



June 2021

# 2020 Water Shortage Contingency Plan Final

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June 2021

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## Acronyms and Abbreviations

%	Percent
Act	Urban Water Management Planning Act
AF	Acre-Feet
Annual Assessment	Annual Water Supply and Demand Assessment
BPP	Basin Production Percentage
City	City of Santa Ana
CRA	Colorado River Aqueduct
DDW	Division of Drinking Water
DRA	Drought Risk Assessment
DVL	Diamond Valley Lake
DWR	California Department of Water Resources
EAP	Emergency Operations Center Actions Plan
EOC	Emergency Operation Center
EOP	Emergency Operations Plan
ERP	Emergency Response Plan
FY	Fiscal Year
GAP	Green Acres Project
GSP	Groundwater Sustainability Plan
HMP	Hazard Mitigation Plan
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
MGD	Million Gallons per Day
MWDOC	Municipal Water District of Orange County
NIMS	National Incident Management System
OC	Orange County
OC Basin	Orange County Groundwater Basin
OC San	Orange County Sanitation District
OCWD	Orange County Water District
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
PPT	Parts Per Trillion
Producer	Groundwater Producer
RL	Response Level
SEMS	California Standardized Emergency Management System
Supplier	Urban Water Supplier

## Santa Ana 2020 Water Shortage Contingency Plan

SWP	State Water Project
SWRCB	California State Water Resources Control Board
UWMP	Urban Water Management Plan
WARN	Water Agency Response Network
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 WSCP complies with California Water Code (Water Code) Section 10632, which requires that every urban water supplier (Supplier) shall prepare and adopt a WSCP as part of its Urban Water Management Plan (UWMP). This level of detailed planning and preparation is intended to help maintain reliable supplies and reduce the impacts of supply interruptions.

The WSCP is the City of Santa Ana (City)'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 plan provides a structured guide for the City to deal with water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption. This way, if and when shortage conditions arise, the City's governing body, its staff, and the public can easily identify and efficiently implement pre-determined steps to manage a water shortage. A well-structured WSCP allows real-time water supply availability assessment and structured steps designed to respond to actual conditions, to allow for efficient management of any shortage with predictability and accountability.

The WSCP also describes the City's procedures for conducting an Annual Water Supply and Demand Assessment (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 City'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 City'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. 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 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 City's water service area.

**Section 3 Water Shortage Contingency Preparedness and Response Planning.**

**Section 3.1 Water Supply Reliability Analysis** provides a summary of the water supply analysis and water reliability findings from the 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 Stages** 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 City to implement and enforce its shortage response actions.

**Section 3.8 Financial Consequences of the WSCP** provides a description of the financial consequences of and responses for drought conditions.

**Section 3.9 Monitoring and Reporting** describes monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

**Section 3.10 WSCP Refinement Procedures** addresses reevaluation and improvement procedures for monitoring and evaluating the functionality of the WSCP.

**Section 3.11 Special Water Feature Distinction** 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 City followed to adopt and implement its WSCP.

## **1.2 Integration with Other Planning Efforts**

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

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

- **2021 Orange County Water Demand Forecast for the Municipal Water District of Orange County (MWDOC) and OCWD Technical Memorandum (Demand Forecast TM)** provides the basis for water demand projections for MWDOC's member agencies as well as the City and the Cities of Anaheim and Fullerton.
- **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 City 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 City is one of the oldest cities in Orange County that was incorporated in 1886 and became an original member agency of MET on February 27, 1931. The City is governed by a non-partisan seven-member City Council, elected to serve staggered four-year terms, except for the Mayor, who serves a two-year term. The City Council appoints the City Manager and various members of commissions, committees, and citizen advisory groups, all of which may weigh in on water management issues and decisions for the City.

### **2.1 City Service Area**

The City is in the heart of Orange County and rated eleventh largest in California. The City's Water Utility provides water service within a 27.5 square mile service area that includes the City of Santa Ana and a small neighborhood in the City of Orange, near Tustin Avenue and Fairhaven by the northeast corner of Santa Ana. The City's water service area is shown in Figure 2-1. The City operates ten reservoirs with a storage capacity of 49 million gallons, seven pumping stations, 21 groundwater wells, four pressure regulating stations and seven import water connections and manages 510.1-mile water mains system with 45,037 service connections.

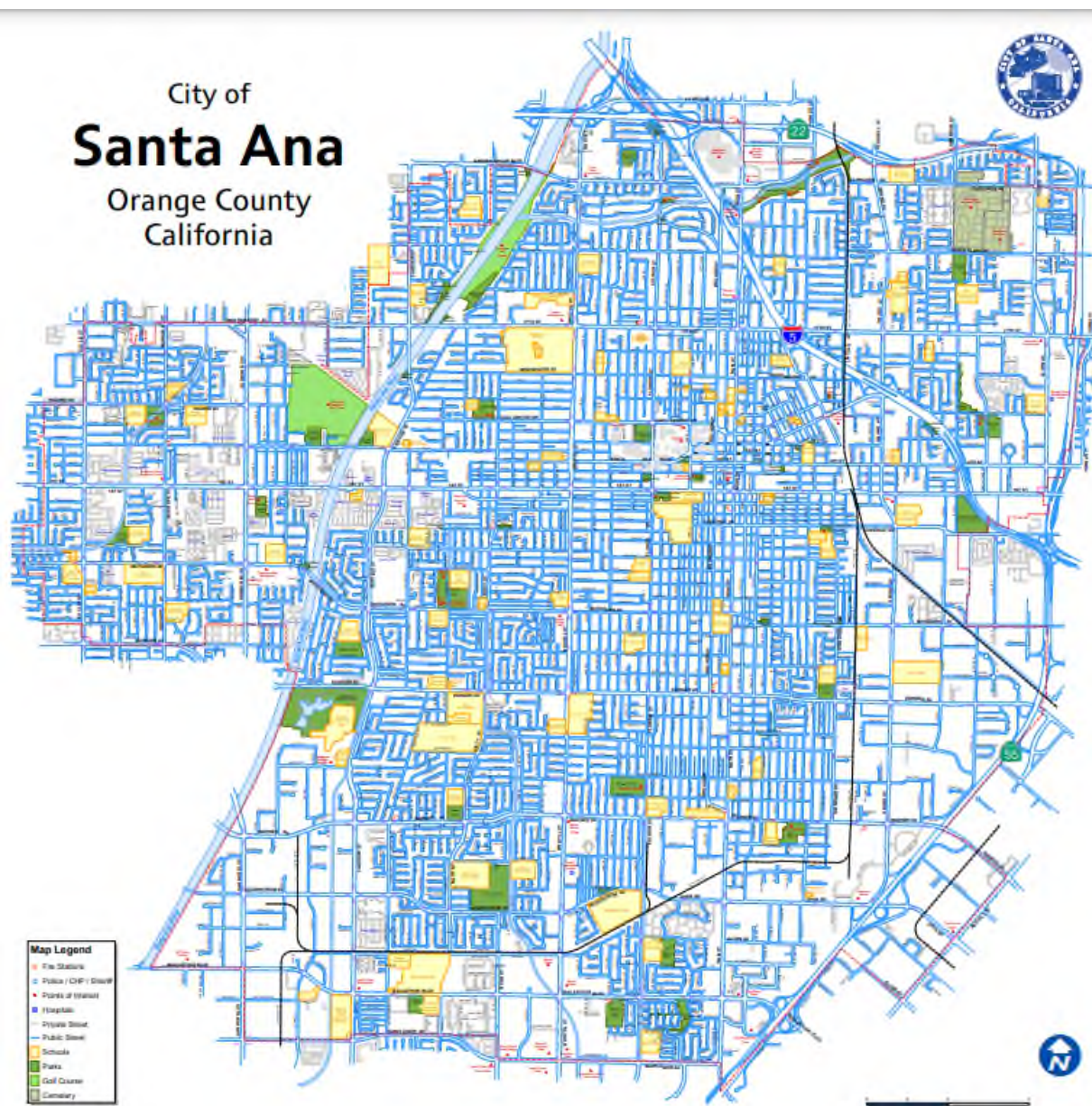


Figure 2-1: City Service Area

Although the City supplements its water supply portfolio with recycled water, the WSCP only applies to its potable water supply. The City is directly involved in wastewater services through its ownership and operation of the wastewater collection system in its service area and sends all collected wastewater to Orange County Sanitation District (OC San) for treatment and disposal. The City provides OCWD Green Acres Project (GAP) recycled water to the southern part of the City, as detailed in Section 6.6 of the City's 2020 UWMP (Santa Ana, 2021a). The City will determine the recycled water demand reduction actions for recycled water based on the availability of supply and to meet necessary wastewater discharge permit requirements.

## 2.2 Relationship to Wholesalers

**MET:** 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 City is one of MET's member agencies that purchases water directly from MET. The City's location within Orange County is shown on Figure 2-2.

