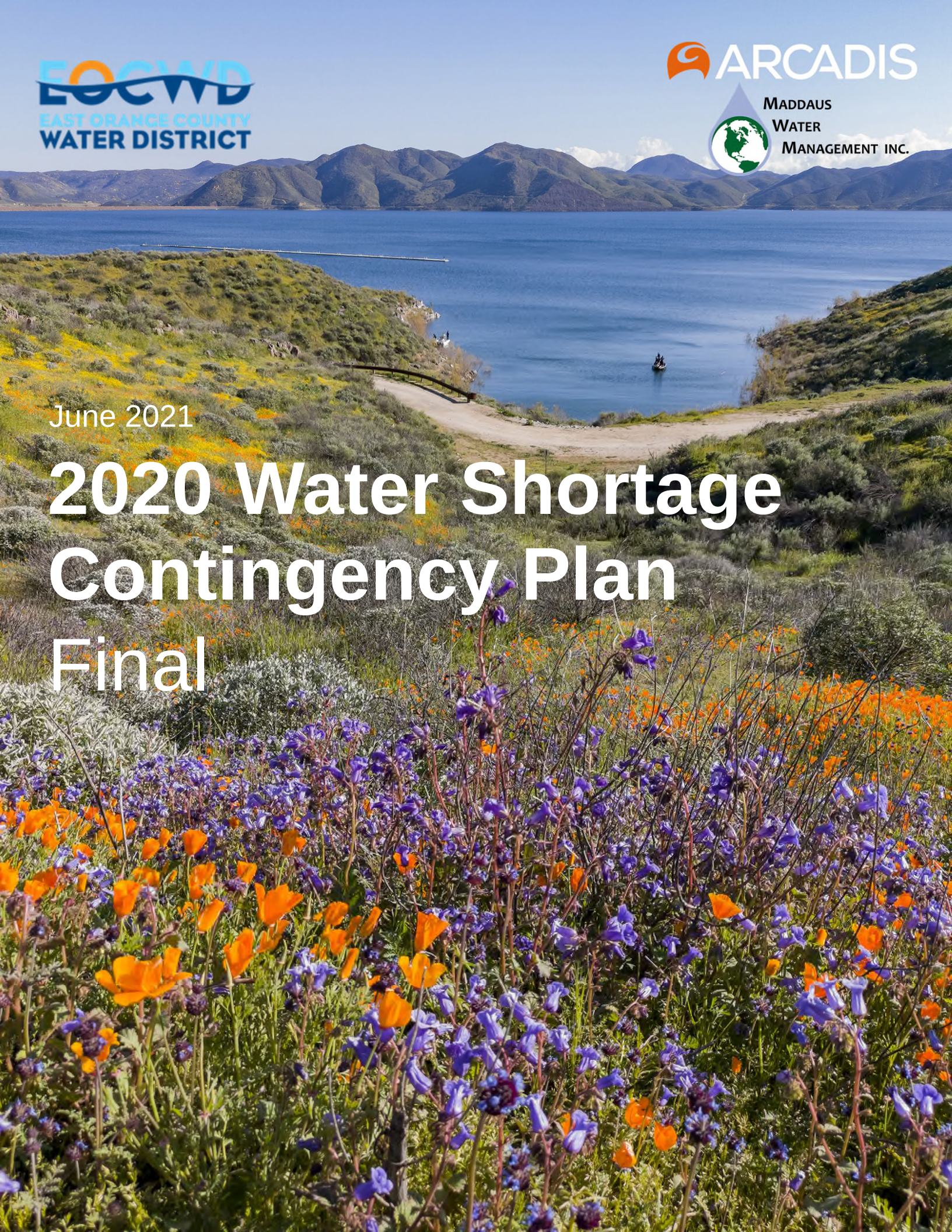

EAST ORANGE COUNTY WATER DISTRICT

ARCADIS

MADDAUS WATER MANAGEMENT INC.

June 2021

2020 Water Shortage Contingency Plan

Final

2020 Water Shortage Contingency Plan

June 2021

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Acronyms and Abbreviations

%	Percent
AF	Acre-Feet
Annual Assessment	Annual Water Supply and Demand Assessment
BPP	Basin Production Percentage
CRA	Colorado River Aqueduct
DDW	Division of Drinking Water
District	East Orange County Water District
DRA	Drought Risk Assessment
DVL	Diamond Valley Lake
DWR	California Department of Water Resources
EAP	Emergency Operations Center Actions Plan
EOCWD	East Orange County Water District
EOC	Emergency Operation Center
EOP	Emergency Operations Plan
FY	Fiscal Year
GSP	Groundwater Sustainability Plan
HMP	Hazard Mitigation Plan
IAWP	Interim Agricultural Water Program
IRP	Integrated Water Resource Plan
M&I	Municipal and Industrial
MCL	Maximum Contaminant Level
MET	Metropolitan Water District of Southern California
Metropolitan Act	Metropolitan Water District Act
MWDOC	Municipal Water District of Orange County
NIMS	National Incident Management System
OCWD	Orange County Water District
OWWD#8	Orange Waterworks District Number 8
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfanate
Producer	Groundwater Producer
RL	Response Level
SEMS	California Standardized Emergency Management System
Supplier	Urban Water Supplier
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

1 INTRODUCTION AND WSCP OVERVIEW

The Water Shortage Contingency Plan (WSCP) is a strategic planning document designed to prepare for and respond to water shortages. This Water Shortage Contingency Plan (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 East Orange County Water District (District)'s operating manual that is used to prevent catastrophic service disruptions through proactive, rather than reactive, management. A water shortage, when 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 District 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 District'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, to allow for efficient management of any shortage with predictability and accountability.

The WSCP also describes the District's procedures for conducting an Annual Water Supply and Demand Assessment (Annual Assessment) 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 District's 2020 WSCP is included as an appendix to its 2020 (UWMP) which will be submitted to DWR by July 1, 2021. However, this WSCP is created separately from the District's 2020 UWMP 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% to greater than 50%; 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 Annual Assessment; 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 the Water Code Section 16032 requirements.

Section 1 Introduction and WSCP Overview gives an overview of the WSCP fundamentals.

Section 2 Background provides a background on the District'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 2020 UWMP.

Section 3.2 Annual Water Supply and Demand Assessment Procedures provide a description of procedures to conduct and approve the Annual Assessment.

Section 3.3 Six Standard Water Shortage Levels explains the WSCP's six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50, and more than 50% shortages.

Section 3.4 Shortage Response Actions describes the 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 is a description of the legal authorities that enable the District 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 is a required definition for inclusion in a WSCP per the Water Code.

Section 3.12 Plan Adoption, Submittal, and Implementation provides a record of the process the District followed to adopt and implement its WSCP.

1.2 Integration with Other Planning Efforts

As a retail water supplier in Orange County, the District 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 manager and provider of recycled water in North Orange

County). As a MWDOC member agency, the District 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 2020 UWMP** provides the basis for the projections of the imported supply availability over the next 25 years for the District's service area.
- **MWDOC's 2020 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.
- **2021 Orange County Water Demand Forecast for MWDOC and OCWD Technical Memorandum (Demand Forecast TM)** provides the basis for water demand projections for MWDOC's member agencies as well as Anaheim, Fullerton, and Santa Ana.
- **MET's 2020 Integrated Water Resources Plan (IRP)** is a long-term planning document to ensure water supply availability in Southern California and provides a basis for water supply reliability in Orange County.
- **MET's 2020 UWMP** was developed as a part of the 2020 IRP planning process and was used by MWDOC as another basis for the projections of supply capability of the imported water received from MET.
- **MET's 2020 WSCP** provides a water supply assessment and guide for MET's intended actions during water shortage conditions.
- **OCWD's 2019-20 Engineer's Report** provides information on the groundwater conditions and basin utilization of the Orange County Groundwater Basin (OC Basin).
- **OCWD's 2017 Basin 8-1 Alternative** is an alternative to the Groundwater Sustainability Plan (GSP) for the OC Basin and provides significant information related to sustainable management of the basin in the past and hydrogeology of the basin, including groundwater quality and basin characteristics.
- **2020 Local Hazard Mitigation Plan (HMP)** provides the basis for the seismic risk analysis of the water system facilities.
- **Orange County Local Agency Formation Commission's 2020 Municipal Service Review for MWDOC Report** provides a comprehensive service review of the municipal services provided by MWDOC.
- **Water Master Plan and Sewer Master Plan** of the District provide information on water infrastructure planning projects and plans to address any required water system improvements.
- **Groundwater Management Plans** provide the groundwater sustainability goals for the basins in the MWDOC's service area and the programs, actions, and strategies activities that support those goals.

2 BACKGROUND INFORMATION

The District operates as both a wholesale and a retail water supplier. The District was formed in December of 1961 to provide wholesale water to the areas within its boundaries. The District operates under the County Water District Law, which is contained in Division 12 of the Water Code, Sections 30000 - 33901.

In July of 1985, the District assumed the operations of the County of Orange Waterworks District No. 8 (OWWD#8), which until that time had been one of the District's sub agencies (it should also be noted that OWWD#8 acquired the water system in 1951 from the El Modena Mutual Irrigation Company). Upon acquisition of this water system, it was named the District's "Retail Zone" and the original system was renamed the "Wholesale Zone." Thus, the District has been both a wholesale and retail water purveyor since 1985.

2.1 District Service Area

2.1.1 Retail Zone Water Service Area

The District's Retail Zone system lies within the central portion of the Wholesale Zone about equidistant from the northern and southern boundaries and on the western side of the District. Most of the Retail Zone lies within the unincorporated community of Panorama Heights generally bounded on the west by Hewes Avenue, on the south by Foothill Boulevard, on the east by Newport Boulevard and Crawford Canyon Road and on the north by Chapman Avenue. The Retail Zone is shown in Figure 2-1.

