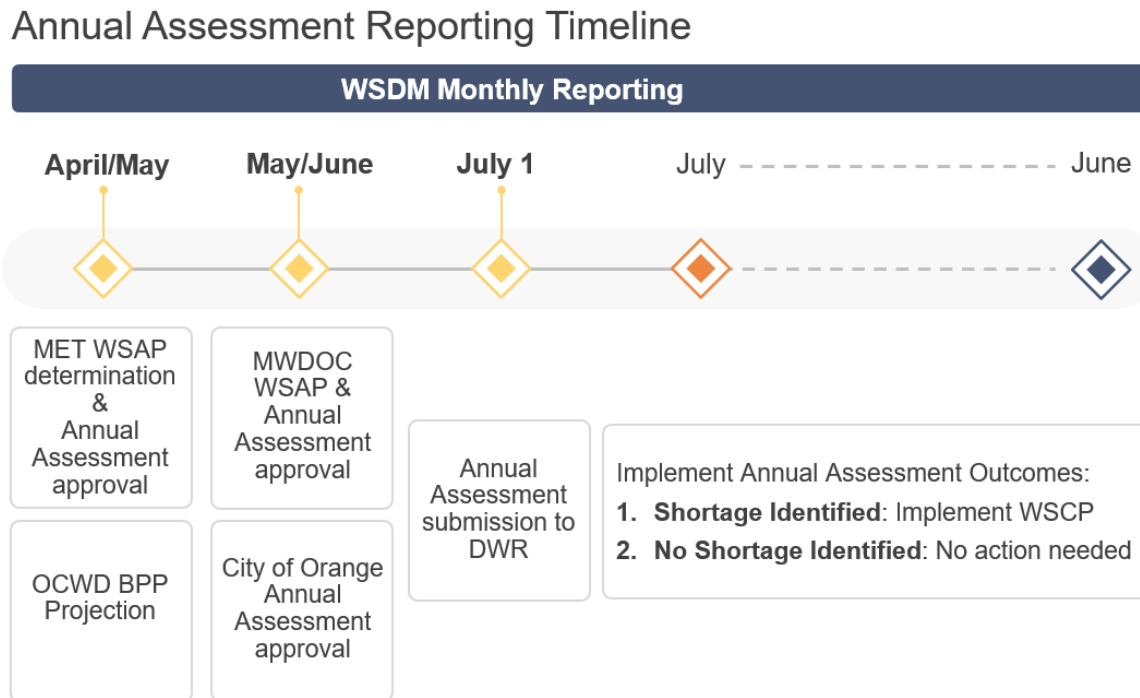


Figure 4 AWSDA Reporting Timeline

The City produces local groundwater from the OC Basin managed by OCWD. The OC Basin is not adjudicated, and as such, pumping from the OC Basin is managed through a process that uses financial incentives to encourage Groundwater Producers (Producers) to pump a sustainable amount of water. The framework for the financial incentives is based on establishing the BPP, the percentage of each Producer’s total water supply that comes from groundwater pumped from the OC Basin. The BPP is set uniformly for all Producers by the OCWD Board of Directors on an annual basis. Based on the projected water demand and modeled water supply, over the long term, OCWD anticipates sustainably supporting a BPP of 85 percent. However, volumes of groundwater and imported water may vary depending on OCWD’s actual BPP projections. A supply reduction that may result from the annual BPP projection will be included in the AWSDA.

While the City’s primary source of water is OCWD groundwater, any remaining source to meet retail demands comes from the purchase of imported water from MWDOC. MWDOC surveys its member agencies annually for anticipated water demands and supplies for the upcoming year. MWDOC utilizes this information to plan for the anticipated imported water supplies for the MWDOC service area. This information is then shared and coordinated with MET and is incorporated into their analysis of their service area’s annual imported water needs. Based on the year’s supply conditions and WSDM actions, MET will present a completed AWSDA for its member agencies’ review, from which they will then seek Board approval in April of each year. Additionally, MET expects that any triggers or specific shortage response actions that result from the AWSDA will be approved by their Board at that time. Based upon

MET’s Assessment and taking into consideration information provided to MWDOC through the annual survey, MWDOC will provide an anticipated estimate of imported supplies for the City to incorporate into the AWSDA.

The City Water Division designee will be responsible for approving the AWSDA in years when no shortage is identified and submitting it to DWR by July 1. In years where a water shortage is identified, the AWSDA will be presented to the City Council and submitted to DWR prior to the July 1 deadline.

3.2.2 Data and Methodologies

The following paragraphs document the key data inputs and methodologies that are used to evaluate the water system reliability for the coming year, while considering that the year to follow would be considered dry.

3.2.2.1 Assessment Methodology

The City will evaluate water supply reliability for the current year and one dry year for the purpose of the AWSDA. The AWSDA determination will be based on considerations of unconstrained water demand, local water supplies, MWDOC imported water supplies, planned water use, and infrastructure considerations. The balance between projected in-service area supplies, coupled with MWDOC imported supplies, and anticipated unconstrained demand will be used to determine what, if any, shortage level is expected under the WSCP framework as presented in Figure 5. The WSCP’s standard shortage levels are defined in terms of shortage percentages. Shortage percentages will be calculated by dividing the difference between water supplies and unconstrained demand by total unconstrained demand. This calculation will be performed separately for anticipated current year conditions and for assumed dry year conditions.