## Santa Ana 2020 Water Shortage Contingency Plan

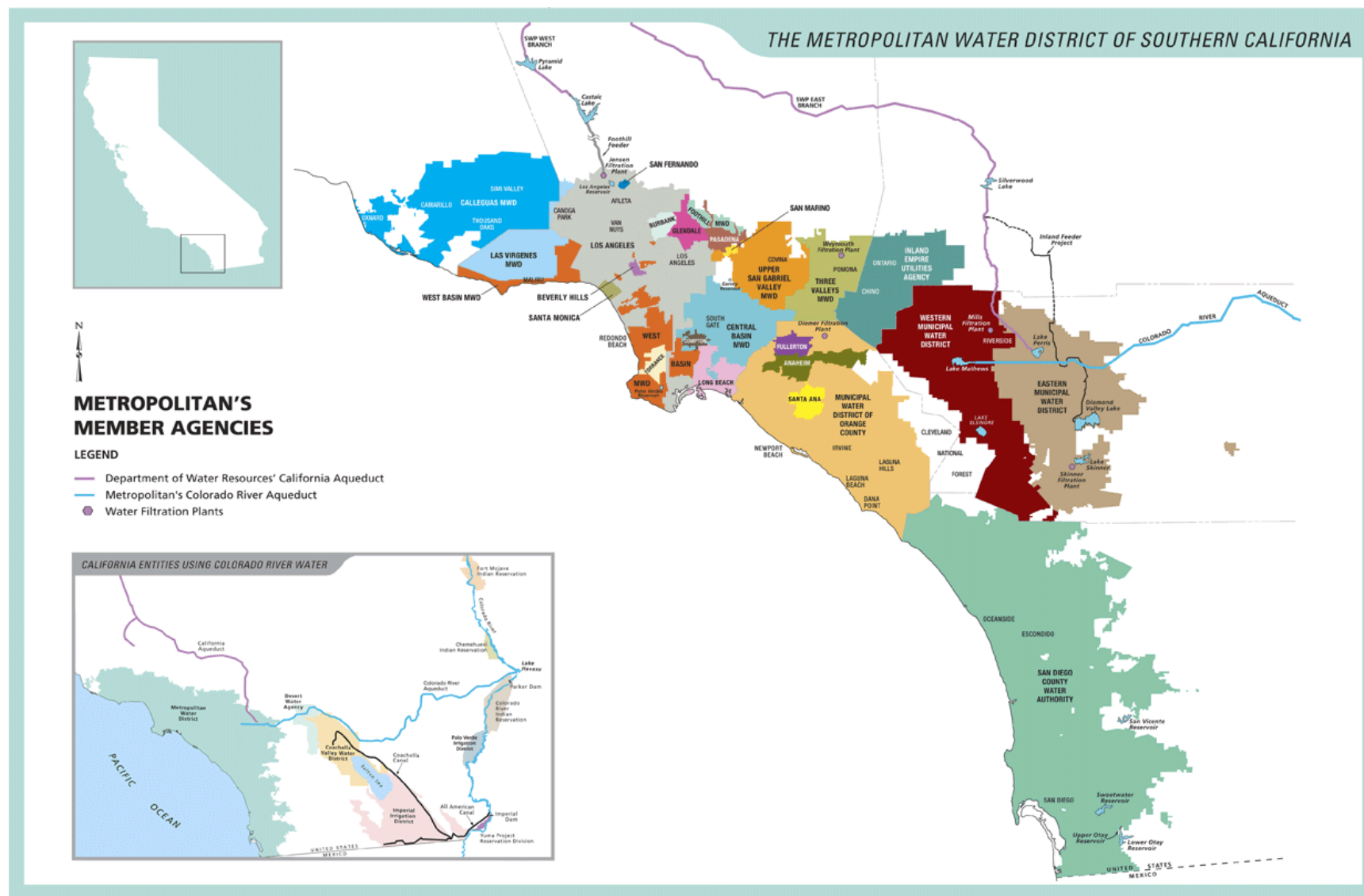


Figure 2-2: Regional Location of the City and Other MET Member Agencies

## **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 and Water Supply Allocation Plan (WSAP), and other emergency planning efforts as described below. MET's WSAP is integral to the WSCP's shortage response strategy in the event that MET 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.
- Severe Shortage: MET can meet full-service demands only by using stored water, transfers, and possibly calling for extraordinary conservation.
- Extreme Shortage: MET must allocate available supply to full-service customers.

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 2-3 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).

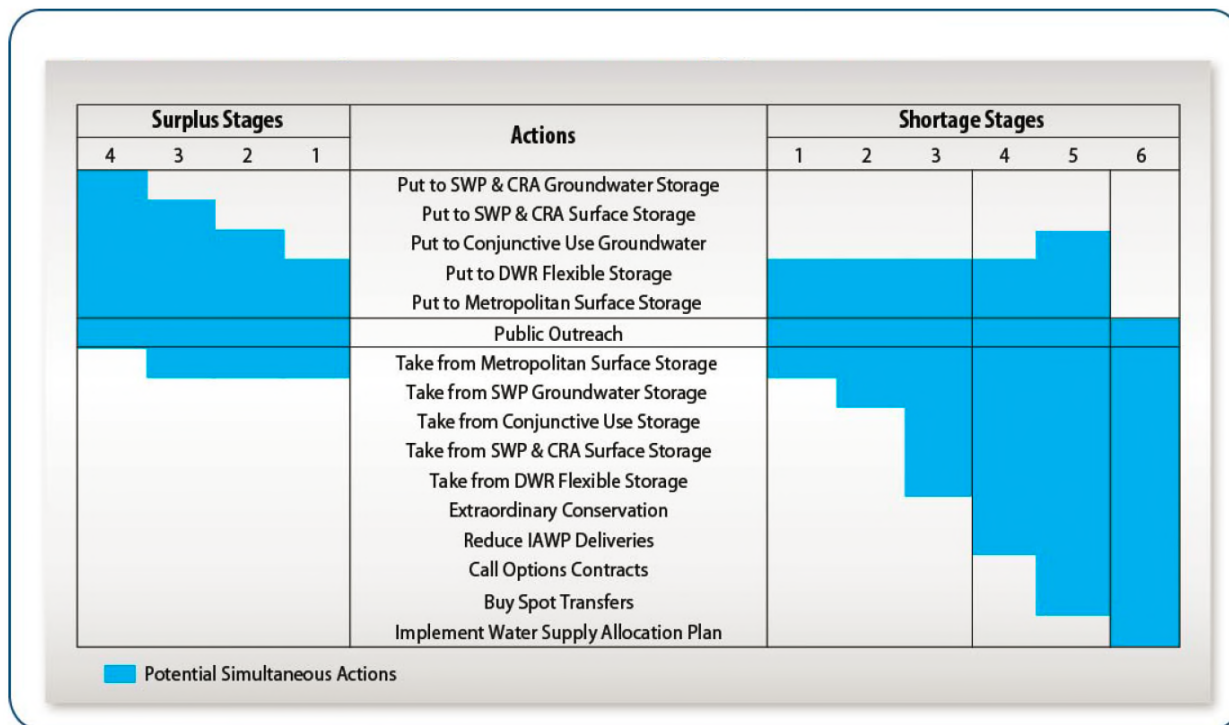


Figure 2-3: Resource Stages, Anticipated Actions, and Supply Declarations

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 up to greater than 50%. 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).

### **3 WATER SHORTAGE CONTINGENCY PREPAREDNESS AND RESPONSE PLANNING**

The City's WSCP is a detailed guide of how the City intends to act in the case of 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 City's water asset portfolio.

Understanding water supply reliability, factors that could contribute to water supply constraints, availability of alternative supplies, and what effect these have on meeting customer demands provides the City with a solid basis on which to develop appropriate and feasible response actions in the event of a water shortage. In the 2020 UWMP, the City 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 (Santa Ana, 2021a).

The City also conducted a DRA to evaluate a drought period that lasts five consecutive water years starting from the year following when the assessment is conducted. An analysis of both assessments determined that the City 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 MET and ongoing conservation program efforts. The City receives the majority of its water supply from groundwater from the OC Basin, as well as supplemental supplies from local recycled water from the OCWD GAP that adds reliability for non-potable water demand.

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

#### **3.2 Annual Water Supply and Demand Assessment Procedures**

Per Water Code Section 10632.1, the City 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 Assessment with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the Supplier's WSCP.

The City must include in its WSCP the procedures used for conducting an 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 stage response actions in the current calendar year. This determination is based on information available to the City at the time of the analysis. Starting in 2022, the Annual Assessment will be due by July 1 of every year.

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

#### **3.2.1.1 City Steps to Approve the Annual Assessment Determination**

The City receives 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 (Producer) to pump a sustainable amount of water. The framework for the financial incentives is based on establishing the Basin Production Percentage (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.

While the City's primary source of water is OCWD groundwater, any remaining source to meet retail demands comes from the purchase of imported water from MET. As a direct MET member, the Annual Assessment will be predicated on MET's WSDM supply demand tracking, which is reported monthly to their Board of Directors. MET WSDM planning involves the examination of developing demand and supply conditions for the calendar year, as well as considerations of potential actions consistent with the WSDM Plan. Additionally, City staff simultaneously provide water supply and demand reports to MET to inform them of emerging demand and supply conditions. These monthly analyses provide key information for MET to manage resources to meet a range of estimated demands and adjust to changing conditions throughout the year. Based on the year's supply conditions and WSDM actions, MET will present a completed Annual Assessment for its member agencies' review from which they will then seek Board approval in April of each year. Additionally, MET expects that any triggers or specific shortage response actions that result from the Annual Assessment would be approved by their Board at that time and this information will be incorporated into the City's Annual Assessment.

The Executive Director of Public Works, or Designee (i.e., Water Resource Manager), will be responsible to approve and Annual Assessment in June and formally submit to DWR prior to the July 1 deadline.