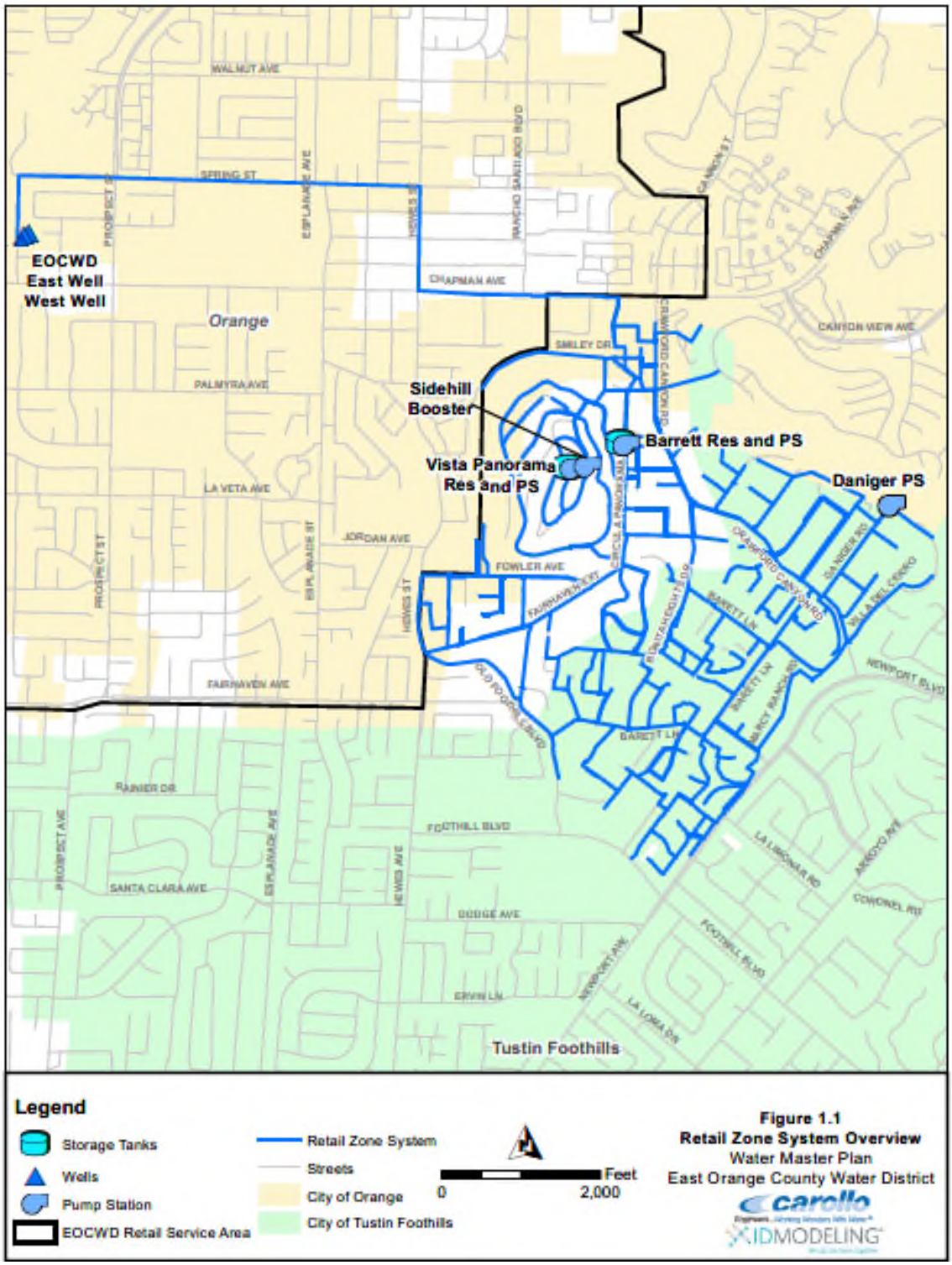

Figure 2-1: East Orange County Water District Retail Zone Water Service Area

2.1.2 Wholesale Zone Water Service Area

The District provides wholesale water to around 10,000 acres area of central Orange County, which encompasses a portion of the City of Tustin, a portion of the City of Orange, a portion of Irvine Ranch Water District, and the adjoining unincorporated communities of Lemon Heights, Cowan Heights (served by GSWC), and Panorama Heights, served by the District. Generally speaking, most of the District lies east of the Costa Mesa (55) Freeway, north of the Santa Ana (5) Freeway, west of the Jamboree Road, and south of Santiago Canyon Road. Figure 2-2 shows the District's Wholesale water service area.

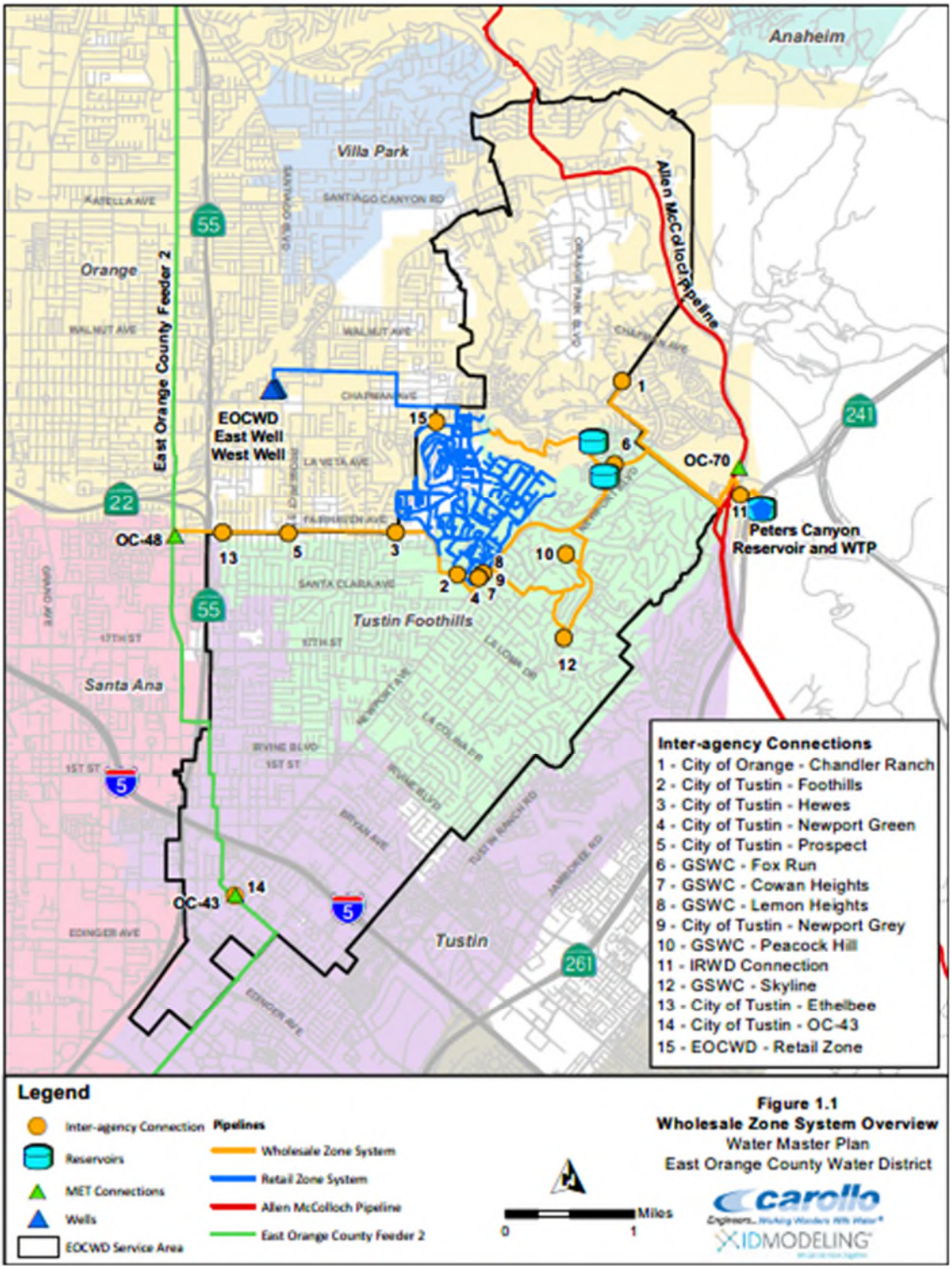

Figure 2-2: East Orange County Water District Wholesale Zone Water Service Area

2.2 Relationship to 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% 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 are determined by each agency's assessed valuation. Each member of the Board shall be entitled to cast one vote for each ten million dollars ($10,000,000) of assessed valuation of property taxable for district purposes, in accordance with Section 55 of the Metropolitan Water District Act (Metropolitan 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 (CRA) 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 District is one of MWDOC's 28 member agencies receiving imported water from MWDOC. The District's location within MWDOC's service area is shown on Figure 2-3.

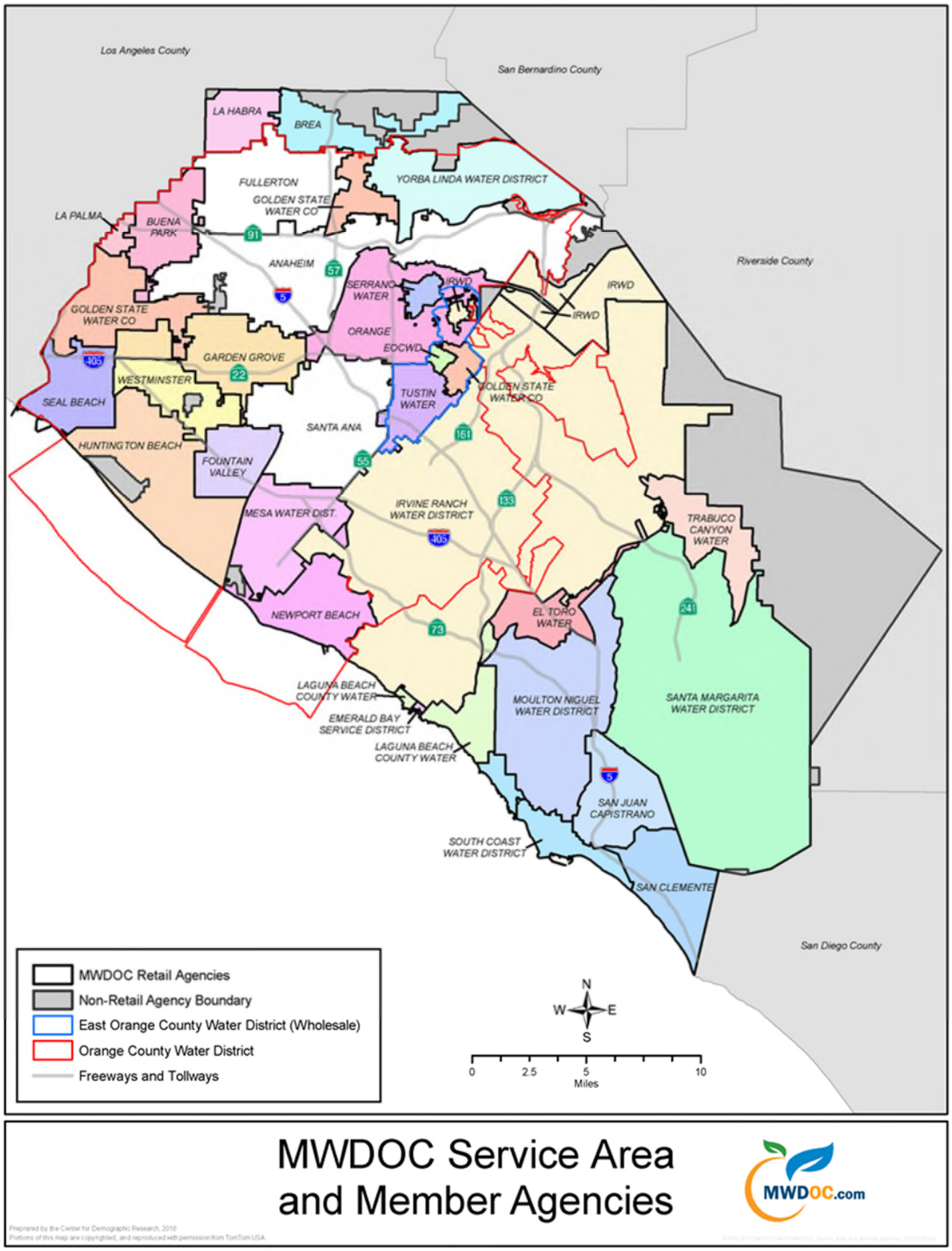

Figure 2-3: Regional Location of the District and Other MWDOC Member Agencies

2.3 Relationship with Wholesaler Water Shortage Planning

The WSCP is designed to be consistent with MET's Water Shortage and Demand Management (WSDM) Plan, MWDOC's Water Supply Allocation Plan (WSAP), and other emergency planning efforts as described below. MWDOC's WSAP is integral to the WSCP's shortage response strategy in the event that MET or MWDOC 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 provides 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 in 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 2-4 gives a summary of actions under each surplus and shortage stages 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, 1999).