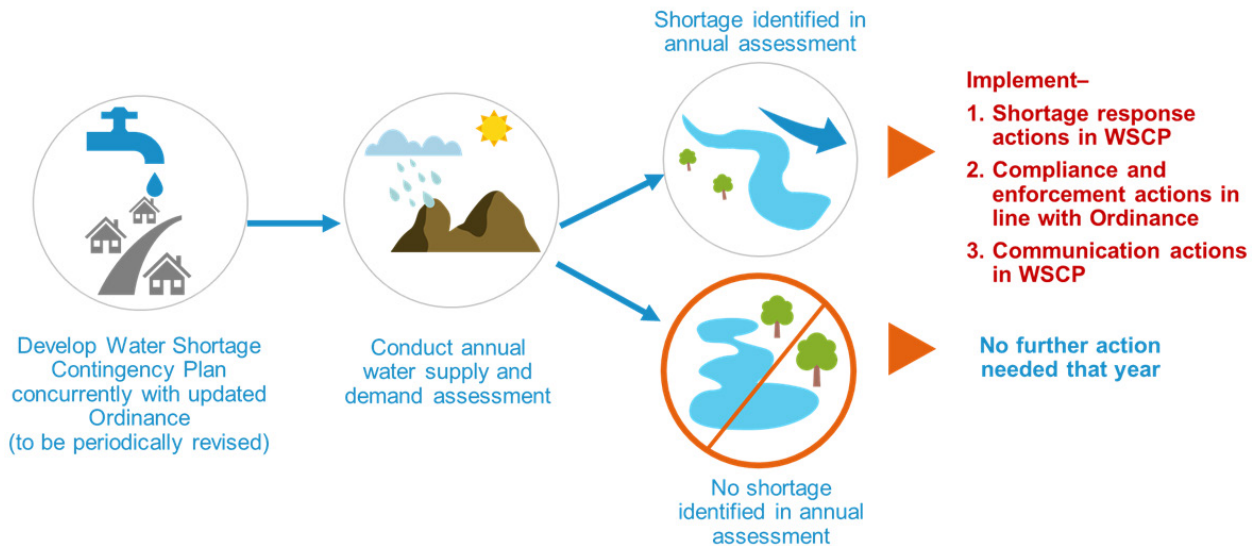


Figure 5 Water Shortage Contingency Plan AWSDA Framework

3.2.2.2 Locally Applicable Evaluation Criteria

Within Orange County, there are no significant local applicable criteria that directly affect reliability. Through the years, the water agencies in Orange County have made tremendous efforts to integrate their systems to provide flexibility to interchange with different sources of supplies. There are emergency agreements in place to ensure all parts of the County have an adequate supply of water. In the northern part of the County, agencies have the ability to meet a majority of their demands through groundwater with very little limitation, except for the OCWD BPP.

The City will also continue to monitor emerging supply and demand conditions related to supplemental imported water from MWDOC/MET and take appropriate actions consistent with the flexibility and adaptiveness inherent to the WSCP. The City's AWSDA was based on the City's service area, water sources, water supply reliability, and water use as described in Water Code Section 10631, including available data from state, regional, or local agency population, land use development, and climate change projections within the service area of the City. Some conditions that affect MWDOC's wholesale supply and demand, such as groundwater replenishment, surface water, and local supply production, can differ significantly from earlier projections throughout the year.

If a major earthquake on the San Andreas Fault occurs, it has the potential to damage all three key regional water aqueducts and disrupt imported supplies for up to six months. The region would likely impose a water use reduction ranging from 25 to 35 percent until the system is repaired. However, MET has taken proactive steps to handle such disruption, such as constructing DVL and repositioning necessary reconstruction resources to quickly recover from such a seismic event, which mitigates potential impacts. DVL, along with other local reservoirs, can store a six to twelve-month supply of emergency water (MET, 2026a).

3.2.2.3 Water Supply

As detailed in the City's 2025 UWMP, the City meets its customers' demands with a combination of local groundwater from the OC Basin, imported water from MWDOC/MET, and local surface water. In Fiscal Year (FY) 2024-2025, the City relied on 78 percent groundwater, 18 percent imported water, and 4 percent surface water. It is projected that by 2050, the City's water supply mix will change to approximately 81 percent groundwater, 14 percent imported water, and 5 percent surface water, and the City can purchase more MET imported water through MWDOC should the need arise (Orange, 2026).

3.2.2.4 Unconstrained Customer Demand

The WSCP and AWSDA define unconstrained demand as expected water use prior to any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is distinguished from observed demand, which may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multi-year drought. WSCP shortage response actions to constrain demand are inherently extraordinary; routine activities such as ongoing conservation programs and regular operational adjustments are not considered as constraints on demand.

The City's DRA reveals that its supply capabilities are expected to balance anticipated total water use and supply, assuming a five-year consecutive drought from FY 2025-2026 through FY 2029-2030 (Orange, 2026). This is based on the water demand projection model; in a single dry year, demand is expected to increase by seven percent above a normal year (MWDOC, 2025).

For the City, the five consecutive dry year demand scenario is based on the demand model's multiple dry year methodology. In accordance with the econometric demand model approach used to develop UWMP demand projections, a single hot/dry year was first identified based on weather conditions that produced the greatest demand response. Consecutive dry years were then represented by applying incremental scaling factors to this single hot/dry year demand to account for the compounding effects of persistent warm and dry conditions over time. These scaling factors show long-term relationships between regional water use and multi-year temperature and precipitation deficits and are applied sequentially to simulate second through fifth consecutive dry years. This approach is consistent with the demand modeling framework summarized in Chapter 7 of the City's UWMP.

3.2.2.5 Planned Water Use for Current Year Considering Dry Subsequent Year

Water Code Section 10632(a)(2)(B)(ii) requires the AWSDA to determine "current year available supply, considering hydrological and regulatory conditions in the current year and one dry year."

The AWSDA will include two separate estimates of the City's annual water supply and unconstrained demand using: (1) current year conditions; and (2) assumed dry year conditions. Accordingly, the AWSDA's shortage analysis will present separate sets of findings for the current year and dry year scenarios. The Water Code does not specify the characteristics of a dry year, allowing discretion to the Supplier. The City will use its discretion to refine and update its assumptions for a dry year scenario in each AWSDA as information becomes available and in accordance with best management practices.