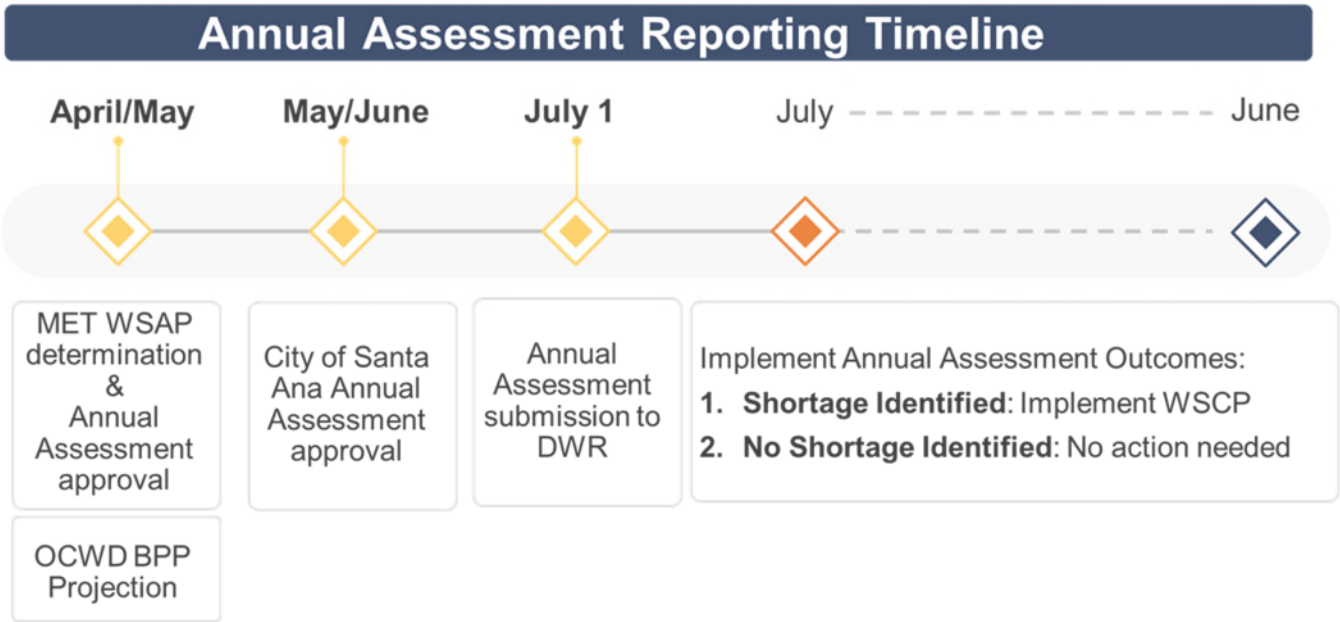


Figure 3-1: Annual Assessment Reporting Timeline

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 City 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, MET imported water supplies, planned water use, and infrastructure considerations. The balance between projected in-service area supplies, coupled with MET imported supplies, and anticipated unconstrained demand will be used to determine what, if any, shortage stage is expected under the WSCP framework as presented in Figure 3-2. The WSCP’s standard shortage stages 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.

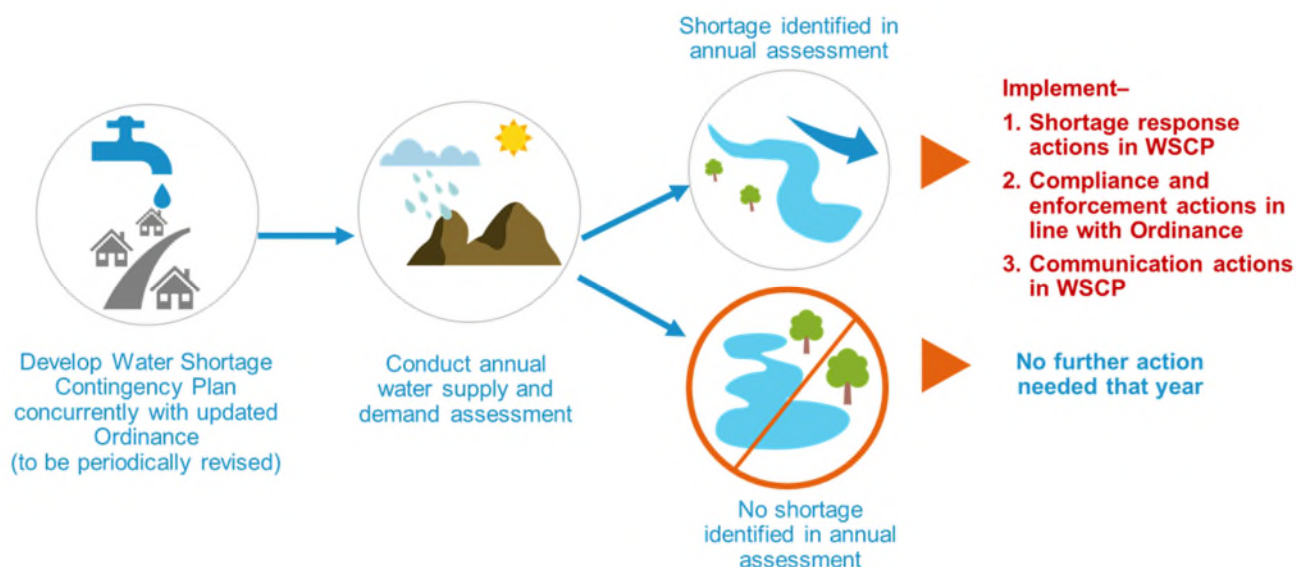


Figure 3-2: Water Shortage Contingency Plan Annual Assessment Framework

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

However, 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 and MWDOC have 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 City's 2020 UWMP, the City meets all of its customers' demands with a combination of local groundwater, imported water from MET, and local recycled water. The City's main source of water supply is groundwater from the OC Basin, with imported water from MET and recycled water making up the rest of the City's water supply portfolio. In fiscal year (FY) 2019-20, the City relied on 76% groundwater, 23% imported

water, and 1% recycled water. It is projected that by 2045, the water supply portfolio will change to approximately 84% groundwater, 15% imported water, and 1% recycled water, reflecting the increase in OCWD's BPP to 85% beginning in 2025 (Santa Ana, 2021a).

#### 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 City's DRA reveals that its supply capabilities are expected to balance anticipated total water use and supply, assuming a five-year consecutive drought from FY 2020-21 through FY 2024-25 (Santa Ana, 2021a). 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 (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 City's annual water supply and unconstrained demand using: 1) current year conditions, and 2) assumed dry year conditions.

The Annual Assessment will include two separate estimates of City'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 City 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.

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 the City'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%, highlight 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 Orange County, 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 OC Basin area where the City's service area is located (CDM Smith, 2021). Detailed information of the model is included in the City's 2020 UWMP.

The City 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 conservation (Santa Ana, 2021a).

### 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.

Following is a list of considerations that have the potential to negatively impact water supply reliability and will be considered in the Annual Assessment:

- MWD pipeline outages (Orange County Feeder and/or East Orange County Feeder #2).
- City currently has 5 groundwater wells placed out of service due to per- and polyfluoroalkyl substances (PFAS) contamination.
- Planned well/pump station rehabilitation/construction projects including Well 32 and Garthe Pump Station.

Following is a list of considerations that have the potential to positively impact water supply reliability and will be considered in the Annual Assessment:

- Drilling of new wells currently planned for Washington Well & Flower Well.
- Expansion of recycled water customers and system.
- AMI project implementation (expected to result in lower water use and less system losses).

### 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.

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.

The City has PFAS contamination in 5 wells. 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 an 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 City 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: Retail: Water Shortage Contingency Plan Levels

<b>Submittal Table 8-1 Water Shortage Contingency Plan Levels</b>		
<b>Shortage Level</b>	<b>Percent Shortage Range</b>	<b>Shortage Response Actions</b>
0	0% (Normal)	A Level 0 Water Supply Shortage – Condition exists when the City notifies its water users that no supply reductions are anticipated in this year. The City proceeds with planned water efficiency best practices to support consumer demand reduction in line with state mandated requirements and local City goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in the City's Water Shortage Response Ordinance.
1	Up to 10%	A Level 1 Water Supply Shortage – Condition exists when the City 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. Upon the declaration of a Water Aware condition, the City shall implement the mandatory Level 1 conservation measures identified in this WSCP. The type of event that may prompt the City 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 City 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 City 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 City 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 City 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 City 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 City must declare a Water Supply Shortage Emergency in the manner and on the grounds provided in California Water Code section 350.

**Submittal Table 8-1**  
**Water Shortage Contingency Plan Levels**

Shortage Level	Percent Shortage Range	Shortage Response Actions
5	41% to 50%	A Level 5 Water Supply Shortage – Condition exists when the City 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 City 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 City 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 City 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 City has defined specific shortage response actions that align with the defined shortage levels in DWR Tables 8-2 and 8-3 (Appendix A). These shortage response actions were developed with consideration to the system infrastructure and operations changes, supply augmentation responses, customer-class or water use-specific demand reduction initiatives, and increasingly stringent water use prohibitions.

#### 3.4.1 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 that action will reduce the gap between supplies and demands. DWR Table 8-2 (Appendix A) demonstrates that the suite of shortage response actions can be expected to deliver the expected outcomes necessary to meet the requirements of a given shortage level (e.g., target of an additional 10% water savings). 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 City through MET and OCWD. The City has the ability to pump additional groundwater from the OC Basin or purchase additional imported water from MET as a MET member agency. However, both additional pumped groundwater and purchased imported water are subject to rate penalties from OCWD and MET, respectively.