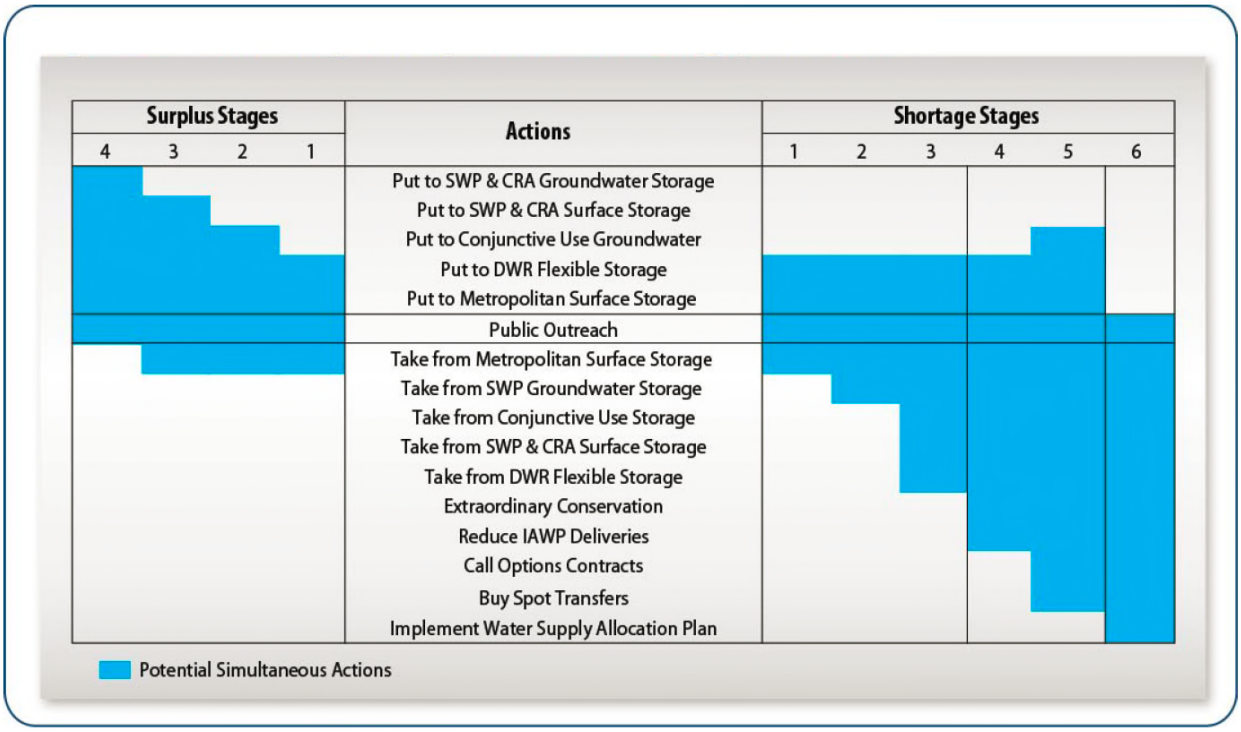

Figure 2-4: Resource Stages, Anticipated Actions, and Supply Declarations
Source: MET, 1999.

MET's Board of Directors adopted a Water Supply Condition Framework in June 2008 in order 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 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, 2021a).

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 is the implementation of its WSAP.

MET's Board of Directors originally adopted the WSAP in February 2008 to fairly distribute a limited amount of water supply and applies it through a detailed methodology to reflect a range of local conditions and needs of the region's retail water consumers (MET, 2021a).

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 2020 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% 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) based 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.

In order to implement the WSAP, MET's Board of Directors makes a determination on the level of the regional shortage, based on specific criteria, typically in April. The criteria used by MET includes current levels of storage, estimated water supplies 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, 2021b).

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 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, 2021a).

Although MET's 2020 UWMP forecasts that MET will be able to meet projected imported demands throughout the projected period from 2025 to 2045, uncertainty in supply conditions can result in MET needing to implement its WSAP to preserve dry-year storage and curtail demands (MET, 2021b).

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 28 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 agency's 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 based 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 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 MWDOC amount with MET. Surcharge funds collected by MET will be invested in its Water Management Fund, which is used to 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 will MWDOC announce allocation to its retail agencies.

3 WATER SHORTAGE CONTINGENCY PREPAREDNESS AND RESPONSE PLANNING

The District's WSCP is a detailed guide of how the District intends to act in the case of an actual water shortage condition. 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 will 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 District'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 District with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage. In the 2020 UWMP, the District conducted a Water Reliability Assessment to compare the total water supply sources available to the water supplier with long-term projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years (EOCWD, 2021).

The District 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. An analysis of both assessments determined that the District is capable of meeting all customers' demands from 2021 through 2045 for a normal year, a single dry year, and a drought lasting five consecutive years with significant imported water supplemental drought supplies from MWDOC/MET and ongoing conservation program efforts. The District receives the majority of its water supply from imported water from MWDOC, and the District's Retail Zone also receives a supplemental local supply of groundwater from the OC Basin that adds reliability.

As a result, there is no projected shortage condition due to drought that will trigger customer demand reduction actions until MWDOC notifies the District of insufficient imported supplies. More information is available in the District's 2020 UWMP Sections 6 and 7 (EOCWD, 2021).

3.2 Annual Water Supply and Demand Assessment Procedures

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

The District must include in its WSCP the procedures used for conducting an Annual Assessment. The Annual Assessment is a determination of the near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage level response actions in the current calendar year. This determination is based on

information available to the District at the time of the analysis. Starting in 2022, the Annual Assessment will be due by July 1 of every year.

This section documents the decision-making process required for formal approval of the District's Annual Assessment 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 District will take to formally approve the Annual Assessment determination of water supply reliability each year.

3.2.1.1 District Steps to Approve the Annual Assessment Determination

The Annual Assessment will be predicated on the OCWD Basin Production Percentage (BPP) and on MWDOCs Annual Assessment outcomes.

The District is supplied groundwater from 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 OCWD on an annual basis in by OCWD Board of Directors. Based on the projected water demand and water modeled water supply, over the long-term, OCWD anticipates sustainably supporting a BPP of 85%; 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 Annual Assessment.

The District's Wholesale Zone relies entirely on purchases of imported water from MWDOC, while the District's Retail Zone'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 Annual Assessment for its member agencies' review from which the District 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 Annual Assessment would 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 District to incorporate into the Annual Assessment.

The District General Manager will be responsible for approving the Annual Assessment in years when no shortage is identified. In years where a shortage is identified, the Annual Assessment will be presented to Board of Directors and formally submit to DWR prior to the July 1 deadline.

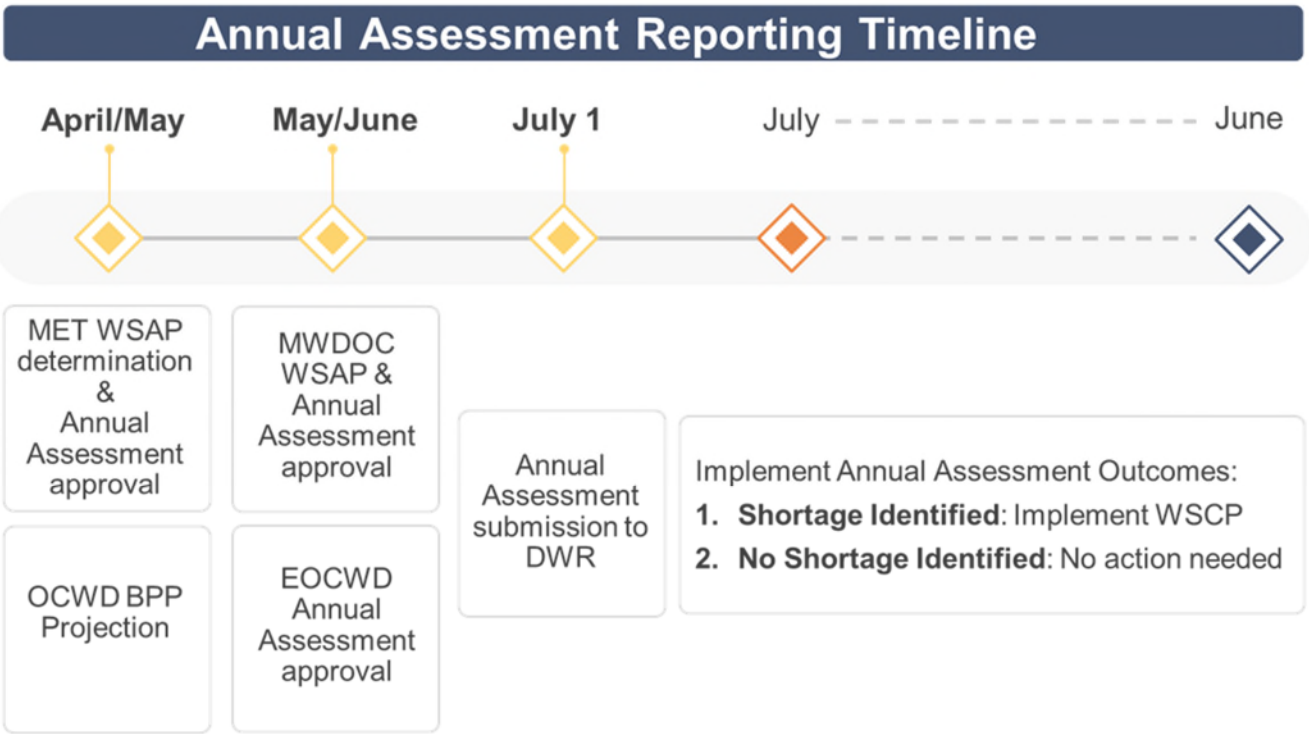

Figure 3-1: Annual Assessment Reporting Timeline

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 District will evaluate water supply reliability for the current year and one dry year for the purpose of the Annual Assessment. The Annual Assessment 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 3-2. 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.