Supply and demand analyses for the single-dry year case were based on conditions affecting the SWP as this supply availability fluctuates the most among MET's, and therefore MWDOC and the City's sources of supply. Severe drought conditions in 2021-2022 affected most of the Western United States, including the Colorado River System, which caused its water supply to decrease. As conditions worsened, Lake Mead and Lake Powell (the largest storage units in the system) had a combined total storage capacity of 25 percent in 2022, a significant decrease from 39 percent in 2021 (MWDOC, 2025).

The Orange County Water Demand Projection Model isolated the impacts that weather and future climate can have on water demand through the use of a statistical model. The impacts of hot/dry weather conditions are reflected as a percentage increase in water demands from the normal year condition for a single dry year condition (FY 2013-2014). The model projects a seven percent increase in demand for the OC Basin area, where the City's service area is located (MWDOC, 2025). Detailed information about the model is included in the City's 2025 UWMP.

The City has documented that it is 100 percent reliable for single dry year demands from 2025 through 2050, with a demand increase of seven percent from normal demand, with significant reserves held by MET, local groundwater supplies, and conservation (Orange, 2026).

3.2.2.6 Infrastructure Considerations

The AWSDA will include consideration of any infrastructure issues that may pertain to near-term water supply reliability, including repairs, construction, and environmental mitigation measures that may temporarily constrain capabilities, as well as any new projects that may add to system capacity. MWDOC closely coordinates with MET and its member agencies, including the City, on any planned infrastructure work that may impact water supply availability. Throughout each year, MET regularly carries out preventive and corrective maintenance of its facilities within the MWDOC service area that may require

shutdowns to inspect and repair pipelines and facilities and support capital improvement projects. These shutdowns involve a high level of planning and coordination between MWDOC, MWDOC's member agencies, and MET to ensure that major portions of the distribution system are not out of service at the same time. Operational flexibility within MET's system and the cooperation of member agencies allow shutdowns to be successfully completed while continuing to meet all system demands.

Specifically for the City, as of March 2026, there are no foreseen near-term infrastructure issues that would impact supply.

3.2.2.7 Other Factors

For the AWSDA, any known issues related to water quality would be considered for their potential effects on water supply reliability.

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of manmade chemicals that includes perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). PFAS compounds were once commonly used in many products, including, among many others, stain- and water-repellent fabrics, nonstick products (e.g., Teflon), polishes, waxes, paints, cleaning products, and fire-fighting foams. Beginning in the summer of 2019, the California State Division of Drinking Water (DDW) began requiring testing for PFAS compounds in some groundwater production wells in the OCWD area.

MET has voluntarily monitored PFAS in its source and treated waters since 2017. Most samples have shown non-detect for all tested PFAS, including PFOA and PFOS. A limited number of other PFAS—such as PFHxA, PFBA, PFPeA, PFDoA, PFTA, and PFBS— have been detected only at trace levels below their method detection limits. PFOA and PFOS have not been detected in MET's imported or treated water supplies. However, some member agencies have detected these compounds in local groundwater wells, which may require treatment or source management to comply with emerging DDW regulations. As DDW and the US Environmental Protection Agency (EPA) establish enforceable maximum contaminant levels (MCL) for PFOA and PFOS, some agencies may supplement their local supplies with increased purchases of MET water (MET, 2025).

The EPA finalized the first national drinking water standards for six PFAS compounds in April 2024. These standards include enforceable MCLs for PFOA and PFOS set at 4 parts per trillion (ppt). In May 2025, the EPA announced that it would extend the compliance deadline for PFOA and PFOS from 2029 to 2031 to provide additional time for testing, planning, and installation of treatment technologies. While MET and its member agencies continue to monitor and test PFAS in imported and local sources, the delay in the federal compliance date allows additional time to evaluate treatment options, coordinate funding, and plan system upgrades necessary to meet forthcoming federal PFAS standards.

PFAS have been detected in the OC Basin in very small amounts (parts per trillion), entering primarily via the Santa Ana River, whose flows infiltrate into the basin. Despite playing no role in releasing PFAS into the environment, OCWD is working with its cities and retail water districts to remove it from local water supplies in order to comply with new state and federal regulations. More than 100 wells have been impacted due to various state and federal regulations. Fifteen impacted agencies will have to temporarily purchase more costly imported water to replace PFAS contaminated supplies. As of 2025, 53 impacted wells are back online due to close to a billion dollars being spent on state-of-the-art testing, research and piloting of different treatment systems, and design and construction of treatment plants that are now operational.

The City has added PFAS treatment systems to all existing wells. New wells will be constructed with a PFAS treatment system in place.

3.3 Six Standard Water Shortage Levels

Per Water Code Section 10632 (a)(3)(A), Suppliers must include the six standard water shortage levels that represent shortages from the normal reliability as determined in the AWSDA or cross-reference their shortage levels to the standard levels. The shortage levels have been standardized to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. This is an outgrowth of the severe statewide drought of 2012-2016, and the widely recognized public communication and state policy uncertainty associated with the many different local definitions of water shortage levels.

The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10, 20, 30, 40, 50, and greater than 50 percent shortage compared to the normal reliability condition) and align with the response actions the Supplier would implement to meet the severity of the impending shortages (Table 1).

Table 1 Cross-Reference for Standard vs Supplier Shortage Levels

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels Water Code Section 10632(a)(3)(B)			
<input 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
1	Up to 10%		
2	Up to 20%		
3	Up to 30%		
4	Up to 40%		
5	Up to 50%		
6	>50%		
NOTES:			

3.4 Shortage Response Actions

Water Code Section 10632 (a)(4) requires the WSCP to specify shortage response actions that align with the defined shortage levels. The City has defined specific shortage response actions that align with the defined shortage levels in DWR Tables 8-2 and 8-3 (Appendix A). These shortage response actions were developed with consideration to the system infrastructure and operations changes, supply augmentation responses, customer-class or water use-specific demand reduction initiatives, and increasingly stringent water use prohibitions.