MET's reliability portfolio of water supply programs including existing water transfers, storage and exchange agreements to supplement gaps in the City's supply/demand balance. MET has developed significant storage capacity (over 5 million 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.

### **3.4.3 Operational Changes**

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. The City considered their operational procedures to identify changes that can be implemented to address water shortage on a short-term basis, including:

- Avoid hydrant flushing when possible.
- Alter maintenance cycles.
- Reduce pressure.

### **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 City will identify additional mandatory restrictions as needed based on the existing Santa Ana Municipal Code Chapter 39 Article VI Water Shortage Contingency Plan (Appendix B). The City 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, the City's HMP, and the Water Emergency Response Organization of Orange County (WEROC)'s Emergency Operations Plan (EOP).

#### **3.4.5.1 MET's WSDM and WSAP**

MET has comprehensive plans for stages of actions it would undertake to address a catastrophic interruption in water supplies through its WSDM and WSAP. MET also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the

southern California region, including seismic events along the San Andreas Fault. In addition, MET is working with the state to implement a comprehensive improvement plan to address catastrophic occurrences outside of the Southern California region, such as a maximum probable seismic event in the Sacramento-San Joaquin River Delta that would cause levee failure and disruption of SWP deliveries.

#### 3.4.5.2 Water Emergency Response Organization of Orange County Emergency Operations Plan

In 1983, the Orange County water community identified a need to develop a plan on how agencies would respond effectively to disasters impacting the regional water distribution system. The collective efforts of these agencies resulted in the formation of WEROC to coordinate emergency response on behalf of all Orange County water and wastewater agencies, develop an emergency plan to respond to disasters, and conduct disaster training exercises for the Orange County water community. WEROC 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 City.

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

The EOP defines the actions to be taken by WEROC Emergency Operations Center (EOC) staff to reduce the loss of water and wastewater infrastructure; to respond effectively to a disaster; and to coordinate recovery operations in the aftermath of any emergency involving extensive damage to Orange County water and wastewater utilities. The EOP includes 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 City 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 City of Santa Ana Emergency Response Plan

The City will also refer to its current American Water Infrastructure Act Risk and Resilience Assessment and Emergency Response Plan in the event of a locally isolated catastrophic supply interruption (Santa Ana, 2020; Santa Ana, 2021b).

### 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 a seismic risk assessment specific to the City's 2020 UWMP, the City has included the previously prepared regional HMP by MWDOC as the regional imported water wholesaler that is required under the federal Disaster Mitigation Act of 2000 (Public Law 106-390).

MWDOC's HMP identified that the overarching goals of the HMP were the same across the region, 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 City'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 City'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 City.
- 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 City has estimated percentage savings for the chosen suite of shortage response actions, which can be anticipated to deliver the expected outcomes necessary to meet the requirements of a given shortage level.

## **3.5 Communication Protocols**

Timely and effective communication is a key element of the WSCP implementation. Per the Water Code Section 10632 (a)(5), the City has established communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments regarding any current or predicted shortages as determined by the Annual Assessment described pursuant to Section 10632.1; any shortage response actions triggered or anticipated to be triggered by the Annual Assessment described pursuant to Section 10632.1; and any other relevant communications. The City's Water Shortage Communication Plan is documented in Appendix C.

### 3.6 Compliance and Enforcement

Per the Water Code Section 10632 (a)(6), the City has defined customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions. Procedures to ensure customer compliance are described in Section 3.5 Communication Protocols and customer enforcement, appeal, and exemption procedures as defined in the existing Santa Ana Municipal Code Chapter 39 Article VI Water Shortage Contingency Plan (Appendix B). The City 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 City has provided a description of the legal authorities that empower the City to implement and enforce its shortage response in Water Shortage Response Ordinance (Appendix B).

Per Water Code Section 10632 (a)(7) (B), the City shall declare a water shortage emergency condition to prevail within the area served by such wholesaler whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

Per Water Code Section 10632 (a)(7)(C), the City shall coordinate with any agency or county within which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558). Table 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 Manager	City of Santa Ana	Call/email/in person
City Council	City of Santa Ana	Memo/Council Meeting
Director of Public Works	County of Orange	Call/email
Director of Public Works	City of Garden Grove	Call/email
Director of Public Works	City of Orange	Call/email

### 3.8 Financial Consequences of WSCP

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

During a catastrophic interruption of water supplies, prolonged drought, or water shortage of any kind, the City will experience a reduction in revenue due to reduced water sales. Throughout this period of time, expenditures may

increase or decrease with varying circumstances. Expenditures may increase in the event of significant damage to the water system, resulting in emergency repairs. Expenditures may also decrease as less water is pumped through the system, resulting in lower power costs. Water shortage mitigation actions will also impact revenues and require additional costs for drought response activities such as increased staff costs for tracking, reporting, and communications.

The City receives water revenue from a service charge and a commodity charge based on consumption. The service charge recovers costs associated with providing water to the serviced property. The service charge does not vary with consumption and the commodity charge is based on water usage. Rates have been designed to recover the full cost of water service in the charges. Therefore, the total cost of purchasing water would decrease as the usage or sale of water decreases. In the event of a drought emergency, the City will impose excessive water use penalties on its customers, which may include additional costs associated with reduced water revenue, staff time taken for penalty enforcement, and advertising the excessive use penalties. The excessive water use penalties are further described in the City's Municipal Code Chapter 39 Article VI Water Shortage Contingency Plan (Appendix B).

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

Based on current water rates, a volumetric cutback of up to 50% of water sales may lead to a range of reduction in revenues from \$4,111,774 to \$20,558,870 (Table 3-3). The impacts to revenues will depend on a proportionate reduction in variable costs related to supply, pumping, and treatment for the specific shortage event. The City could mitigate these impacts by increasing water rate revenues and/or increasing fix charges.

Table 3-3: Revenue Impacts Analysis

Revenue Impact Analysis (Tiered Rates)						
	Reduction in Sales					
Demand	Baseline	10%	20%	30%	40%	50%
Water Produced (HCF)	14,376,194	12938575	11500955	10063336	8625716	7188097
Water Sales (HCF)	13,565,101	12,208,591	10,852,081	9,495,571	8,139,061	6,782,551
Water Losses (HCF)	811,093	729,984	648,874	567,765	486,656	405,547
Potable (%)	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%
Construction (%)		0.0%	0.0%	0.0%	0.0%	0.0%
Fire (%)		0.0%	0.0%	0.0%	0.0%	0.0%
Recycled (%)	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Potable (HCF)	13,565,101	12,208,591	10,852,081	9,495,571	8,139,061	6,782,551
Tier 1 (HCF)	10,173,826	9,156,443	8,139,061	7,121,678	6,104,295	5,086,913
Tier 2 (HCF)	3,391,275	3,052,148	2,713,020	2,373,893	2,034,765	1,695,638
Tier 3 (HCF)		0	0	0	0	0
Tier 4 (HCF)		0	0	0	0	0
Tier 5 (HCF)		0	0	0	0	0
Construction (HCF)	0	0	0	0	0	0
Fire (HCF)	0	0	0	0	0	0
Recycled (HCF)	67,826	61,043	54,260	47,478	40,695	33,913
<b>Total</b>	<b>27,198,028</b>	<b>24,478,225</b>	<b>21,758,422</b>	<b>19,038,619</b>	<b>16,318,817</b>	<b>13,599,014</b>
<b>Rate Schedule</b>						
Tiered Rate Potable (\$/HCF)						
Tier 1 rate (\$/HCF)	\$2.03	\$2.03	\$2.03	\$2.03	\$2.03	\$2.03
Tier 2 rate (\$/HCF)	\$4.79	\$4.79	\$4.79	\$4.79	\$4.79	\$4.79
Tier 3 rate (\$/HCF)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Santa Ana 2020 Water Shortage Contingency Plan

Revenue Impact Analysis (Tiered Rates)						
	Reduction in Sales					
Demand	Baseline	10%	20%	30%	40%	50%
Tier 4 rate (\$/HCF)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tier 5 rate (\$/HCF)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Flat Rate Construction (\$/HCF)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Flat Rate Fire (\$/HCF)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Flat Rate Recycled (\$/HCF)	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
<b>Calculated Revenue</b>						
Calculated Potable Revenue (\$)	\$36,897,075	\$33,207,367	\$29,517,660	\$25,827,952	\$22,138,245	\$18,448,537
Calculated Construction Revenue (\$)	\$0	\$0	\$0	\$0	\$0	\$0
Calculated Fire Revenue (\$)	\$0	\$0	\$0	\$0	\$0	\$0
Calculated Recycled Revenue (\$)	\$145,825	\$131,242	\$116,660	\$102,077	\$87,495	\$72,912
<b>Total Calculated Revenue (\$)</b>	<b>\$37,042,900</b>	<b>\$33,338,610</b>	<b>\$29,634,320</b>	<b>\$25,930,030</b>	<b>\$22,225,740</b>	<b>\$18,521,450</b>
<b>Actual Revenue</b>						
Potable Revenue (\$)	\$40,903,906	\$36,813,515	\$32,723,125	\$28,632,734	\$24,542,344	\$20,451,953
Construction Revenue (\$)		\$0	\$0	\$0	\$0	\$0
Fire Revenue (\$)		\$0	\$0	\$0	\$0	\$0
Recycled Revenue (\$)	\$213,834	\$192,451	\$171,067	\$149,684	\$128,300	\$106,917
<b>Total Rate Revenue (\$)</b>	<b>\$41,117,740</b>	<b>\$37,005,966</b>	<b>\$32,894,192</b>	<b>\$28,782,418</b>	<b>\$24,670,644</b>	<b>\$20,558,870</b>
<b>Fixed Monthly/Bimonthly Charge Revenue</b>	\$13,329,831	\$13,329,831	\$13,329,831	\$13,329,831	\$13,329,831	\$13,329,831
<b>Total Revenue</b>	\$54,447,571	\$50,335,797	\$46,224,023	\$42,112,249	\$38,000,475	\$33,888,701
<b>Revenue Lost</b>		<b>\$4,111,774</b>	<b>\$8,223,548</b>	<b>\$12,335,322</b>	<b>\$16,447,096</b>	<b>\$20,558,870</b>
<b>Variable Costs</b>						