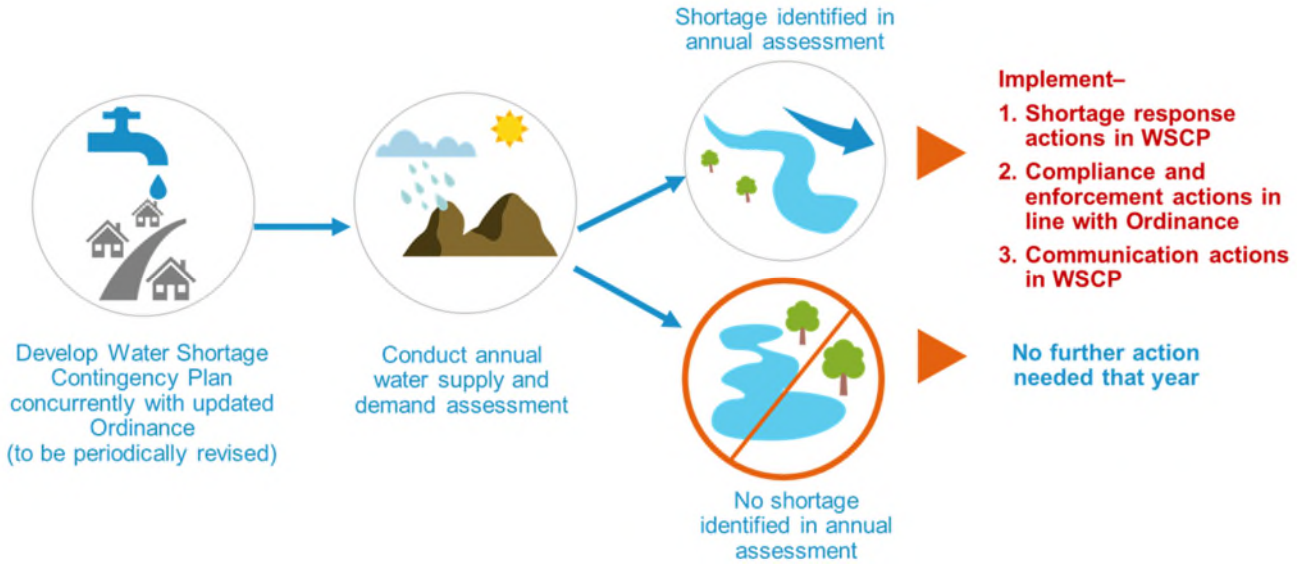

Figure 3-2: Water Shortage Contingency Plan Annual Assessment Framework

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 District 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 District's Annual Assessment was based on the District'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 District. 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 10-25% until the system is repaired. However, MET has taken proactive steps to handle such disruption, such as constructing DVL, which mitigates potential impacts. DVL, along with other local reservoirs, can store a six to twelve-month supply of emergency water (MET, 2021b).

3.2.2.3 Water Supply

As detailed in the District's 2020 UWMP, the District is both a wholesale supplier and a retail supplier. The District meets all of its demands with a combination of local groundwater from the OC Basin and imported water from MWDOC/MET. In fiscal year (FY) 2019-20, the District's Wholesale Zone relied on 100% imported water, and the

Retail Zone relied on approximately 99% imported water and 1% groundwater. It is projected that by 2045, the Retail Zone's water supply portfolio will change to approximately 85% groundwater and 15% imported water, reflecting the increase in OCWD's BPP to 85% beginning in 2025 (EOCWD, 2021).

3.2.2.4 Unconstrained Customer Demand

The WSCP and Annual Assessment 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 demands.

The District'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 2020-21 through FY 2024-25 (EOCWD, 2021). Water demands in a five-year consecutive drought are calculated as a six percent increase in water demand above a normal year for each year of the drought, without compounding increases (CDM Smith, 2021).

3.2.2.5 Planned Water Use for Current Year Considering Dry Subsequent Year

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

The Annual Assessment will include two separate estimates of the District's annual water supply and unconstrained demand using: 1) current year conditions, and 2) assumed dry year conditions. Accordingly, the Annual Assessment'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 District will use its discretion to refine and update its assumptions for a dry year scenarios in each Annual Assessment as information becomes available and in accordance with best management practices (BMPs).

Supply and demand analyses for the single-dry year case was based on conditions affecting the SWP as this supply availability fluctuates the most among MET's, and therefore MWDOC and the District's, sources of supply. FY 2013-14 was the single driest year for SWP supplies with an allocation of 5% to Municipal and Industrial (M&I) uses. Unique to this year, the 5% SWP allocation was later reduced to 0%, before ending up at its final allocation of 5%, highlighting the stressed water supplies for the year. Furthermore, on January 17, 2014 Governor Brown declared the drought State of Emergency citing 2014 as the driest year in California history. Additionally, within MWDOC's service area, precipitation for FY 2013-14 was the second lowest on record, with 4.37 inches of rain, significantly impacting water demands.

The water demand forecasting model developed for the Demand Forecast TM 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 (average of FY 2017-18 and FY 2018-19). For a single dry year condition (FY 2013-14), the model projects a 6% increase in demand for the Orange County Groundwater Basin area where the District's service area is located (CDM Smith, 2021). Detailed information of the model is included in the District's 2020 UWMP.

The District has documented that it is 100% reliable for single dry year demands from 2025 through 2045 with a demand increase of 6% from normal demand with significant reserves held by MET, local groundwater supplies, and water use efficiency (EOCWD, 2021).

3.2.2.6 Infrastructure Considerations

The Annual Assessment 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 District, 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 District, as of July 2021, there are no foreseen near-term infrastructure issues that would impact supply.

3.2.2.7 Other Factors

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

The District's local groundwater supply wells are impacted by PFAS. Construction of a treatment plant for PFAS removal is planned for completion in 2022. 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.

PFAS are of particular concern for groundwater quality, and since the summer of 2019, DDW requires testing for PFAS compounds in some groundwater production wells in the OCWD area. In February 2020, the DDW lowered its Response Levels (RL) for PFOA and PFOS to 10 and 40 parts per trillion (ppt), respectively. The DDW recommends Producers not serve any water exceeding the RL – effectively making the RL an interim Maximum Contaminant Level (MCL) while DDW undertakes administrative action to set a MCL. In response to DDW's issuance of the revised RL, as of December 2020, approximately 45 wells in the OCWD service area have been temporarily turned off until treatment systems can be constructed. As additional wells are tested, OCWD expects this figure may increase to at least 70 to 80 wells. The state has begun the process of establishing MCLs for PFOA and PFOS and anticipates these MCLs to be in effect by the Fall of 2023. OCWD anticipates the MCLs will be set at or below the RLs.

In April 2020, OCWD as the groundwater basin manager, executed an agreement with the impacted Producers to fund and construct the necessary treatment systems for production wells impacted by PFAS compounds. The PFAS treatment projects includes the design, permitting, construction, and operation of PFAS removal systems

for impacted Producer production wells. Each well treatment system will be evaluated for use with either granular activated carbon or ion exchange for the removal of PFAS compounds. These treatment systems utilize vessels in a lead-lag configuration to remove PFOA and PFOS to less than 2 ppt (the current non-detect limit). Use of these PFAS treatment systems are designed to ensure the groundwater supplied by Producer wells can be served in compliance with current and future PFAS regulations. With financial assistance from OCWD, the Producers will operate and maintain the new treatment systems once they are constructed.

To minimize expenses and provide maximum protection to the public water supply, OCWD initiated design, permitting, and construction of the PFAS treatment projects on a schedule that allows rapid deployment of treatment systems. Construction contracts were awarded for treatment systems for production wells in the City of Fullerton and Serrano Water District in Year 2020. Additional construction contracts will likely be awarded in the first and second quarters of 2021. OCWD expects the treatment systems to be constructed for most of the initial 45 wells above the RL within the next 2 to 3 years.

As additional data are collected and new wells experience PFAS detections at or near the current RL, and/or above a future MCL, and are turned off, OCWD will continue to partner with the affected Producers and take action to design and construct necessary treatment systems to bring the impacted wells back online as quickly as possible.

Groundwater production in FY 2019-20 was expected to be approximately 325,000 acre-feet (AF) but declined to 286,550 AF primarily due to PFAS impacted wells being turned off around February 2020. OCWD expects groundwater production to be in the area of 245,000 AF in FY 2020-21 due to the currently idled wells and additional wells being impacted by PFAS and turned off. As PFAS treatment systems are constructed, OCWD expects total annual groundwater production to slowly increase back to normal levels (310,000 to 330,000 AF) (OCWD, 2020).

3.3 Six Standard Water Shortage Levels

Per Water Code Section 10632 (a)(3)(A), the District must include the six standard water shortage levels that represent shortages from the normal reliability as determined in the Annual Assessment. 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% 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 3-1).

Table 3-1: Water Shortage Contingency Plan Levels

Submittal Table 8-1 Water Shortage Contingency Plan Levels		
Shortage Level	**Percent Shortage Range**	**Shortage Response Actions**
0	0% (Normal)	A Level 0 Water Supply Shortage –Condition exists when the District notifies its water users that no supply reductions are anticipated in this year. The District proceeds with planned water efficiency best practices to support consumer demand reduction in line with state mandated requirements and local District goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in the District's Water Shortage Response Ordinance.
1	Up to 10%	A Level 1 Water Supply Shortage – Condition exists when the District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 10% is necessary to make more efficient use of water and respond to existing water conditions. The District shall implement the mandatory Level 1 conservation measures identified in this WSCP. The type of event that may prompt the District to declare a Level 1 Water Supply Shortage may include, among other factors, a finding that its wholesale water provider calls for extraordinary water conservation.
2	11% to 20%	A Level 2 Water Supply Shortage – Condition exists when the District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 20% is necessary to make more efficient use of water and respond to existing water conditions. Upon declaration of a Level 2 Water Supply Shortage condition, the District shall implement the mandatory Level 2 conservation measures identified in this WSCP.
3	21% to 30%	A Level 3 Water Supply Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 30% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
4	31% to 40%	A Level 4 Water Supply Shortage - Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 40% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water

Submittal Table 8-1 Water Shortage Contingency Plan Levels		
Shortage Level	**Percent Shortage Range**	**Shortage Response Actions**
		Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
5	41% to 50%	A Level 5 Water Supply Shortage - Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
6	>50%	A Level 6 Water Supply Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that greater than 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
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 District 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 Demand Reduction

The demand reduction measures that would be implemented to address shortage levels are described in DWR Table 8-2 (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.