3.4.1 Supply Augmentation

The supply augmentation actions are described in DWR Table 8-2 (Appendix A). These augmentations represent short-term management objectives triggered by the MET’s WSDM Plan and do not overlap with

the long-term new water supply development or supply reliability enhancement projects. Supply Augmentation is made available to the City through MWDOC and MET. The City relies on MET's reliability portfolio of water supply programs including existing water transfers, storage, and exchange agreements to supplement gaps in the City's supply/demand balance. MET has developed significant storage capacity (over 5 million acre foot [AF]) in reservoirs and groundwater banking programs both within and outside of the Southern California region. Additionally, MET can pursue additional water transfer and exchange programs with other water agencies to help mitigate supply/demand imbalances and provide additional dry-year supply sources.

MWDOC, and in turn its retail agencies, including the City, have access to supply augmentation actions through MET. MET may exercise these actions based on regional need, and in accordance with their WSCP, and may include the use of supplies and storage programs within the Colorado River, SWP, and in-region storage. The City has the ability to augment its supply to reduce the shortage gap by up to 100 percent by purchasing additional imported water through MWDOC or pumping additional groundwater in the OC Basin; however, both are subject to rate penalties from MWDOC and OCWD, respectively.

3.4.2 Demand Reduction

The demand reduction measures that would be implemented to address shortage levels are described in DWR Table 8-3 (Appendix A). This table indicates which actions align with specific defined shortage levels and estimates the extent to which the actions will reduce the gap between supplies and demands to deliver the outcomes necessary to meet the requirements of a given shortage level. This table also identifies the enforcement action, if any, associated with each demand reduction measure.

3.4.3 Operational Changes

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. The City will consider their operational procedures when it completes its AWSDA or as needed to identify changes that can be implemented to address water shortage on a short-term basis, such as temporarily altering maintenance cycles, deferring planned system outages, and adjusting the flow and routing of water through its system to more effectively distribute available supply across the service area.

3.4.4 Additional Mandatory Restrictions

California Water Code Section 10632(a)(4)(D) calls for "additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions" to be included among the WSCP's shortage response actions. The City will identify additional mandatory restrictions as needed based on the Orange Municipal Code Chapter 7.02 Water Conservation and Water Supply Shortage (Appendix B).

3.4.5 Emergency Response Plan (Hazard Mitigation Plan)

A catastrophic water shortage would be addressed according to the appropriate water shortage level and response actions. It is likely that a catastrophic shortage would immediately trigger Shortage Level 6, and response actions have been put in place to mitigate a catastrophic shortage. In addition, there are several Plans that address catastrophic failures and align with the WSCP, including MET's, WSDM, and WSAP, the

City's Local Hazard Mitigation Plan (LHMP), and the Water Emergency Response Organization of Orange County's (WEROC) Emergency Operations Plan (EOP).

3.4.5.1 MET's, WSDM, and WSAP

MET has comprehensive plans for stages of actions it would undertake to address a catastrophic interruption in water supplies through its WSDM and WSAP. MET also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region, including seismic events along the San Andreas Fault. In addition, MET is working with the state to implement a comprehensive improvement plan to address catastrophic occurrences outside of the Southern California region, such as a maximum probable seismic event in the Sacramento-San Joaquin River Delta that would cause levee failure and disruption of SWP deliveries.

3.4.5.2 Water Emergency Response Organization of Orange County Emergency Operations Plan

In 1983, the Orange County water community identified a need to develop a plan on how agencies would respond effectively to disasters impacting the regional water distribution system. The collective efforts of these agencies resulted in the formation of WEROC to coordinate emergency response on behalf of all Orange County water and wastewater agencies, develop an emergency plan to respond to disasters, and conduct disaster training exercises for the Orange County water community. WEROC, administered by MWDOC, was established through the creation of an indemnification agreement among its member agencies to protect each other against civil liabilities and to facilitate the exchange of resources. WEROC is unique in its ability to provide a single point of contact for the representation of all water and wastewater utilities in Orange County during a disaster. This representation is to the county, state, and federal disaster coordination agencies. Within the Orange County Operational Area, WEROC is the recognized contact for emergency response for the water community, including the City.

As a member of WEROC, the City will follow WEROC's EOP in the event of an emergency and coordinate with WEROC to assess damage, initiate repairs, and request and coordinate mutual aid resources in the event that the City is unable to provide the level of emergency response support required by the situation.

The EOP defines the actions to be taken by WEROC Emergency Operations Center (EOC) staff to reduce the loss of water and wastewater infrastructure; to respond effectively to a disaster; and to coordinate recovery operations in the aftermath of any emergency involving extensive damage to Orange County water and wastewater utilities. The EOP includes an activation notification protocol that will be used to contact partner agencies to inform them of the situation, activation status of the EOC, known damage or impacts, or resource needs. The EOP is a standalone document that is reviewed annually and approved by the MWDOC Board every three years.

WEROC is organized on the basis that each member agency is responsible for developing its own EOP in accordance with the California Standardized Emergency Management System (SEMS), National Incident Management System (NIMS), and Public Health Security and Bioterrorism Preparedness and Response Act of 2002 to meet specific emergency needs within its service area.

The WEROC EOC is responsible for assessing the overall condition and status of the Orange County regional water distribution and wastewater collection systems, including MET facilities that serve Orange

County. The EOC can be activated during an emergency situation resulting from both natural and man-made causes, and can be activated through automatic, manual, or standby for activation.