Santa Ana 2020 Water Shortage Contingency Plan

Revenue Impact Analysis (Tiered Rates)						
	Reduction in Sales					
Demand	Baseline	10%	20%	30%	40%	50%
Sources of Supply, Pumping, Treatment (\$)	\$21,195,164	\$19,075,648	\$16,956,131	\$14,836,615	\$12,717,098	\$10,597,582
Calculated Unit Cost to Produce Water (\$/HCF)	1.474323733	\$1.47	\$1.47	\$1.47	\$1.47	\$1.47
Avoided Costs		\$2,119,516	\$4,239,033	\$6,358,549	\$8,478,066	\$10,597,582
Net Revenue Change		\$1,992,258	\$3,984,515	\$5,976,773	\$7,969,030	\$9,961,288
Rate Revenue Increase Required		5.38%	12.11%	20.77%	32.30%	48.45%

### **3.9 Monitoring and Reporting**

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

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

Under normal water supply conditions, potable water production figures are recorded daily. Weekly and monthly reports are prepared and monitored. In addition, once the Advanced Meter Infrastructure project is complete, the City will be able to monitor the consumption of various customer classes. 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, the City will follow implementation of those levels as appropriate based on the City's risk profile provided in UWMP Chapter 6 and continue to monitor water demand levels. When MET calls for extraordinary conservation, MET's Drought Program Officer will coordinate public information activities with the City and monitor the effectiveness of ongoing conservation programs.

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

### **3.10 WSCP Refinement Procedures**

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

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

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

### **3.11 Special Water Feature Distinction**

Per Water Code Section 10632 (b), the City has defined water features in that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code, in the City's Municipal Code Chapter 39 Article VI Water Shortage Contingency Plan (Appendix B).

### **3.12 Plan Adoption, Submittal, and Availability**

Per Water Code Section 10632 (a)(c), City 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 City's [website](#) in advance of the public hearing on June 1, 2021. Copies of the draft WSCP were also made available for public inspection at the City Clerk's and Utilities Department offices and public hearing notifications were published in local newspapers. A copy of the published Notice of Public Hearing is included in Appendix D.

The City held the public hearing for the draft 2020 UWMP and draft WSCP on June 1, 2021 at the City Council meeting. The City Council reviewed and approved the 2020 UWMP and the WSCP at its June 1, 2021 meeting after the public hearing. See Appendix E for the resolution approving the WSCP.

By July 1, 2021, the City's adopted 2020 UWMP and WSCP was filed with DWR, California State Library, and the County of Orange. The City will make the WSCP available for public review on its website no later than 30 days after filing with DWR.

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

If the City 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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Municipal Water District of Orange County (MWDOC). (2019, August). *Orange County Regional Water and Wastewater Hazard Mitigation Plan*.

Water Emergency Response Organization of Orange County (WEROC). (2018, March). *WEROC Emergency Operations Plan (EOP)*.

# 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 City notifies its water users that no supply reductions are anticipated in this year. The City proceeds with planned water efficiency best practices to support consumer demand reduction in line with state mandated requirements and local City goals for water supply reliability. Permanent water waste prohibitions are in place as stipulated in the City's Water Shortage Response Ordinance.
1	Up to 10%	A Level 1 Water Supply Shortage – Condition exists when the City 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. Upon the declaration of a Water Aware condition, the City shall implement the mandatory Level 1 conservation measures identified in this WSCP. The type of event that may prompt the City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 City 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 <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
0	Other water feature or swimming pool restriction	Statewide Prohibition is Required	All decorative water features must re-circulate water or users must secure a waiver from the City.	Yes
0	Other	Statewide Prohibition is Required	Washing or hosing down vehicles is prohibited except by use of a hand held container, hose with an automatic shut off device, or at a commercial car wash.	Yes
0	Other - Prohibit use of potable water for washing hard surfaces	Statewide Prohibition is Required	Washing hard or paved surfaces is prohibited except to alleviate safety or sanitary hazards using a hand held container, hose with an automatic shut off device, or a low-volume high pressure cleaning machine that recycles used water.	Yes
0	Landscape - Restrict or prohibit runoff from landscape irrigation	Statewide Prohibition is Required	Watering vegetated areas in a manner that causes excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter, or ditch is prohibited.	Yes
0	Landscape - Other landscape restriction or prohibition	Statewide Prohibition is Required	Irrigating ornamental turf on public street medians is prohibited.	Yes
0	Landscape - Other landscape restriction or prohibition	Statewide Prohibition is Required	No landscape watering shall occur within 48 hours after measurable precipitation.	Yes
0	Landscape - Limit landscape irrigation to specific times	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Watering or irrigation with a device that is not continuously attended is limited to fifteen (15) minutes per day per valve. Low flow drip type systems, water efficient stream rotor systems, and sensor/weather controlled systems are exempt.	Yes
0	Landscape - Other landscape restriction or prohibition	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Any new planting should be performed with drought tolerant plants, as listed in Metropolitan's list of California friendly plants and the City's established List of Orange County Native Plants.	Yes
0	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Fix leaks or faulty sprinklers promptly/within 3 day(s).	Yes

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
0	CII - Restaurants may only serve water upon request	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	CII - Restaurants may only serve water upon request.	Yes
0	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.	CII - Lodging establishment must offer opt out of linen service.	Yes
0	CII - Other CII restriction or prohibition	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	No single pass cooling systems may be installed in new or remodeled buildings.	Yes
0	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.	All new commercial car wash and laundry facilities must re-circulate the wash water or obtain a waiver from the City.	Yes
0	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.	Food preparation establishments must use water efficient kitchen spray valves.	Yes
0	Landscape - Limit landscape irrigation to specific times	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Watering or irrigation of vegetated areas is prohibited between 8 am and 6 pm except by use of a hand held device, hose equipped with an automatic shutoff device, or for adjusting or repairing an irrigation system for short periods of time.	Yes
0	Other - Require automatic shut of hoses	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Use a shutoff nozzle on hoses.	Yes
0	Other	On-going Long Term-Conservation Savings Measure. Not applicable to Water Shortage Contingency Plan quantifiable savings.	Unauthorized use of hydrants is prohibited. Authorization for use must be obtained from water supplier.	Yes
1	Expand Public Information Campaign	0-1%	Community Outreach and Messaging (Expand Public Information Campaign)	No
1	Expand Public Information Campaign	0-1%	Encourage customers to wash only full loads when washing dishes or clothes.	No

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
1	Expand Public Information Campaign	0-1%	Encourage customers to use pool covers to minimize evaporation.	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	0-1%	Fix leaks or faulty sprinklers promptly/within 3 day(s).	Yes
1	Landscape - Other landscape restriction or prohibition	0-5%	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 evapotranspiration sensors that use weather-based data to set efficient watering schedules.	No
1	Landscape - Limit landscape irrigation to specific times	0-5%	Watering or irrigation of vegetated areas is prohibited between 6 am and 6 pm except by use of a hand held device, hose equipped with an automatic shutoff device, or for adjusting or repairing an irrigation system for short periods of time.	Yes
1	CII - Other CII restriction or prohibition	0-1%	Commercial, industrial, institutional equipment must be properly maintained and in full working order.	No
1	Landscape - Prohibit certain types of landscape irrigation	0-1%	All non-essential water use for nurseries should cease.	No
1	Landscape - Prohibit certain types of landscape irrigation	0-1%	All non-essential water use for public entities should cease.	Yes
1	Landscape - Prohibit certain types of landscape irrigation	0-1%	All non-essential water use for commercial and industrial use should cease.	No
1	Other	5-10%	Other Prohibited Uses: The City may implement other prohibited water uses as determined by the City, after notice to customers.	Yes
1	Other	5-10%	The City may reduce water allocations in all categories to meet the available water supply.	No

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
1	Improve Customer Billing	0-3%	AMI Customer Leak Reports with Detection and Repair Assistance	No
1	Provide Rebates for Landscape Irrigation Efficiency	0-1%	Expanded/Enhanced Rebate Programs	No
1	Reduce System Water Loss	0-5%	Real Loss Reduction - Pressure Management and More Aggressive Leak Detection and Repair	No
1	Offer Water Use Surveys	0-1%	Offer Water Use Surveys	No
1	Provide Rebates on Plumbing Fixtures and Devices	0-1%	Provide Rebates on Plumbing Fixtures and Devices	No
1	Provide Rebates for Turf Replacement	0-1%	Provide Rebates for Turf Replacement	No
1	Increase Water Waste Patrols	0-1%	Increase Water Waste Patrols	No
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	0-1%	Fix leaks or faulty sprinklers within 2 days.	Yes
2	Landscape - Limit landscape irrigation to specific days	5-10%	Irrigation shall be limited to 2 days per week turf watering when using potable water. Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	0-1%	Filling or refilling ornamental lakes and ponds is prohibited. Ornamental lakes and ponds that sustain aquatic life of significant value and were actively managed prior to the storage declaration are exempt.	Yes