3.4.2 Supply Augmentation

The supply augmentation actions are described in DWR Table 8-3 (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 District through MWDOC and MET. The District relies on MET's reliability portfolio of water supply programs including existing water transfers, storage and exchange agreements to supplement gaps in the District's supply/demand balance. MET has developed significant storage capacity (over 5 million 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 District, has 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 District has the ability to augment its supply to reduce the shortage gap by up to 100% 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.

3.4.3 Operational Changes

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. The District will consider their operational procedures when it completes its Annual Assessment 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

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 District has identified additional mandatory restrictions in the Water Conservation Ordinance (Appendix B). The District intends to update any mandatory restrictions in a subsequently adopted ordinance which will supersede the existing ordinance.

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 and the Water Emergency Response Organization of Orange County (WEROC)'s Emergency Response 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 was established with the creation of an indemnification agreement between 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 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 District.

As a member of WEROC, the District 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 District 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 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 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 that can result from both natural and man-made causes, and can be activated through automatic, manual, or standby for activation.

WEROC recognized 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 to 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. MWDOC's HMP outlines threats and identifies mitigation projects.

The EOC Action Plans (EAP) 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 which results in a catastrophic water shortage, the District will declare a water shortage condition of up to Level 6 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, 2018).

3.4.5.3 East Orange County Water District Emergency Response Plan

The District 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 aqueducts, pipelines and other facilities associated with delivering the supplies to the region. Additionally, the infrastructure in place to deliver supplies are susceptible to damage from earthquakes and other disasters.

In lieu of conducting their own seismic risk assessment, the District has included the local hazard mitigation plan or multi-hazard mitigation plan that is required under the federal Disaster Mitigation Act of 2000 (Public Law 106-390).

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 are susceptible to damage from earthquakes and other disasters.

MWDOC's HMP identified that the overarching goals of the HMP were the same for all of its member agencies, which include:

- Goal 1: Minimize vulnerabilities of critical infrastructure to minimize damages and loss of life and injury to human life caused by hazards.
- Goal 2: Minimize security risks to water and wastewater infrastructure.
- Goal 3: Minimize interruption to water and wastewater utilities.
- Goal 4: Improve public outreach, awareness, education, and preparedness for hazards in order to increase community resilience.
- Goal 5: Eliminate or minimize wastewater spills and overflows.
- Goal 6: Protect water quality and supply, critical aquatic resources, and habitat to ensure a safe water supply.

- Goal 7: Strengthen Emergency Response Services to ensure preparedness, response, and recovery during any major or multi-hazard event.

MWDOC's HMP evaluates hazards applicable to all jurisdictions in its entire planning area, prioritized based on probability, location, maximum probable extent, and secondary impacts. The identification of hazards is highly dependent on the location of facilities within the District's jurisdiction and takes into consideration the history of the hazard and associated damage, information provided by agencies specializing in a specific hazard, and relies upon the District's expertise and knowledge.

Earthquake fault rupture and seismic hazards, including ground shaking and liquefaction, are among the highest ranked hazards to the region as a whole because of its long history of earthquakes, with some resulting in considerable damage. A significant earthquake along one of the major faults could cause substantial casualties, extensive damage to infrastructure, fires, damages and outages of water and wastewater facilities, and other threats to life and property.

Nearly all of Orange County is at risk of moderate to extreme ground shaking, with liquefaction possible throughout much of Orange County but the most extensive liquefaction zones occur in coastal areas. Based on the amount of seismic activity that occurs within the region, there is no doubt that communities within Orange County will continue to experience future earthquake events, and it is a reasonable assumption that a major event will occur within a 30-year timeframe.

The mitigation actions identify the hazard, proposed mitigation action, location/facility, local planning mechanism, risk, cost, timeframe, possible funding sources, status, and status rationale, as applicable. Mitigation actions for MWDOC's member agencies for seismic risks may include (MWDOC, 2019):

- Secure above ground assets in all buildings, booster stations, pressure reducing stations, emergency interties, water systems, and pipelines.
- Conduct assessment of infrastructure to ensure seismic retrofitting is in place.
- Replace aging infrastructure throughout the District.
- Install backup power for critical facilities to ensure operability during emergency events.
- Enhance emergency operability by implementing communication infrastructure improvements.

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 Table 8-2 (Appendix A). To the extent feasible, the District 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. Per the Water Code Section 10632 (a)(5), the District 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 annual water supply and demand assessment described pursuant to Section 10632.1; any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand

assessment described pursuant to Section 10632.1; and any other relevant communications. The District's Water Shortage Communication Plan is documented in Appendix C.

3.6 Compliance and Enforcement

Per the Water Code Section 10632 (a)(6), the District has defined customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions. Procedures to ensure customer compliance are described in Section 3.5 and customer enforcement, appeal, and exemption procedures are defined in the Water Conservation Ordinance (Appendix B). The District intends to update any enforcement procedures in a subsequently adopted ordinance which will supersede the existing ordinance.

3.7 Legal Authorities

Per Water Code Section 10632 (a)(7)(A), the District has provided a description of the legal authorities that empower the District to implement and enforce its shortage response in Water Conservation Ordinance (Appendix B). The District 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 District 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 District 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 3-2 identifies the contacts for all cities or counties for which the Supplier provides service in the WSCP, along with developed coordination protocols, 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 3-2: Agency Contacts and Coordination Protocols

Contact	Agency	Coordination Protocols
City Council/Manager Water Services Manager	City of Tustin	Letter Call/email
City Council/Manager Water Services Manager	City of Orange	Letter Call/email
Board of Directors/General Manager Water Operations Manager	Irvine Ranch Water District	Letter Call/email

Contact	Agency	Coordination Protocols
General Manager	Golden State Water Company	Call/email/letter
Board of Supervisors	County of Orange	Letter

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 District 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 District 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 District 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 Water Conservation Ordinance (Appendix B).

However, there are significant fixed costs associated with maintaining a minimal level of service. The District 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 District may use reserves. If necessary, the District 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, evaluate staffing levels, implement a drought surcharge, and/or make adjustments to its water rate structure.

Based on current water rates, a volumetric cutback of 50% and above of water sales may lead to a range of reduction 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 District has set aside reserve funding to mitigate short-term water shortage situation.

3.9 Monitoring and Reporting

Per Water Code Section 10632(a)(9), the District 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 District will follow implementation of those levels as appropriate based on the District'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 District 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 District to be aware of import and groundwater use on a timely basis as a result of specific actions taken responding to the District's WSCP.

3.10 WSCP Refinement Procedures

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

The District's WSCP is prepared and implemented as an adaptive management plan. The District 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 District staff, or suggested by customers or other interested parties, the District 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 Annual Assessment each year, District staff will routinely consider the functionality the overall WSCP and will prepare recommendations for District Board of Directors if changes are found to be needed.

3.11 Special Water Feature Distinction

Per Water Code Section 10632 (b), the District 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 Water Conservation Ordinance (Appendix B).

3.12 Plan Adoption, Submittal, and Availability

Per Water Code Section 10632 (a)(c), the District provided notice of the availability of the draft 2020 UWMP and draft 2020 WSCP and notice of the public hearing to consider adoption of the WSCP. The public review drafts of the 2020 UWMP and the 2020 WSCP were posted prominently on the District's website in advance of the public hearing on June 17, 2021. Copies of the draft WSCP were also made available for public inspection at the District 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 D.

The District held the public hearing for the draft 2020 UWMP and draft WSCP on June 17, 2021, at the District Board meeting. The District Board reviewed and approved the 2020 UWMP and the WSCP at its June 17, 2021 meeting after the public hearing. See Appendix E for the resolution approving the WSCP.

By July 1, 2021, the District's adopted 2020 UWMP and WSCP was filed with DWR, California State Library, and the County of Orange. The District 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 District will make any amendments in its adopted WSCP, as required and directed by DWR.

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

4 REFERENCES

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Appendix A

DWR Submittal Tables

Table 8-1: Water Shortage Contingency Plan Levels

Table 8-2: Demand Reduction Actions

Table 8-3: Supply Augmentation and Other Actions

Submittal Table 8-1
Water Shortage Contingency Plan Levels

Shortage Level	Percent Shortage Range	Shortage Response Actions (*Narrative description*)
0	0% (Normal)	A Level 0 Water Supply Shortage –Condition exists when the District notifies its water users that no supply reductions are anticipated in this year. The District proceeds with planned water efficiency best practices to support consumer demand reduction in line with state mandated requirements and local District goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in the District's Water Shortage Response Ordinance.
1	Up to 10%	A Level 1 Water Supply Shortage – Condition exists when the District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 10% is necessary to make more efficient use of water and respond to existing water conditions. The District shall implement the mandatory Level 1 conservation measures identified in this WSCP. The type of event that may prompt the District to declare a Level 1 Water Supply Shortage may include, among other factors, a finding that its wholesale water provider calls for extraordinary water conservation.
2	11% to 20%	A Level 2 Water Supply Shortage – Condition exists when the District notifies its water users that due to drought or other supply reductions, a consumer demand reduction of up to 20% is necessary to make more efficient use of water and respond to existing water conditions. Upon declaration of a Level 2 Water Supply Shortage condition, the District shall implement the mandatory Level 2 conservation measures identified in this WSCP.
3	21% to 30%	A Level 3 Water Supply Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 30% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
4	31% to 40%	A Level 4 Water Supply Shortage - Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 40% consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
5	41% to 50%	A Level 5 Water Supply Shortage - Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that up to 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.
6	>50%	A Level 6 Water Supply Shortage – Condition exists when the District declares a water shortage emergency condition pursuant to California Water Code section 350 and notifies its residents and businesses that greater than 50% or more consumer demand reduction is required to ensure sufficient supplies for human consumption, sanitation and fire protection. The District must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.