WEROC recognizes four primary phases of emergency management, which include:

- **Preparedness:** Planning, training, and exercises that are conducted prior to an emergency to support and enhance response to an emergency or disaster.
- **Response:** Activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster that helps to reduce effects on water infrastructure and speed recovery. This includes alert and notification, EOC activation, direction and control, and mutual aid.
- **Recovery:** This phase involved restoring systems to normal, in which short-term recovery actions are taken to assess the damage and return vital life-support systems to minimum operating standards, while long-term recovery actions have the potential to continue for many years.
- **Mitigation/Prevention:** These actions prevent the occurrence of an emergency or reduce the area's vulnerability in ways that minimize the adverse impacts of a disaster or emergency.

The EOC Action Plans provide frameworks for EOC staff to respond to different situations with the objectives and steps required to complete them, which will in turn serve the WEROC member agencies. In the event of an emergency that results in a catastrophic water shortage, the City will declare a water shortage condition of up to Level 3 for the impacted area depending on the severity of the event, and coordination with WEROC is anticipated to begin at Level 4 or greater (WEROC, 2021).

3.4.5.3 City of Orange Emergency Response Plan

The City will also refer to its current American Water Infrastructure Act Risk and Resilience Assessment and Emergency Response Plan in the event of a catastrophic supply interruption.

3.4.6 Seismic Risk Assessment and Mitigation Plan

Per the Water Code Section 10632.5, Suppliers are required to assess seismic risk to water supplies as part of their WSCP. The plan also must include the mitigation plan for the seismic risk(s). Given the great distances that imported supplies travel to reach Orange County, the region is vulnerable to interruptions along hundreds of miles of aqueducts, pipelines and other facilities associated with delivering the supplies to the region. Additionally, the infrastructure in place to deliver supplies is susceptible to damage from earthquakes and other disasters.

In lieu of conducting a seismic risk assessment specific to the City's 2025 UWMP, the City has included their LHMP, as required under the federal Disaster Mitigation Act of 2000 (Public Law 106-390). The LHMP describes the City's approach to proactively decreasing threats before disaster occurs, including water supply specific mitigation actions such as improving security and alert systems, upgrading back-up power systems, and retrofitting existing flood control infrastructure. (Orange, 2025).

3.4.7 Shortage Response Action Effectiveness

For each specific Shortage Response Action identified in the plan, the WSCP also estimates the extent to which that action will reduce the gap between supplies and demands identified in DWR Tables 8-2 and 8-3 (Appendix A). To the extent feasible, the City has estimated percentage savings for the chosen suite of

shortage response actions, which can be anticipated to deliver the expected outcomes necessary to meet the requirements of a given shortage level.

3.5 Communication Protocols

Timely and effective communication is a key element of the WSCP implementation. In the context of water shortage response, the purpose may be an emergency water shortage situation, such as may result from an earthquake, or a longer-term, non-emergency, shortage condition, such as may result from a drought. In an emergency, the City will activate the communication protocol detailed in the Emergency Response Plan. In a non-emergency water shortage situation, the City will follow the communication protocols described below.

Per the Water Code Section 10632 (a)(5), the City has established communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments regarding any current or predicted shortages as determined by the AWSDA described pursuant to Section 10632.1; any shortage response actions triggered or anticipated to be triggered by the AWSDA described pursuant to Section 10632.1; and any other relevant communications.

Non-emergency water shortage communication protocols are focused on communicating the water shortage contingency planning actions that can be derived from the results of the AWSDA, and it would likely trigger based upon the decision-making process in Section 3.2. Prior to water shortage level declaration, the City will pursue outreach to inform customers of water shortage levels and definitions, targeted water savings for each drought stage, guidelines that customers are to follow during each stage, and sources of current information on the City's supply and demand response status.

The type and degree of communication varies with each shortage level; thus, predefined and actionable communication protocols improve the City's ability to message necessary events. These communication objectives and tools are summarized in Table 2.

The City's Public Relations department will lead public information and outreach efforts in close coordination with other MWDOC and MET. The City will share information and provide guidance to its customers, as well as monitor the customer response and attitude toward both voluntary and mandatory customer response guidelines. The City's customer outreach is required to successfully achieve targeted water savings during each drought stage.

Table 2 Coordination Procedures

Shortage Level	Communication Objectives	Communication Tools
1	Compliance with response actions, 10% reduction in water use	<ul style="list-style-type: none"> ▪ Website info. on City website. ▪ Social media outreach. ▪ Direct mailings to homes and businesses. ▪ School education programs (through MWDOC). ▪ City water efficiency programs (through MWDOC). ▪ Direct communication with high water users. ▪ Communication with commercial/industrial water users.
2	Compliance with response actions, 20% reduction in water use	<ul style="list-style-type: none"> ▪ Include all Communication Tools listed under Shortage Level 1. ▪ Communication outreach. ▪ Educational outreach.
3	Compliance with response actions, 30% reduction in water use	Include all Communication Tools listed under Shortage Levels 1 and 2. <ul style="list-style-type: none"> ▪ Water bill communications.
4	Compliance with response actions, 40% reduction in water use	
5	Compliance with response actions, 50% reduction in water use	
6	Compliance with response actions, >50% reduction in water use	

3.6 Compliance and Enforcement

Per the Water Code Section 10632 (a)(6), the City has defined customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions. Communication procedures to ensure customer compliance are described in Section 3.5. Communication Protocols and customer enforcement, appeal, and exemption procedures are defined in the Orange Municipal Code Chapter 7.02 Water Conservation and Water Supply Shortage (Appendix B).

3.7 Legal Authorities

Per Water Code Section 10632 (a)(7)(A), the City has provided a description of the legal authorities that empower the City to implement and enforce its shortage response in the Orange Municipal Code Chapter 7.02 Water Conservation and Water Supply Shortage (Appendix B). The City intends to update any legal authorities in a subsequently adopted ordinance which will supersede the existing ordinance.

Per Water Code Section 10632 (a)(7) (B), the City shall declare a water shortage emergency condition to prevail within the area served by such wholesaler 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.