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
2	Implement or Modify Drought Rate Structure or Surcharge	0-5%	Drought Rates and Surcharges	Yes
2	Improve Customer Billing	0-1%	Improve customer billing reports to include more details on water use	No
2	Decrease Line Flushing	0-1%	Decrease Line Flushing	Yes
2	Pools and Spas - Require covers for pools and spas	0-1%	Pools and Spas - Require covers for pools and spas	No
2	Pools - Allow filling of swimming pools only when an appropriate cover is in place.	0-1%	Pools - Allow filling of swimming pools only when an appropriate cover is in place.	No
2	Other	5-10%	Other Prohibited Uses: The City may implement other prohibited water uses as determined by the City, after notice to customers.	Yes
2	Other	5-10%	The City may reduce potable water allocations in all categories to meet the available water supply.	Yes
2	Other	0-1%	The City may reduce non-potable water allocations in all categories to meet the available water supply.	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	0-1%	Fix leaks or faulty sprinklers within 2 days.	Yes
3	Other water feature or swimming pool restriction	0-1%	Decorative water features that use potable water must be drained and kept dry.	Yes

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	0-1%	Car washing is only permitted using a commercial carwash that recirculates water or by high pressure/low volume wash systems.	Yes
3	Other - Prohibit use of potable water for construction and dust control	0-1%	Require a construction water use plan be submitted to the water supplier that addresses how impacts to existing water users will be mitigated (such as dust control).	Yes
3	Landscape - Other landscape restriction or prohibition	0-1%	With the exception of landscapes watered with non-potable water, limit the installation of new landscaping to drought tolerant trees, shrubs and groundcover. Prohibit installation of new turf or hydroseed. Customers may apply for a waiver to irrigate during an establishment period for the installation of new turf or hydroseed.	Yes
3	Landscape - Limit landscape irrigation to specific days	10-25%	Irrigation shall be limited to 2 days per week turf watering when using potable water. Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Yes
3	Landscape - Prohibit certain types of landscape irrigation	0-1%	Plant containers, trees, shrubs and vegetable gardens shall be watered only by drip irrigation or hand watering.	Yes
4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	0-1%	Fix leaks or faulty sprinklers within 2 day(s).	Yes
4	Other water feature or swimming pool restriction	0-1%	Existing pools shall not be emptied and refilled using potable water unless required for public health and safety purposes.	Yes
4	Other water feature or swimming pool restriction	0-1%	No new permits for pools will be issued.	Yes
4	Landscape - Other landscape restriction or prohibition	0-1%	No new landscape installations or renovations will be permitted.	Yes
4	Landscape - Prohibit all landscape irrigation	0-1%	Previous waivers for watering during an establishment period will be revoked.	Yes

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
4	Landscape - Limit landscape irrigation to specific days	5-20%	Irrigation shall be limited to 1 day per week turf watering when using potable water. Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Yes
4	Other	5-10%	Other Prohibited Uses: The City of Santa Ana may implement other prohibited water uses as determined by the City, after notice to customers.	Yes
4	Other	5-10%	The City of Santa Ana may reduce water allocations in all categories to meet the available water supply.	Yes
5	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	0-1%	Fix leaks or faulty sprinklers within 1 day.	Yes
5	Other	0-1%	Water for agricultural or commercial nursery purposes, except for livestock watering, is prohibited.	Yes
5	Landscape - Prohibit all landscape irrigation	0-1%	All irrigation is prohibited.	Yes
5	Landscape - Prohibit certain types of landscape irrigation	0-1%	Watering of all golf course areas is prohibited	Yes
5	Landscape - Prohibit certain types of landscape irrigation	0-1%	Watering of parks, school grounds, and recreation fields is prohibited, except for rare plant or animal species	Yes
5	Moratorium or Net Zero Demand Increase on New Connections	0-2%	Moratorium or Net Zero Demand Increase on New Connections	Yes
5	Other	0-50%	Water use for public health and safety purposes only.	Yes

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <b>Drop down list</b> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <b>For Retail Suppliers Only</b> <i>Drop Down List</i>
6	Other	0-1%	The City of Santa Ana may discontinue service to consumers who willfully violate any water conservation provisions.	Yes
6	Other	0-1%	Water for air conditioning is prohibited.	Yes
6	Landscape - Prohibit all landscape irrigation	0-5%	The City of Santa Ana may shut off all non-essential water services. All irrigation is prohibited.	Yes
6	CII - Other CII restriction or prohibition	0-15%	Water for commercial, manufacturing, or processing purposes shall be reduced in volume by up to 50% or exceeded if necessary for public health and safety purposes.	Yes
6	Other	0-70%	Water use for public health and safety purposes only. Customer rationing may be implemented.	Yes
NOTES:				

**Submittal Table 8-3: Supply Augmentation and Other Actions**

Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier <i><b>Drop down list</b></i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool</i>	How much is this going to reduce the shortage gap? <i>Include units used (volume type or percentage)</i>	Additional Explanation or Reference <i>(optional)</i>
1 through 6	Other Purchases	0 - 100%	Additional imported water purchases through MET
1 through 6	Other Purchases	0 - 100%	Additional groundwater pumping through Orange County Groundwater Basin

**NOTES:**

Additional Imported Water Purchases to meet the supply gap may have financial ramifications per the MET's Water Supply Allocation Plan.  
Additional Groundwater Pumping in the Orange County Groundwater Basin is subject to OCWD's policies and may be subject to financial

# Appendix B

## **Santa Ana Municipal Code Chapter 39 Article VI Water Shortage Contingency Plan**

**Below is the weblink to the current ordinance (last accessed on April 30, 2021)**

[https://library.municode.com/ca/santa\\_ana/codes/code\\_of\\_ordinances?nodeId=PTIITHCO\\_CH39WASE\\_ARTVI\\_WASHCOPL\\_DIV4REGOWACOPH](https://library.municode.com/ca/santa_ana/codes/code_of_ordinances?nodeId=PTIITHCO_CH39WASE_ARTVI_WASHCOPL_DIV4REGOWACOPH)

# 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 City will activate the communication protocol detailed in the City of Fullerton American Water Infrastructure Act Risk and Resilience Assessment and Emergency Response Plan (ERP). In a longer-term water shortage situation, the City 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 City 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 City 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.

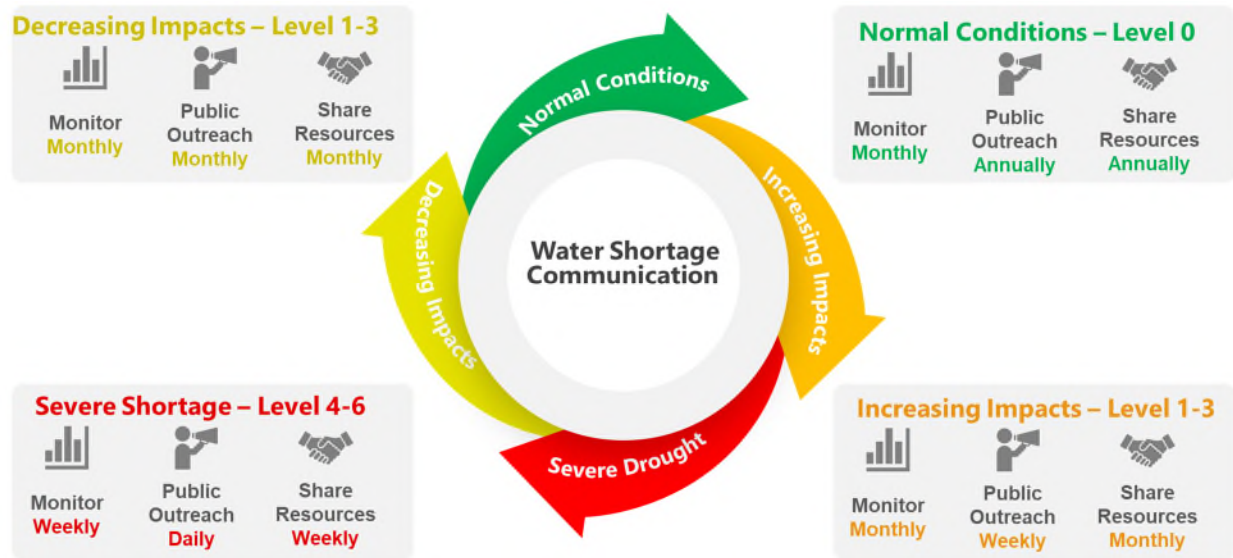
## **Water Shortage Communication Plan**

The Water Shortage Communication Plan serves as the baseline understanding for how the City 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 City's Public Works 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 City 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 City's 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 specified shortage levels. As a water shortage condition escalates, the objectives of the Communication Plan also escalate to ensure progress toward water supply reliability. The