NOTES:

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
Permanent Year-Round	Landscape - Other landscape restriction or prohibition	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	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 ten (10) minutes watering per day per station. This does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems and weather-based controllers or stream rotor sprinklers that meet a seventy percent efficiency standard.	Yes
Permanent Year-Round	Landscape - Restrict or prohibit runoff from landscape irrigation	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	-	Yes
Permanent Year-Round	Landscape - Other landscape restriction or prohibition	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	New and existing residential automated irrigation systems must be equipped with rain sensors that shut off the system when it rains, or smart controllers or evapo-transpiration sensors that use weather-based data to set efficient watering schedules.	Yes
Permanent Year-Round	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.	Leaks, breaks, and other malfunctions must be corrected in no more than three (3) days of receiving notice from the District.	Yes
Permanent Year-Round	Other - Prohibit use of potable water for washing hard surfaces	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	This restriction does not apply to situations where it is necessary to wash surfaces to alleviate safety or sanitary hazards. Only then may the surface be washed with a hand-held bucket or similar container, a hand-held hose equipped with a positive shut-off valve, or a low-volume high-pressure cleaning machine or "water broom."	Yes
Permanent Year-Round	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	-	Yes

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
Permanent Year-Round	Water Features - Restrict water use for decorative water features, such as fountains	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	All decorative water fountains and water features must recirculate water or users must secure a waiver from the District.	Yes
Permanent Year-Round	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No person may use water from any fire hydrant for any purpose other than fire suppression or emergency aid without first requesting and posting the appropriate fees at the District or obtaining a hydrant meter to record all water consumption for a specified project.	Yes
Permanent Year-Round	CII - Restaurants may only serve water upon request	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	-	Yes
Permanent Year-Round	CII - Lodging establishment must offer opt out of linen service	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	-	Yes
Permanent Year-Round	CII - Commercial kitchens required to use pre-rinse spray valves	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	-	Yes
Permanent Year-Round	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Installation of single pass cooling systems is prohibited in buildings requesting new water service.	Yes
Permanent Year-Round	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Installation of non-re-circulating water systems is prohibited in new commercial conveyor car wash and new commercial laundry operations.	Yes
Permanent Year-Round	Other - Prohibit use of potable water for construction and dust control	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	-	Yes
1	Expand Public Information Campaign	5%	Community Outreach and Messaging (Expand Public Information Campaign to reflect Level 1 Shortage Response Actions)	No

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
1	Landscape - Limit landscape irrigation to specific days	10%	Watering or irrigating of lawn, landscape, or other vegetated area with potable water is limited to four (4) days per week from the months of April to October on a schedule established a posted by the District. 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 two (2) days per week on a schedule established and posted by the District. An exception is made for the use of hand-water shut-off nozzle or device, watering with a hand-held bucket or similar container, landscape irrigation systems that exclusively use very low-flow drip, and for fruit trees and vegetable gardens.	Yes
2	Expand Public Information Campaign	5%	Community Outreach and Messaging (Expand Public Information Campaign to reflect Level 2 Shortage Response Actions)	No
2	Landscape - Limit landscape irrigation to specific days	10%	No more than three (3) days per week from April – October and no more than two (2) days per week from November – March. This applies to lawns, landscaping and all other vegetated areas. The District will establish and post the new watering schedules.	Yes
3	Expand Public Information Campaign	3%	Community Outreach and Messaging (Expand Public Information Campaign to reflect Level 3 Shortage Response Actions)	No
3	Landscape - Limit landscape irrigation to specific days	10%	Watering lawns, landscaping and other vegetated areas is limited to no more than two (2) days per week from April to October. The number of watering days permitted from November to March will be no more than one (1) day per week.	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%	Leaks, breaks, and other malfunctions must be corrected in no more than two (2) days of receiving notice from the District.	Yes

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
3	Other water feature or swimming pool restriction	1%	Filling or refilling ornamental lakes and ponds is prohibited except for those that sustain aquatic life provided such life is of significant value and was actively managed in the water feature prior to declaring the shortage.	Yes
3	Other water feature or swimming pool restriction	1%	Filling or refilling uncovered residential swimming pools or uncovered outdoor spas is prohibited. Refilling of covered pools and/or outdoor spas of up to one (1) foot of water per week is allowed. This is exempt for individuals for health reasons.	Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	1%	-	Yes
3	Other	5%	Other Prohibited Uses: The District may implement other prohibited water uses as deemed necessary, following notification of customers	
4	Expand Public Information Campaign	5%	Community Outreach and Messaging (Expand Public Information Campaign to reflect Level 4 Shortage Response Actions)	No
4	Landscape - Limit landscape irrigation to specific days	10%	Watering lawns, landscaping and other vegetated areas is limited to no more than one (1) day per week from April to October. The number of watering days permitted from November to March remains the same at no more than one (1) day per week.	Yes
4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%	Leaks, breaks, and other malfunctions must be corrected in no more than one (1) days of receiving notice from the District.	Yes

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
4	Other	2%	No new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no statements of immediate ability to serve or provide potable water service will be issued except under the following circumstances: 1) District-approved plans and specifications have been issued, 2) a valid, unexpired building permit has been issued for the project, 3) the project is necessary to protect the public's health, safety, and welfare, or 4) the applicant provides substantial evidence of an enforceable commitment that water demand for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the District.	Yes
5	Expand Public Information Campaign	5%	Community Outreach and Messaging (Expand Public Information Campaign to reflect Level 5 Shortage Response Actions)	No
5	Other	10%	The District Board of Directors, at its sole discretion, may establish water allocations or water budgets for properties served by the District -- using a method that does not penalize persons for either the implementation of the conservation method or installation of water-saving devices and includes the User's Base Consumption. Following the effective date of a water allocation or budget program, any person using water in excess of the allocation or budget will be subject to a penalty as determined by the District rate schedule. The penalty for excess water use will be cumulative to any other remedy or penalty imposed for violation of this Ordinance.	Yes

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
5	Implement or Modify Drought Rate Structure or Surcharge	5%	Increased Water Usage Rates: The District Board of Directors, at its sole discretion, may increase water usage rates, by an amount deemed necessary, as determined by the District's rate schedule.	Yes
5	CII - Other CII restriction or prohibition	2%	Percentage-Use Reduction for Commercial Customer: The District Board of Directors, at its sole discretion, may require commercial customers to reduce water use by a certain percentage, as determined by the District.	Yes
5	Other	5%	Customers with high annual water usage. During Level 1, Level 2 or Level 3 Water Shortages or Emergencies, the District Board of Directors, at its sole discretion and by written request, may require residential, commercial and/or public customers using five thousand (5,000) or more billing units per year to submit a Water Conservation Plan to the District and to submit quarterly progress reports on such plan. The conservation plan must make recommendations for increased water savings, including increased use of recycled water based on feasibility. Quarterly progress reports must include status on implementation of recommendations.	Yes
6	Expand Public Information Campaign	5%	Community Outreach and Messaging (Expand Public Information Campaign to reflect Level 6 Shortage Response Actions)	No
6	Landscape - Prohibit all landscape irrigation	5%	All irrigation is prohibited.	Yes
6	Other	5%	Other Prohibited Uses: The District may implement other prohibited water uses as deemed necessary, following notification of customers	Yes

Submittal Table 8-2: Demand Reduction Actions				
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
6	Other	0-70%	Water use for public health and safety purposes only.	Yes
NOTES:				

Submittal Table 8-3: Supply Augmentation and Other Actions			
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? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*
1 through 6	Other Purchases	0 - 100%	Additional imported water purchases through MWDOC
1 through 6	Other Purchases	0 - 100%	Additional groundwater pumping in the Orange County Groundwater Basin
NOTES:			

Appendix B

Water Conservation Ordinance

Below is the weblink to the current ordinance (last accessed on May 28, 2021)
https://www.eocwd.com/conservation

Appendix C

Water Shortage Communication Plan

1 Communication Protocol

Public communication is an ongoing activity where the purpose, audience, message, tools, and channels may change at any given moment. In the context of water shortage response, the purpose may be an immediate emergency water shortage situation, such as may result from an earthquake, or a longer-term emergency shortage condition, such as may result from a drought. In a catastrophic emergency under crisis conditions, the District will activate the communication protocol detailed in the EOCWD American Water Infrastructure Act Risk and Resilience Assessment and Emergency Response Plan (ERP). In a longer-term water shortage situation, the District will implement the procedures identified in this Communication Plan.

Timely and effective communication is a key element of the WSCP implementation. Per CWC Section 10632 (a)(5), the District has established communication protocols and procedures to inform stakeholders regarding any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1; any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1; and any other relevant communications.

Emergency Response Plan Communication

The ERP defines the actions to be taken by District 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 local and regional water and wastewater utilities. The ERP includes activation notification protocols that will be used to contact partner agencies to inform them of the situation, activation status of the ERP, known damage or impacts, or resource needs. The ERP is a standalone document that is reviewed annually and updated every 5 years. Refer to the ERP for full details.

EOCWD Water Shortage Communication Plan

The Water Shortage Communication Plan serves as the baseline understanding for how EOCWD will provide information and value to its various stakeholders, partners, and employees during normal conditions where water efficiency is an everyday goal for water supply reliability. In times of water shortage, this Communications Plan can be enhanced for the purposes of a Water Shortage Communication Plan. The EOCWD Operations Department works to elevate public awareness and participation in water efficiency so, in the event of a water shortage, the community is aware of the importance of response actions and can identify as an active participant in the EOCWD demand reduction target levels. The Communications Plan is designed to provide transparent, reliable, and accurate information to the public and collaborating agencies by identifying goals and objectives for each shortage level and outlining the appropriate communication interface tools and implementation schedule to for effective communication to assist customers with curtailing their water use.

Goals & Objectives

The goal of the EOCWD Water Shortage Communication Plan is to create a local awareness of water shortage conditions and to encourage water efficiency from all citizens. The Water Shortage Communication Plan objectives further refine the focus of the program goal to achieve a desired outcome at shortage level. As a water shortage condition escalates, the objectives of the Communication Plan also escalate to ensure progress toward water supply reliability. The defined objectives for each Water Shortage level will determine the information that is communicated at each level.

Target Audiences

EOCWD reviewed its water demand and customer class profile to develop a communication plan to be the most effective with its unique customer profile and water demands. Based on the 2025 projections, EOCWD single family water use is expected to account for 95% of the total water demand. Multifamily and CII (commercial, industrial, and institutional) accounts are projected to account for 2% and 3% of total demand, respectively. By understanding the local customer and water use profile, EOCWD can implement a Water Shortage Communication Plan that leverages the appropriate communications tools to reach the target audience most effectively during a water shortage.