Per Water Code Section 10632 (a)(7)(C), the City shall coordinate with any agency or county within which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558). Table 2 identifies the contacts for all cities or counties for which the Supplier provides service in the WSCP, along with developed coordination protocols, which can facilitate compliance with this section of the Water Code in the event of a local emergency as defined in subpart (c) of Government Code Section 8558.

Table 3 Agency Contacts and Coordination Protocols

Contact	Agency	Coordination Protocols
City Manager	City of Anaheim	Phone and email
City Manager	City of Santa Ana	Phone and email
City Manager	City of Garden Grove	Phone and email
City Manager	City of Tustin	Phone and email
General Manager	Irvine Ranch Water District	Phone and email
General Manager	Serrano Water District	Phone and email
City Manager	City of Villa Park	Phone and email
Director of Public Works	Orange County Public Works Department	Phone and email
General Manager	East Orange County Water District	Phone and email

3.8 Financial Consequences of WSCP

Per Water Code Section 10632(a)(8), Suppliers must include a description of the overall anticipated financial consequences to the Supplier of implementing the WSCP. This description must include potential reductions in revenue and increased expenses associated with implementation of the shortage response actions. This should be coupled with an identification of the anticipated mitigation actions needed to address these financial impacts.

During a catastrophic interruption of water supplies, prolonged drought, or water shortage of any kind, the City will experience a reduction in revenue due to reduced water sales. Throughout this period of time, expenditures may increase or decrease with varying circumstances. Expenditures may increase in the event of significant damage to the water system, resulting in emergency repairs. Expenditures may also decrease as less water is pumped through the system, resulting in lower power costs. Water shortage mitigation actions will also impact revenues and require additional costs for drought response activities, such as increased staff costs for tracking, reporting, and communications.

The City receives water revenue from a service charge and a commodity charge based on consumption. The service charge recovers costs associated with providing water to the serviced property. The service charge does not vary with consumption, and the commodity charge is based on water usage. Rates have been designed to recover the full cost of water service in the charges. Therefore, the total cost of purchasing water would decrease as the usage or sale of water decreases. In the event of a drought emergency, the City will impose excessive water use penalties on its customers, which may include additional costs associated with reduced water revenue, staff time taken for penalty enforcement, and advertising the excessive use penalties. The excessive water use penalties are further described in the Orange Municipal Code Chapter 7.02 Water Conservation and Water Supply Shortage (Appendix B).

However, there are significant fixed costs associated with maintaining a minimal level of service. The City will monitor projected revenues and expenditures should an extreme shortage and a large reduction in water sales occur for an extended period of time. To overcome these potential revenue losses and/or expenditure impacts, the City may use reserves. If necessary, the City may reduce expenditures by delaying implementation of its Capital Improvement Program and equipment purchases to reallocate funds to cover the cost of operations and critical maintenance, adjust the workforce, implement a drought surcharge, and/or make adjustments to its water rate structure.

Based on current water rates, a volumetric cutback of 50 percent or more of water sales may lead to a range of reductions in revenues. The impacts to revenues will depend on a proportionate reduction in variable costs related to supply, pumping, and treatment for the specific shortage event. The City has set aside reserve funding to mitigate a short-term water shortage situation.

3.9 Monitoring and Reporting

Per Water Code Section 10632(a)(9), the City is required to provide a description of the monitoring and reporting requirements and procedures that have been implemented to ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

Monitoring and reporting key water use metrics is fundamental to water supply planning and management. Monitoring is also essential in times of water shortage to ensure that the response actions are achieving their intended water use reduction purposes, or if improvements or new actions need to be considered (see Section 3.10). Monitoring for customer compliance tracking is also useful in enforcement actions.

Under normal water supply conditions, potable water production figures are recorded daily. Weekly and monthly reports are prepared and monitored. This data will be used to measure the effectiveness of any water shortage contingency level that may be implemented. As levels of water shortage are declared by MET and MWDOC, the City will follow implementation of those levels as appropriate based on the City's risk profile provided in UWMP Chapter 6 and continue to monitor water demand levels. When MET calls for extraordinary conservation, MET's Drought Program Officer will coordinate public information activities with MWDOC and monitor the effectiveness of ongoing conservation programs.

The City will participate in monthly member agency manager meetings with both MWDOC and OCWD to monitor and discuss monthly water allocation charts. This will enable the City to be aware of imported water and groundwater use on a timely basis as a result of specific actions taken in response to the City's WSCP.

3.10 WSCP Refinement Procedures

Per Water Code Section 10632 (a)(10), the City must provide reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure that shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

The City's WSCP is prepared and implemented as an adaptive management plan. The City will use the monitoring and reporting process defined in Section 3.9 to refine the WSCP. In addition, if certain procedural refinements or new actions are identified by City staff or suggested by customers or other interested parties, the City will evaluate their effectiveness, incorporate them into the WSCP, and implement them quickly at the appropriate water shortage level.

It is envisioned that the WSCP will be periodically re-evaluated to ensure that its shortage risk tolerance is adequate and the shortage response actions are effective and up to date based on lessons learned from implementing the WSCP. The WSCP will be revised and updated during the UWMP update cycle to incorporate updated and new information. For example, new supply augmentation actions will be added, and actions that are no longer applicable for reasons such as program expiration will be removed. However, if revisions to the WSCP are warranted before the UWMP is updated, the WSCP will be updated outside of the UWMP update cycle. In the course of preparing the AWSDA each year, City staff will routinely consider the functionality of the overall WSCP and will prepare recommendations for City Council if changes are found to be needed.

3.11 Special Water Feature Distinction

Per Water Code Section 10632 (b), the City has defined water features in 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, in the City's Municipal Code Chapter 7.02 Water Conservation and Water Supply Shortage (Appendix B).