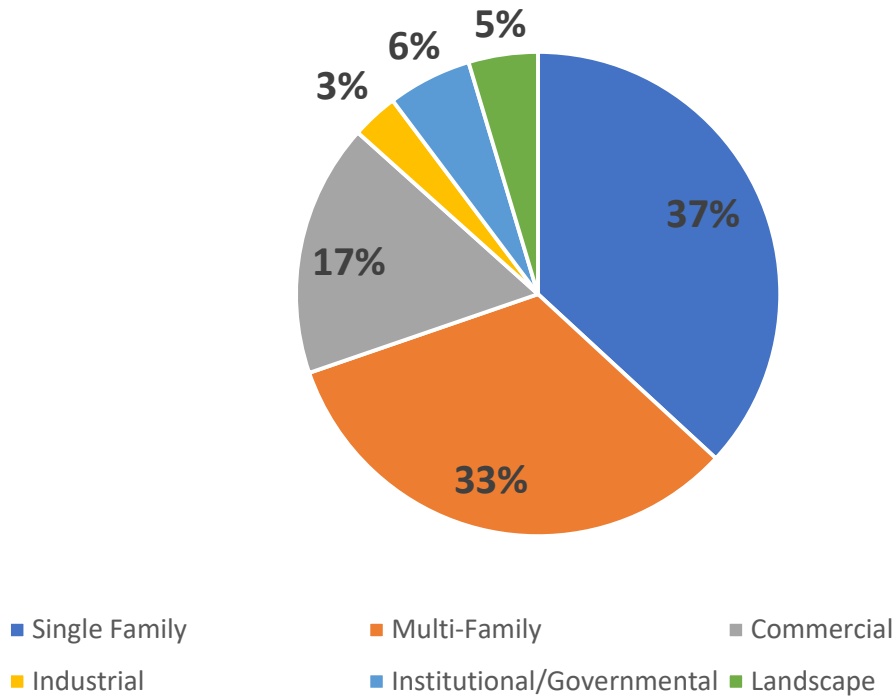
defined objectives for each Water Shortage Level will determine the information that is communicated at each level.



## Target Audiences

The City 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, the City single family water use is expected to account for approximately 50% of the total water demand. Commercial, industrial, and institution water use is projected to account for approximately 17% of total demand. Multifamily and landscape use are both projected to account for approximately 26% and approximately 8% of total demand, respectively. By understanding the local customer and water use profile, the City can implement a Water Shortage Communication Plan that leverages the appropriate communications tools to reach the target audience most effectively during a water shortage.

2025 Projected Water Use by Customer Class



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

- City staff
- Homeowners and renters
- Business owners
- Local Industries
- Property owners and managers
- School district administrators and teachers
- Elected officials and staff
- Environmental/public interest groups
- General public
- Local media
- Homeowners Associations
- Golf courses

### Communications Interfaces and Tools

During normal and water shortage conditions, the City will utilize a comprehensive set of communication interface tools to engage water customers. The interface options and tools include, but are not limited to:

- Water Bill Communications
- Website Information and News Bulletins
- City's Newsletter
- Social Media Outreach

- Media Coverage (print and electronic)
- Publications and Handouts
- Presence at Local Events
- Public Service Announcements
- Direct Mailings
- School Education Programs
- Banners and signs

## Communication Tactics and Implementation Schedule

The City understands their responsibility to be transparent and accountable, have a positive impact on the community, and provide actionable guidance in times of water shortage. Carefully developed and executed communication tactics and an 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 in Table 1.

This Water Shortage Communication Plan is designed to have a standard set of tactics that systematically align to the current Water Shortage Level. For example, information that may be educational during Shortage Level 0 will shift to specific status information and shortage level response action, as defined in Section 3.4.1 of the WSCP and DWR Table 8.2, as water shortage levels increase from 1 to 6. In Shortage Level 0, shortage communication will include a general overview of water efficiency. As the Water Shortage Levels increase, messaging will align with specific shortage level response requirements and objectives.

### *Website*

- City Website: Provide water efficiency information and resources on City 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.
- Promote SoCal Water\$mart Website: Provide information and link directing viewers to SoCal Water\$mart incentive programs.

### *Partnerships/Regional Initiatives*

- MET/MWODOC: Utilize regional messaging programs, messages, and resources to communicate with local water users.
- SoCal Water\$mart: Direct local water users to regional incentive programs for water efficiency incentive opportunities.

### *Social Media*

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

### *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 information 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.
- Briefing Papers/Talking Points: Provide briefing papers to local media outlets such as newspapers, magazines, and other publications. This may also include social media posts and infographics.

### *Community Outreach*

- Public Events: Promote water efficiency and water awareness at local events such as concerts in the park, disaster preparedness expos and other community events.
- Promotional Giveaways: Provide promotional water efficiency devices or messaging materials (i.e. hats, stickers, mugs, 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.
- Residential Water Efficiency Educational Classes: Provide educational classes to community on topics such as finding and fixing leaks, irrigation program scheduling, waterwise vegetation (with focus on Orange County native plants), etc.
- Non-residential water efficiency training classes/programs: Provide training programs to local irrigation and cooling tower service technicians on water efficient practices and water shortage level requirements.

### *City 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.
- Water Surveys – Commercial: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase.
  - Water Surveys – Residential: Promote regional rebate and incentive programs for local water users. Messaging frequency increased as the shortage levels increase. City staff may participate in limited residential surveys to assist with efficiency, identify and correct leaks and provide communication to customers.
  - California Friendly Landscaping Classes: Promote free classes on California friendly landscape design, irrigation principles and maintenance. 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.
- **Neighborhood Canvassing:** City staff and/or representatives will canvas neighborhoods to educate residents of water shortage status and response action requirements.

### 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.**
- **SoCal Water\$mart:** Direct local water users to regional incentive programs for water efficiency incentive opportunities.

Water Shortage Communication Matrix			
	Wholesaler	Santa Ana	Stakeholders
Decision	<b>Wholesaler Board of Directors</b>	<b>City of Santa Ana City Council</b> 	<b>Member Agencies Board/Council</b>
Interagency Coordination	<b>Water Shortage Team Leader</b>	<b>City Water Shortage Leader</b> 	<b>Member Agencies and Public Partner Leaders</b>
Support Staff	<b>Coordination Support</b> <ul style="list-style-type: none"> <li>• Policy/Legal</li> <li>• Public Outreach</li> <li>• Logistics</li> <li>• Monitoring</li> </ul>	<b>Water Shortage Team</b> <ul style="list-style-type: none"> <li>• Engineering Planning</li> <li>• Operations</li> <li>• Communications</li> <li>• Financial</li> <li>• Urban Conservation</li> <li>• Public Outreach</li> </ul> 	<b>Member Agency Water Shortage Team</b> <ul style="list-style-type: none"> <li>• Engineering Planning</li> <li>• Monitoring</li> <li>• Operations</li> <li>• Environmental Quality</li> <li>• Policy/Legal</li> <li>• Communications</li> <li>• Financial</li> <li>• Urban Conservation</li> <li>• Public Outreach</li> </ul>

### Monitor, Evaluate, and Amend

The effectiveness of the City's 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.

Table 1: Water Shortage Communication Plan Implementation Schedule

Water Shortage Level	0	1	2	3	4	5	6
<b>Goal</b>	Create an awareness of water shortage level status and encourage water efficiency from all citizens.						
<b>Objective</b>	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
<b>Outreach Strategies</b>	1) City Website 2) Written and Print Media 3) Social Media 4) Community Outreach 5) Educational Outreach 6) Direct communication with high water users 7) Communication with commercial/industrial water users 8) City Water Efficiency Programs 9) Water Use Communications 10) Partnerships/Regional Initiatives						
<b>Tactics</b>							
<i>Website</i>	X	X	X	X	X	X	X
City Website	X	X	X	X	X	X	X
Water Shortage Indicator.	X	X	X	X	X	X	X
<i>Social Media</i>							
Facebook		X	X	X	X	X	X
Instagram		X	X	X	X	X	X
Twitter		X	X	X	X	X	X
<i>Digital and Print Media</i>							
Flyers/Signage/Brochures		X	X	X	X	X	X
Consumer Confidence Reports (CCRs)	X	X	X	X	X	X	X
<i>Media Relations</i>							

News Stories/News Releases/Newsletters.			X	X	X	X	X
<i>Community Outreach</i>							
Public Events	X	X	X	X	X	X	X
Promotional Giveaways.	X	X	X	X	X	X	X
<i>Educational Outreach</i>							
School Programs	X	X	X	X	X	X	X
Residential Water Efficiency Educational Classes		X	X	X	X	X	X
<i>City Water Efficiency Programs</i>							
Rebate/Incentive Programs	X	X	X	X	X	X	X
Turf Removal	X	X	X	X	X	X	X
Water Surveys	X	X	X	X	X	X	X
California Friendly Landscaping Classes		X	X	X	X	X	X
<i>Direct Customer Communication</i>							
Billing Inserts		X	X	X	X	X	X
Water Use Notifications			X	X	X	X	X
Neighborhood Canvassing					X	X	X
<i>Partnerships/Regional Initiatives</i>	X	X	X	X	X	X	X
<b>Message Frequency</b>	Ongoing, regular messaging	Frequency escalates depending on water shortage level and/or financial budget.					

# Appendix D

## Notice of Public Hearing

MAYOR  
Vicente Sarmiento  
MAYOR PRO TEM  
David Penaloza  
COUNCILMEMBERS  
Phil Bacerra  
Johnathan Ryan Hernandez  
Jessie Lopez  
Nelida Mendoza  
Thai Viet Phan



CITY MANAGER  
Kristine Ridge  
CITY ATTORNEY  
Sonia R. Carvalho  
CLERK OF THE COUNCIL  
Daisy Gomez

## CITY OF SANTA ANA

### PUBLIC WORKS AGENCY

220 S. Daisy Ave • (M-85)  
Santa Ana, California 92703  
[www.santa-ana.org](http://www.santa-ana.org)  
714-647-3320

March 8, 2021  
County of Orange  
Attn: Mr. James Treadaway, Director of Public Works  
601 N. Ross Street  
Santa Ana, California 92701

#### **Subject: City of Santa Ana 2020 Urban Water Management Plan Update**

The City of Santa Ana (City) 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 City'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 City'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. City will be adopting its Water Shortage Contingency Plan as part of the 2020 UWMP.