EOCWD has further refined their customer categories to identify the following target audiences for communication:

Retail Audience
Retail Customers
Customers Starting/Stopping Service
Customers paying water bill
Conservation Advocates
California-friendly landscape providers and customers
Parents and teachers
District-wide Audience
Residents of Orange, Tustin and unincorporated areas
Service Recipients
Employees
Board of Directors
Citizens Advisory Group
Elected Officials (local, county, state, federal)
Orange City staff
Tustin City staff
County of Orange staff
Advocacy and Community Organizations
North Tustin Advisory Council
Foothills Community Association
Orange Chamber of Commerce
Tustin Chamber of Commerce

Communication Channels

During a normal and water shortage condition, EOCWD will utilize a comprehensive set of communication interface tools to engage water customers, including:

- Water Bill communications
- Website Information on the “EOCWD” homepage
- Social Media outreach
- Media Coverage (print and electronic)
- Publications and Handouts
- Presence at local events
- Board President Public Service Announcements
- Direct mailings to homes and businesses
- School education programs

Communication Tactics and Implementation Schedule

The EOCWD understands their responsibility to be transparent, accountable, have a positive impact on the community, and provide actionable guidance in times of water shortage. Carefully developed and executed communication tactics and implementation schedule will establish trust and credibility for all stakeholders by clearly communicating expectations and responsibilities. Below is a description of the Water Shortage Communication Plan Tactics. These tactics will be implemented according to the schedule and objectives defined below.

This Water Shortage Communication Plan is designed to have a standard set of Tactics systematically align to the current Water Shortage Level. EOCWD has developed the EOCWD Outreach Tier system, which is a three-tiered system to align with each Shortage Level, as defined in Section 3.4.1 of the WSCP. Communication Tactics, messaging and frequency of messaging will ramp up with the increase in Shortage Level. EOCWD’s three-tiered system is shown below. Under the EOCWD Outreach Tier system, the “Efficient Water Use” tier aligns with Shortage Level 0, the “Reduced Water Use” tier aligns with Shortage Levels 1-3 and the “Severe Water Shortage” tier aligns with Shortage Levels 4-6.

In addition, EOCWD will ensure that messaging will align with those being delivered by regional water agencies, such as MWDOC, OCWD and Metropolitan Water District of Southern California.

EOCWD Outreach Tier System

Communication Tactics

Website

- District website: Provide water efficiency information and resources on District website including water shortage level status.
- Water Shortage Indicator: develop a permanent image on the webpage that identifies water shortage level status. Image will be updated promptly when status level changes and will link to additional shortage level information. The Water Shortage Indicator aligns with the EOCWD Outreach Tier System, describe above.
- Promote https://www.bewaterwise.com website: Provide information and link directing viewers to Metropolitan Water District, MWDOC incentive programs.

Social Media

- Facebook: post water efficiency information and shortage level status on EOCWD Facebook page. This may include unique EOCWD content or reposting of regional messages and images.
- Twitter: Tweet water efficiency information and water shortage level status on EOCWD account. This may include unique EOCWD content or reposting of regional messages and images.
- Instagram: Post water efficiency information and shortage level status on EOCWD's Instagram account.

Digital and Print Media

- Flyers/Signage/Brochures: Create and provide informational materials on water efficiency actions, local/regional water resource awareness, and water shortage level status.
- Consumer Confidence Reports (CCRs): provide water efficiency in CCR including water shortage level information.

Media Relations

- News stories/News Releases/Newsletters: Provide news releases with information regarding water shortage level and expected trends. Local media targets include the Foothills Sentry and the Orange County Register.

Community Outreach

- Public Events (when permitted by state and local jurisdictions): Promote water efficiency and water awareness at community events within targeted neighborhoods.
- Promotional giveaways: Provide promotional water efficiency devices or messaging materials (i.e. hats, stickers, hose nozzles, etc.) promoting water efficiency and response.

Educational Outreach

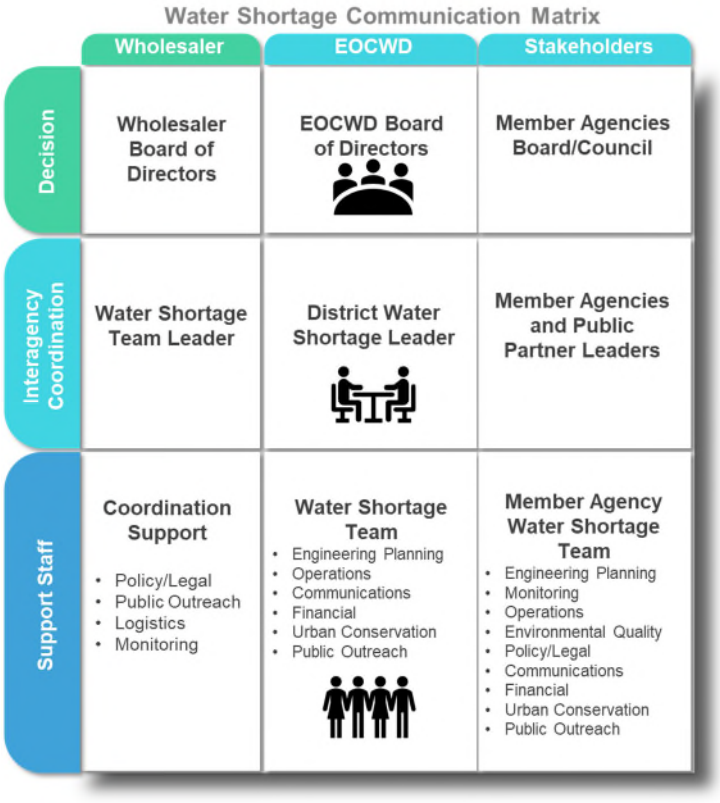
- School Programs: Provide water resource and efficiency presentations for local schools, including information and response to water shortage levels, through MWDOC.

District Water Efficiency Programs

- Rebate/Incentive Programs: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase.
- Turf Removal: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase.

- *Direct Customer Communication* Billing Inserts: Include billing inserts in water utility billings including water shortage level status and response actions.
- Water Use notifications: Include a comparison of actual water use compared to allocated water use and information regarding penalties.

- *Partnerships/Regional Initiatives*
- MET/MWODOC: Utilize regional messaging programs, messages, and resources to communicate with local water users.
- Coordinate messaging with other member agencies and public partnerships.
- Bewaterwise: Direct local water users to regional incentive programs for water efficiency incentive opportunities.



Monitor, Evaluate, and Amend

The effectiveness of the EOCWD Communication Plan depends on a large variety of factors including technological advancements or changes, the rise and fall of audience engagement, current news or media concentration, political changes in leadership and focus, and the weather. The Communication Plan will be evaluated for effectiveness and updated accordingly based on available metrics (i.e. website traffic) and stakeholder feedback.

Water Shortage Level	0	1	2	3	4	5	6
EOCWD Outreach Tier	Green	Yellow	Yellow	Yellow	Red	Red	Red
Goal	Create an awareness of water shortage level status and encourage water efficiency from all citizens.						
Objective	Permanent Water Waste Prohibitions, Water Awareness	Compliance with response actions, 10% reduction in water use	Compliance with response actions, 20% reduction in water use	Compliance with response actions, 30% reduction in water use	Compliance with response actions, 40% reduction in water use	Compliance with response actions, 50% reduction in water use	Compliance with response actions, Essential Water Use only
Outreach Strategies	See above						
Tactics							
EOCWD website:	X	X	X	X	X	X	X
Water Shortage Indicator:	X	X	X	X	X	X	X
Promote Bewaterwise website:	X	X	X	X	X	X	X
MET/MWDOC:	X	X	X	X	X	X	X
Facebook:	X	X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Twitter:	X	X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Flyers/Signage/Brochures:	X	X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X

Consumer Confidence Reports (CCRs):	Jeff to provide direction						
News stories/News Releases Newsletters:		X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Public Events:		X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Promotional giveaways:		X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
School Programs:		X	X	X			
Rebate/Incentive Programs:	X	X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Turf Removal:	X	X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Billing Inserts:	X	X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X

Water Use notifications:	Jeff to provide notifications						
Water Shortage Indicator:		X (frequency and message intensity increase in Yellow Tier)	X	X	X	X (frequency and message intensity increase in Red Tier	X
Message Frequency	Ongoing Plan for regular messaging	Frequency escalates depending on shortage level and/or budget.					

Appendix D

Notice of Public Hearing

EAST ORANGE COUNTY WATER DISTRICT

185 N. McPherson Rd.
Orange, Ca 92869
P: 714-538-5815
F: 714-538-0334
eocwd.com

March 9, 2021

Jose Diaz
Water Manager
City of Orange
189 S. Water Street
Orange, CA 92866

Subject: East Orange County Water District 2020 Urban Water Management Plan Update

Dear Mr. Diaz,

The East Orange County Water District (EOCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the EOCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as EOCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. EOCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

EOCWD is also considering an Addendum to the 2015 UWMP to demonstrate consistency with the Delta Plan Policy to Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit. 23, § 5003). The 2015 UWMP Addendum and a copy of EOCWD's draft 2020 UWMP will be available for review on the EOCWD website at www.eocwd.com in spring of 2021, and EOCWD will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

EOCWD invites you to submit comments and consult with EOCWD regarding its 2020 UWMP update and 2015 UWMP Addendum. EOCWD anticipates holding a public comment period in spring 2021, with a public hearing planned during that time.

If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss EOCWD's 2020 UWMP update, please contact Jeff Smyth at (714) 538-5815, or by email at jsmyth@eocwd.com.

Sincerely,

David Youngblood, P.E.
General Manager

Cc Jeff Smyth, Engineering Manager

EAST ORANGE COUNTY WATER DISTRICT

185 N. McPherson Rd.
Orange, Ca 92869
P: 714-538-5815
F: 714-538-0334
eocwd.com

March 9, 2021

Michael Grisso
Water Services Manager
City of Tustin
1472 Service Road
Tustin, CA 92780

Subject: East Orange County Water District 2020 Urban Water Management Plan Update

Dear Mr. Grisso,

The East Orange County Water District (EOCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the EOCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as EOCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. EOCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

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If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss EOCWD's 2020 UWMP update, please contact Jeff Smyth at (714) 538-5815, or by email at jsmyth@eocwd.com.

Sincerely,

David Youngblood, P.E.
General Manager

Cc Jeff Smyth, Engineering Manager

EAST ORANGE COUNTY WATER DISTRICT

185 N. McPherson Rd.
Orange, Ca 92869
P: 714-538-5815
F: 714-538-0334
eocwd.com

March 9, 2021

Hugh Nguyen
Clerk Recorder
County of Orange
12 Civic Center Plaza, Room 101
Santa Ana, CA 92701

Subject: East Orange County Water District 2020 Urban Water Management Plan Update

Dear Mr. Nguyen,

The East Orange County Water District (EOCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the EOCWD's UWMP is required every five (5) years.