3.12 Plan Adoption, Submittal, and Availability

Per Water Code Section 10632 (a)(c), the City provided notice of the availability of the Public Review Draft 2025 UWMP and Draft 2025 WSCP and notice of the public hearing to consider adoption of the WSCP. The Public Review Drafts of the 2025 UWMP and the 2025 WSCP were posted prominently on the City's [website](#) in advance of the public hearing on June 9, 2026. Copies of the draft WSCP were also made available for public inspection at the City Clerk's and Utilities Department offices, and public hearing notifications were published in local newspapers. A copy of the published Notice of Public Hearing is included in Appendix C.

The City held the public hearing for the Draft 2025 UWMP and Draft WSCP on June 9, 2026, at the City Council meeting. The City Council reviewed and approved the 2025 UWMP and the WSCP at its June 9, 2026 meeting after the public hearing. See Appendix D for the resolution approving the WSCP.

By July 1, 2026, the City's adopted 2025 UWMP and WSCP was filed with DWR, California State Library, and the County of Orange. The City will make the WSCP available for public review on its website no later than 30 days after filing with DWR.

Based on DWR's review of the WSCP, the City will make any amendments to its adopted WSCP, as required and directed by DWR.

If the City revises its WSCP after the UWMP is approved by DWR, then an electronic copy of the revised WSCP will be submitted to DWR within 30 days of its adoption.

SECTION 4 REFERENCES

City of Orange. (2026). *2025 Urban Water Management Plan*.

City of Orange. (2025). *Local Hazard Mitigation Plan*.

Metropolitan Water District of Southern California (MET). (2026a). *2025 Water Shortage Contingency Plan*.

Metropolitan Water District of Southern California (MET). (2026b). *2025 Urban Water Management Plan*.

Municipal Water District of Orange County. (2023, July). *2023 Orange County Water Reliability Study*.

Municipal Water District of Orange County. (2025, December 30). *Orange County Water Demand Projection Model Technical Memorandum*.

Water Emergency Response Organization of Orange County (WEROC). (2025). *WEROC 2025 Annual Report*.

APPENDIX A

DWR SUBMITTAL TABLES

Submittal Table 8-1: Water Shortage Contingency Plan Levels

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
1	Up to 10%		
2	Up to 20%		
3	Up to 30%		
4	Up to 40%		
5	Up to 50%		
6	>50%		
NOTES:			

Submittal Table 8-2: Supply Augmentation and Other Actions

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Add additional rows as needed				
1 through 6	Other Purchases	Percentage	0 - 100%	Additional imported water purchases through MWDOC
1 through 6	Other Purchases	Percentage	0 - 100%	Additional groundwater pumping in the Orange County Groundwater Basin
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES: Additional imported water purchases and groundwater pumping may be subject to rate penalties from MWDOC and OCWD, respectively.				

Submittal Table 8-3: Demand Reduction Actions

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B) 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					
0	Landscape - Limit landscape irrigation to specific times		On-going Long-Term Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Limits of watering hours: Watering or irrigating of lawn, landscape, or other vegetated area with potable water is prohibited between the hours of 9:00 a.m. and 5:00 p.m. Pacific Standard Time on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
0	Landscape - Prohibit all landscape irrigation		On-going Long-Term Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Limit on watering duration: Watering or irrigating of lawn, landscape, or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended is limited to no more than 15 minutes of watering per day per station. This subsection does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour, and weather-based controllers or stream rotor sprinklers that meet a 70 percent efficiency standard.	Yes
0	Landscape - Restrict or prohibit runoff from landscape irrigation		Statewide Prohibition is Required	No excessive water flow or runoff: Watering or irrigating of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter, or ditch is prohibited	
0	Other - Prohibit use of potable water for washing hard surfaces		Statewide Prohibition is Required	No washing down hard or paved surfaces: Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device or a low-volume, high-pressure cleaning machine equipped to recycle any water used.	Yes
0	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		On-going Long-Term Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Obligation to fix leaks, breaks, or malfunctions: Excessive use, loss or escape of water through breaks, leaks, or other malfunctions, in the water user's plumbing or distribution system for any period of time after such escape of water should have been discovered and corrected and in no event more than 7 days of receiving a notice from the City is prohibited.	Yes
0	Water Features - Restrict water use for decorative water features, such as fountains		Statewide Prohibition is Required	Re-circulating water is required for water fountains and decorative water features: Operating a water fountain or other decorative water feature that does not use re-circulated water is prohibited.	No
0	CII - Other CII restriction or prohibition		On-going Long-Term Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No installation of single pass cooling systems: Installation of single pass cooling systems is prohibited in buildings requesting new water service.	No
0	CII - Other CII restriction or prohibition		On-going Long-Term Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No installation of non-re-circulating commercial car wash and laundry systems: Installation of non-re-circulating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems.	No
0	Other - Require automatic shut-off hoses		On-going Long-Term Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Limits on washing vehicles: Using water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat, or trailer, whether motorized or not, is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility.	Yes
1	Expand Public Information Campaign	Percentage	5%	Community Outreach and Messaging (Expand Public Information Campaign to Shortage Level 1 Protocols)	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	2%	Obligation to fix leaks, breaks or malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 72 hours of notification by the City unless other arrangements are made with the City.	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B) 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 WUData 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)		
1	CII - Lodging establishment must offer opt out of linen service	Percentage	1%	Commercial lodging establishments must provide option to not launder linen daily: Hotels, motels and other commercial lodging establishments must provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments must prominently display notice of this option in each bathroom using clear and easily understood language.	No
1	CII - Commercial kitchens required to use pre-rinse spray valves	Percentage	1%	Restaurants are required to use water-conserving dish wash spray valves: Food preparation establishments, such as restaurants or cafes, are prohibited from using non-water-conserving dish wash spray valves.	No
1	CII - Restaurants may only serve water upon request	Percentage	1%	Drinking water served upon request only: Eating or drinking establishments, including, but not limited to, a restaurant, hotel, café, cafeteria, bar, club, or other public place where food or drinks are sold, served, or offered for sale, are prohibited from providing drinking water to any person unless expressly requested.	Yes
1	Other	Percentage		Other prohibited uses: The City may implement other prohibited water uses as determined by the Director of Public Works, or his designee, after notice to customers.	Yes
2	Expand Public Information Campaign	Percentage	5%	Community Outreach and Messaging (Expand Public Information Campaign to Shortage Level 2 Protocols)	No
2	Water Features - Restrict water use for decorative water features, such as fountains	Percentage	1%	Limits on filling ornamental lakes or ponds: Filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under this chapter.	No
2	Other water feature or swimming pool restriction	Percentage	2%	Limits on filling residential swimming pools and spas: Re-filling of more than 1 foot and initial filling of residential swimming pools or outdoor spas with potable water is prohibited.	Yes
2	Landscape - Limit landscape irrigation to specific days	Percentage	10%	Limits on watering days: Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to 3 days per week during the months of April through October. During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than 2 days per week. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	2%	Obligation to fix leaks, breaks or malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 48 hours of notification by the City unless other arrangements are made with the City.	Yes
2	Other	Percentage		Other prohibited uses: The City may implement other prohibited water uses as determined by the City, after notice to customers.	Yes
3	Expand Public Information Campaign	Percentage	5%	Community Outreach and Messaging (Expand Public Information Campaign to Shortage Level 3 Protocols)	No
3	Other	Percentage	5%	Reporting mechanism—hotline: The City may establish a water waste hotline for residents to report violations of this chapter.	Yes
3	Landscape - Other landscape restriction or prohibition	Percentage	3%	Large landscape areas—rain sensors: Large landscape areas, such as parks, cemeteries, golf courses, school grounds, and playing fields, that use landscape irrigation systems to water or irrigate, must use landscape irrigation systems with rain sensors that automatically shut off such systems during periods of rain or irrigation timers which automatically use information such as evapotranspiration sensors to set an efficient water use schedule.	No