City 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 City's draft 2020 UWMP will be available for review on the City's website at <https://www.santa-ana.org/pw> in spring of 2021, and City will subsequently hold noticed public hearings on the 2020 UWMP, Water Shortage Contingency Plan, and 2015 UWMP Addendum in advance of their proposed adoption.

City invites you to submit comments and consult with City regarding its 2020 UWMP update and 2015 UWMP Addendum. City 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 City's 2020 UWMP update, please contact Rudy Rosas at (714) 647-3379, or by email at [rrosas@santa-ana.org](mailto:rrosas@santa-ana.org).

Sincerely,

Cesar E. Barrera, P.E.  
Deputy Public Works Director/Water Resources Manager

#### SANTA ANA CITY COUNCIL

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Daisy Gomez

## CITY OF SANTA ANA

### PUBLIC WORKS AGENCY

220 S. Daisy Ave. • (M-85)  
Santa Ana, California 92703  
[www.santa-ana.org](http://www.santa-ana.org)  
714-647-3320

March 8, 2021

City of Orange Public Works Department  
Attn: Christopher Cash, Public Works Director  
300 E Chapman Avenue  
Orange, California 92866-1591

#### **Subject: City of Santa Ana 2020 Urban Water Management Plan Update**

The City of Santa Ana (City) 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 City's UWMP is required every five (5) years.

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Sincerely,

Cesar E. Barrera, P.E.  
Deputy Public Works Director/Water Resources Manager

#### SANTA ANA CITY COUNCIL

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### PUBLIC WORKS AGENCY

220 S. Daisy Ave • (M-85)  
Santa Ana, California 92703  
[www.santa-ana.org](http://www.santa-ana.org)  
714-647-3320

March 8, 2021

City of Garden Grove Public Works Department  
Attn: Mr. Bill Murray, Public Works Director  
13802 Newhope Street  
Garden Grove, California 92843

#### **Subject: City of Santa Ana 2020 Urban Water Management Plan Update**

The City of Santa Ana (City) 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 City's UWMP is required every five (5) years.

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Sincerely,

Cesar E. Barrera, P.E.  
Deputy Public Works Director/Water Resources Manager

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# ORANGE COUNTY REPORTER

~ SINCE 1921 ~

600 W SANTA ANA BLVD, SANTA ANA, CA 92701  
Telephone (714) 543-2027 / Fax (714) 542-6841

NORMA OROZCO  
SANTA ANA/CITY CLERK  
20 CIVIC CENTER PLAZA M-30  
SANTA ANA, CA - 92701

## PROOF OF PUBLICATION

(2015.5 C.C.P.)

State of California )  
County of ORANGE ) ss

Notice Type: GPN - GOVT PUBLIC NOTICE

Ad Description:  
PH - UWMP and WSCP

I am a citizen of the United States and a resident of the State of California; 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 printer and publisher of the ORANGE COUNTY REPORTER, a newspaper published in the English language in the city of SANTA ANA, county of ORANGE, and adjudged a newspaper of general circulation as defined by the laws of the State of California by the Superior Court of the County of ORANGE, State of California, under date 06/20/1922, Case No. 13421. That the notice, of which the annexed is a 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:

05/19/2021, 05/28/2021

Executed on: 05/28/2021  
At Los Angeles, California

I certify (or declare) under penalty of perjury that the foregoing is true and correct.



Signature



\* A 0 0 0 0 0 5 7 3 4 6 3 1 \*

This space for filing stamp only

OR #: 3472862

OR-3472862#

CITY OF SANTA ANA  
PUBLIC WORKS AGENCY  
NOTICE OF PUBLIC HEARING TO  
ADOPT 2020 URBAN WATER  
MANAGEMENT PLAN & WATER  
SHORTAGE CONTINGENCY PLAN

Date: June 1, 2021  
To: Affected Agencies, Organizations and Interested Parties  
Subject: Notice of Public Hearing to Adopt a Resolution Approving the 2020 Urban Water Management Plan, 2020 Water Shortage Contingency Plan, and Appendix J as an Addendum to its 2015 Urban Water Management Plan

NOTICE IS HEREBY GIVEN that the City Council of the City of Santa Ana ("City") will hold a public hearing on June 1, 2020, or as soon thereafter as the Agenda permits, in the Council Chamber of the City, to consider the City'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.

The documents continue to be available for review on the City's website at <https://www.santa-ana.org/pw/public-works-newsroom/public-noticeshearings> and at the City of Santa Ana Public Works Counter, located at 20 Civic Center Plaza, Santa Ana, CA 92701.

**INVITATION TO BE HEARD:** A public hearing of the City Council of the City of Santa Ana to consider approval of the resolution and consider adoption of the UWMP and WSCP will be held on **June 1, 2021 at 5:45 p.m.** Due to the ongoing pandemic, City Council will hold its meeting virtually. All persons desiring to comment on, or having objections to, the content or adequacy of the UWMP and WSCP may submit written comments to the Clerk of the Council, by mail to City of Santa Ana, 20 Civic Center Plaza - M30, Santa Ana, CA 92701 or via email at [ecomments@santa-ana.org](mailto:ecomments@santa-ana.org) by 12:00 p.m. on Monday, the day before the meeting. To participate in the meeting virtually please see instructions found on <https://www.santa-ana.org/cc/city-meetings>.

For any questions regarding the UWMP and WSCP, please contact Rudy Rosas, by phone at (714) 647-3379 or by email at [ecomments@santa-ana.org](mailto:ecomments@santa-ana.org).  
5/19, 5/28/21

# Appendix E

## Adopted WSCP Resolution

RESOLUTION NO. 2021-031

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
SANTA ANA ADOPTING THE 2020 WATER SHORTAGE  
CONTINGENCY PLAN FOR THE CITY OF SANTA ANA

WHEREAS, Sections 10610 through 10657 of the California Water Code, known as the Urban Water Management Planning Act, require that every urban water supplier providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, prepare an Urban Water Management Plan ("UWMP") at least once every five years; and

WHEREAS, these plans support suppliers' long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs; and

WHEREAS, each UWMP must be adopted by the supplier's governing body and submitted to the California Department of Water Resources; and

WHEREAS, the City of Santa Ana is an urban water supplier subject to this requirement; and

WHEREAS, on June 7, 2016, by Resolution No. 2106-040, the City Council adopted the City's 2015 UWMP; and

WHEREAS, the City has prepared the 2020 Urban Water Management Plan as an update to the 2015 UWMP on the City's water resource needs, water use efficiency programs, water reliability assessments, and strategies to mitigate water shortage conditions; and

WHEREAS, the City's 2020 UWMP contains all elements to satisfy compliance with the Urban Water Management Planning Act as amended since 2015; and

WHEREAS, the City's 2020 UWMP contains a Water Shortage Contingency Plan ("WSCP"), a detailed proposal for how a supplier intends to act in the case of an actual water shortage condition, as required by Water Code Section 10632; and

WHEREAS, the WSCP must be treated as a standalone plan for public hearing and adoption procedures; and

WHEREAS, the City has given the legally required notices for the 2020 WSCP and conducted a public hearing on June 1, 2021 to consider the approval of the 2020 WSCP; and

WHEREAS, the City separately gave the legally required notices for the 2020 UWMP and conducted a public hearing on June 1, 2021 to consider the approval of the 2020 UWMP.

NOW, THEREFORE, be it resolved by the City Council of the City of Santa Ana as follows:

Section 1. The 2020 Water Shortage Contingency Plan is hereby adopted.

Section 2. The City Manager or his or her designee is directed to file a copy of the City's 2020 Water Shortage Contingency Plan with the California Department of Water Resources, the California State Library, and any city or county within which the City provides water supplies within 30 days but no later than July 1, 2021.

Section 3. The 2020 Water Shortage Contingency Plan shall be available for public review during the City's normal business hours no later than 30 days after filing a copy of the plan.

Section 4. This Resolution shall take effect immediately upon its adoption by the City Council, and the Clerk of the Council shall attest to and certify the vote adopting this Resolution.

ADOPTED this 1<sup>st</sup> day of June, 2021.

\_\_\_\_\_  
Vicente Sarmiento  
Mayor

APPROVED AS TO FORM:  
Sonia R. Carvalho, City Attorney

By: John M. Funk  
John M. Funk  
Sr. Assistant City Attorney

AYES:	Councilmembers	<u>Bacerra, Hernandez, Lopez, Mendoza, Phan</u> <u>Penaloza, Sarmiento (7)</u>
NOES:	Councilmembers	<u>None (0)</u>
ABSTAIN:	Councilmembers	<u>None (0)</u>
NOT PRESENT:	Councilmembers	<u>None (0)</u>

CERTIFICATION OF ATTESTATION AND ORIGINALITY

I, DAISY GOMEZ, Clerk of the Council, do hereby attest to and certify the attached Resolution No. 2021-031 to be the original resolution adopted by the City Council of the City of Santa Ana on June 1, 2021.

Date: June 3, 2021

  
\_\_\_\_\_  
Daisy Gomez  
Clerk of the Council  
City of Santa Ana

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