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Sincerely,

David Youngblood, P.E.
General Manager

Cc Jeff Smyth, Engineering Manager

EAST ORANGE COUNTY WATER DISTRICT

185 N. McPherson Rd.
Orange, Ca 92869
P: 714-538-5815
F: 714-538-0334
eocwd.com

March 9, 2021

Ken Vecchiarelli
General Manager
Golden State Water Company
1920 W Corporate Way
Anaheim, CA 92801

Subject: East Orange County Water District 2020 Urban Water Management Plan Update

Dear Mr. Vecchiarelli,

The East Orange County Water District (EOCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the EOCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as EOCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. EOCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

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Sincerely,

David Youngblood, P.E.
General Manager

Cc Jeff Smyth, Engineering Manager

EAST ORANGE COUNTY WATER DISTRICT

185 N. McPherson Rd.
Orange, Ca 92869
P: 714-538-5815
F: 714-538-0334
eocwd.com

March 9, 2021

Paul Cook
General Manager
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

Subject: East Orange County Water District 2020 Urban Water Management Plan Update

Dear Mr. Cook,

The East Orange County Water District (EOCWD) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) in compliance with the Urban Water Management Planning Act and the Water Conservation Act of 2009, commonly referred to as SBX7-7. An update of the EOCWD's UWMP is required every five (5) years.

Water Code section 10621(b) requires an urban water supplier updating its UWMP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing. This letter serves as EOCWD's notice that it is preparing and updating its 2020 UWMP, to be adopted and submitted to the California Department of Water Resources before the July 1, 2021 deadline. EOCWD will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

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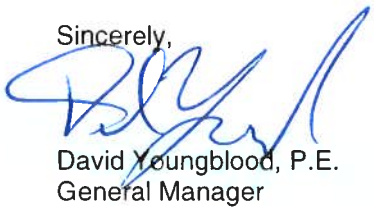
If you have any input for the matters contained in this notice letter, require additional information, or would like to set up a meeting to discuss EOCWD's 2020 UWMP update, please contact Jeff Smyth at (714) 538-5815, or by email at jsmyth@eocwd.com.

Sincerely,



David Youngblood, P.E.
General Manager

Cc Jeff Smyth, Engineering Manager

The Orange County Register
1771 S. Lewis Street
Anaheim, CA 92805
714-796-2209

5190289

EAST OC WATER DISTRICT
185 N MCPHERSON RD
ORANGE, CA 92869-3720

AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA, } **SS.**

County of Orange

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of The Orange County Register, a newspaper of general circulation, published in the city of Santa Ana, County of Orange, and which newspaper has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, under the date of November 19, 1905, Case No. A-21046, that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

06/02/2021, 06/09/2021

I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct:

Executed at Anaheim, Orange County, California, on Date: June 09, 2021.

Sandra Campos

Signature

PROOF OF PUBLICATION

Legal No. **0011466274**

EAST ORANGE COUNTY WATER DISTRICT

NOTICE OF PUBLIC HEARING

2020 URBAN WATER MANAGEMENT PLAN, WATER SHORTAGE CONTINGENCY PLAN, AND 2015 URBAN WATER MANAGEMENT PLAN ADDENDUM

NOTICE IS HEREBY GIVEN that the East Orange County Water District ("EOCWD") will hold a public hearing at 5:00 p.m. on Thursday, June 17, 2021, or as soon thereafter as the Agenda permits to consider EOCWD's proposed 2020 Urban Water Management Plan ("UWMP"), 2020 Water Shortage Contingency Plan ("WSCP"), and Appendix J as an Addendum to its 2015 UWMP in advance of their proposed adoption.

The public hearing is being held in accordance with the Urban Water Management Planning Act (California Water Code Sections 10610 through 10656; herein referred to as the "Act"). The Act requires "every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually" to prepare, adopt, and file a UWMP with the California Department of Water Resources and review and update its UWMP every five years. The purpose of the public hearing will be to solicit public comment prior to adoption of the proposed updated UWMP and WSCP.

Copies of the proposed 2020 UWMP, 2020 WSCP, and Appendix J as an Addendum to its 2015 UWMP are available for public inspection on EOCWD's website, www.eocwd.com, as well as by making arrangements to obtain physical copies by contacting Sylvia Prado at (714) 538-5815 or sprado@eocwd.com, as the District's offices are currently closed to the public due to the COVID-19 Pandemic. In the event the offices are reopened, the documents will also be available for inspection at the District Office, located at 185 N. McPherson Road, Orange, California, during normal business hours of 8:00 a.m. - 5:00 p.m.

As a result of the COVID-19 emergency and the Governor's Executive Orders, including N-29-20, to protect public health by limiting public gatherings and requiring social distancing, at this time, the meeting, inclusive of the public hearing, is scheduled to occur via the Zoom virtual meeting application. Instructions for joining the meeting are as follows:

ZOOM VIDEOCONFERENCE LINK: http://bit.ly/3nCm3eR

TELEPHONE AUDIO: (669) 900-6833

WEBINAR/MEETING ID: 840 7023 6480 Passcode: 558073

Please consult the meeting agenda, to be published by EOCWD no later than 72 hours before the public hearing, for updated information relative to public access to the meeting.

Comments may be made orally at the meeting or may also be e-mailed to sprado@eocwd.com by 4:30 p.m. on June 17, 2021. For more information, or if you would like assistance in presenting your comments to the Board of Directors at the public hearing, please contact Sylvia Prado at (714) 538-5815 or sprado@eocwd.com.

DATED: June 1, 2021

/s/
JEFFREY A. HOSKINSON, Secretary
EAST ORANGE COUNTY WATER DISTRICT
and the Board of Directors thereof

Published: June 2, 2021 and June 9, 2021 Orange County Register

Appendix E

Adopted WSCP Resolution

RESOLUTION NO. 911

RESOLUTION OF THE EAST ORANGE COUNTY WATER DISTRICT BOARD OF DIRECTORS ADOPTING THE 2020 URBAN WATER MANAGEMENT PLAN, THE 2020 WATER SHORTAGE CONTINGENCY PLAN, AND AN ADDENDUM TO THE 2015 URBAN WATER MANAGEMENT PLAN PURSUANT TO THE URBAN WATER MANAGEMENT PLANNING ACT

WHEREAS, the Urban Water Management Planning Act (the "Act'), as set forth in Part 2.6 (commencing with Section 10610) of Division 6 of the California Water Code, requires every urban water supplier to prepare and adopt an urban water management plan and a water shortage contingency plan; and

WHEREAS, the East Orange County Water District ("EOCWD") is an urban water supplier as defined by the Act as it is a publicly owned supplier providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre feet annually; and

WHEREAS, the conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level; and

WHEREAS, in June 2016, EOCWD completed its 2015 Urban Water Management Plan ("2015 UWMP") pursuant to the requirements of the Act; and

WHEREAS, EOCWD has now prepared its 2020 Urban Water Management Plan ("2020 UWMP") and 2020 Water Shortage Contingency Plan ("2020 WSCP"), as required by the Act, each of which is hereby incorporated herein by this reference; and

WHEREAS, in conjunction with its preparation of the 2020 UWMP and 2020 WSCP, EOCWD prepared an addendum to Appendix J of the 2015 UWMP ("2015 UWMP Addendum"), in order to demonstrate consistency with the Delta Plan Policy to reduce reliance on the Delta; and

WHEREAS, on or about March 9, 2021, EOCWD provided notice to the County of Orange, City of Orange, City of Tustin, Irvine Ranch Water District, and Golden State Water Company that EOCWD was in the process of preparing the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum, and invited their consultation and comment on such documents; and

WHEREAS, EOCWD made the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum available for public inspection, commencing on or about June 2, 2021, both on its website (eocwd.com) or by making arrangements with District staff to obtain physical copies; and

WHEREAS, on June 2, 2021, and June 9, 2021, EOCWD published notice in the *Orange County Register* of both (1) the availability of the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum for public inspection, and (2) a public hearing to be held at the EOCWD Board of Directors ("Board") meeting on June 17, 2021, to be held at 5:00 p.m. or as soon thereafter as reasonably possible ("Public Hearing"); and

WHEREAS, EOCWD provided notice to the County of Orange, City of Orange, and City of Tustin as to the date and time of the Public Hearing; and

WHEREAS, on June 17, 2021, the Board held a noticed public hearing to receive public comment on the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum; and

WHEREAS, the Board has received and had an opportunity to review the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum, along with any and all public comments received; and

WHEREAS, the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum have been prepared in accordance with the requirements of the Act; and

WHEREAS, the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum are general information documents that are intended to provide an analysis of the current and alternative water demand and supplies and conservation activities of EOCWD, including effects and measures of coping with short-term and chronic water shortages within the EOCWD boundaries.

IT IS HEREBY RESOLVED BY THE BOARD OF DIRECTORS ("BOARD") OF THE EAST ORANGE COUNTY WATER DISTRICT ("EOCWD"):

Section 1. The recitals set forth herein are true and correct, and shall hereinafter constitute findings of the Board.

Section 2. The 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum, as presented to the Board, are hereby approved and adopted by EOCWD.

Section 3. The General Manager, or his designee, is directed to: (1) submit copies of the 2020 UWMP, 2020 WSCP, and, as required, 2015 UWMP Addendum to the Department of Water Resources by July 1, 2021, and to the California State Library, the County of Orange, City of Orange, and City of Tustin by July 16, 2021; and (2) makes copies of the 2020 UWMP, 2020 WSCP, and 2015 UWMP Addendum available for public review during normal business hours no later than July 16, 2021.

Section 4. The General Manager, or his designee, are further authorized to take any action reasonably necessary to effectuate the purpose or intent of this Resolution, to implement the 2020 UWMP, 2020 WSCP, 2015 UWMP Addendum, or otherwise comply with the Act.

APPROVED, ADOPTED, AND SIGNED this 17th day of June, 2021.

Douglass S. Davert, President
EAST ORANGE COUNTY WATER DISTRICT
and of the Board of Directors thereof

Jeffrey A. Hoskinson, Secretary
EAST ORANGE COUNTY WATER DISTRICT
and of the Board of Directors thereof

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, JEFFREY A. HOSKINSON, Secretary of the Board of Directors of the EAST ORANGE COUNTY WATER DISTRICT, do hereby certify that the foregoing Resolution No. 911 was duly adopted by the Board of Directors of said District at a Regular Meeting of said District held on June 17, 2021, and that it was so adopted by the following vote:

AYES: BELL, DAVERT, DULEBOHN, MURDOCH, SEARS

NOES:

ABSENT:

ABSTAIN:

Jeffrey A. Hoskinson, Secretary
EAST ORANGE COUNTY WATER DISTRICT
and of the Board of Directors thereof

006313.00001
33040526.1

Arcadis U.S., Inc.
320 Commerce, Suite 200
Irvine
California 92602
Phone: 714 730 9052
www.arcadis.com

Maddaus Water Management, Inc.
Danville, California 94526
Sacramento, California 95816
www.maddauswater.com