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B) 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)		
3	Landscape - Limit landscape irrigation to specific days	Percentage	10%	Limits on watering days: Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to 2 days per week during the months of April through October. During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than 1 day per week. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	2%	Obligation to fix leaks, breaks or malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired immediately upon notification by the City unless other arrangements are made with the City.	Yes
3	Other	Percentage		Other prohibited uses: The City may implement other prohibited water uses as determined by the City, after notice to customers.	Yes
4	Expand Public Information Campaign	Percentage	5%	Community Outreach and Messaging (Expand Public Information Campaign to Shortage Level 4 Protocols)	No
4	Other	Percentage	1%	Retrofits upon sale or transfer: No structure shall be sold or transferred unless all existing plumbing fixtures in the structure are retrofitted exclusively with water-conserving plumbing fixtures.	No
4	Other	Percentage	3%	Water recycling required if alternative available: The use of potable water, other than recycled water, is prohibited for specified uses after the City has provided to the customer an analysis showing that recycled water is a cost-effective alternative to potable water for such uses and the customer has had a reasonable time, as determined by the City Manager, to make the conversion to recycled water.	No
4	Other	Percentage	1%	Change in service: Upon the establishment of new water service or a change in water service from 1 person to another non-family member, all existing plumbing fixtures are required to be retrofitted exclusively with water-conserving plumbing fixtures.	No
4	Other	Percentage	1%	Limits of building permits: The City may limit or withhold the issuance of building permits that require new or expanded water service, except to protect the public health, safety, and welfare.	No
4	Landscape - Limit landscape irrigation to specific days	Percentage	10%	Watering days: Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to 1 day per week during the months of April through October. During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than 1 day per week. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
5	Expand Public Information Campaign	Percentage	5%	Community Outreach and Messaging (Expand Public Information Campaign to Shortage Level 5 Protocols)	No
5	Other	Percentage	2%	City conservation reports: Upon request of the City Manager, City Departments must prepare and submit quarterly reports on their water conservation efforts. The reports will be consolidated by the City Manager and reported to the City Council at a minimum of once a year.	Yes
5	Landscape - Prohibit all landscape irrigation	Percentage	10%	No watering or irrigating: Watering or irrigating of lawn, landscape, or other vegetated area with potable water is prohibited.	Yes

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B) 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)		
5	Moratorium or Net Zero Demand Increase on New Connections	Percentage	5%	No new potable water service: No new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no statement of immediate ability to serve or provide potable water service (such as will serve letters, certificates, or letters of availability) will be issued, except under the following circumstances:	No
5	Other	Percentage	5%	Customer water conservation reports: The City may, by written request, require all commercial, residential, and industrial customers using 25,000 or more billing units per year to submit a water conservation plan and to submit quarterly progress reports on such plan. The conservation plan must include recommendations for increased water savings, including increased water recycling based on feasibility, and the reports must include progress to date on implementation of such recommendations.	No
5	Other	Percentage	1%	Discontinue service: The City, in its sole discretion, may discontinue service to customers who willfully violate provisions of this section.	No
6	Expand Public Information Campaign	Percentage	5%	Community Outreach and Messaging (Expand Public Information Campaign to Shortage Level 6 Protocols)	Yes
6	Other	Percentage	20%	Water use for public health and safety purposes only.	Yes
6	Other	Percentage		Other prohibited uses: The City may implement other prohibited water uses as determined by the City, after notice to customers.	Yes
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

APPENDIX B

ORANGE MUNICIPAL CODE CHAPTER 7.02 WATER CONSERVATION AND WATER SUPPLY SHORTAGE

Below is the weblink to the current ordinance (last accessed on May 11, 2026):

<https://ecode360.com/43561783>

APPENDIX C

NOTICE OF PUBLIC HEARING (PENDING)

APPENDIX D

ADOPTED WSCP RESOLUTION (PENDING)