

## SECTION 8. WATER SHORTAGE CONTINGENCY PLANNING

This section acts as the City's Water Shortage Contingency Plan (WSCP) to address potential water shortages, including catastrophic interruptions and drought management. It documents the process the City will follow to anticipate water supply disruptions and describes how the City will address water shortages. This WSCP can help the City justify projects, policies, and programs determined necessary to mitigate the risk of a water shortage condition. The following elements are included in this WSCP:

- Water Supply Reliability Analysis
- Legal Authorities
- Annual Water Supply and Demand Assessment Procedures
- Water Shortage Levels and Shortage Response Actions
- Monitoring, Reporting, and Refinement of Procedures
- Compliance and Enforcement
- Financial Consequences
- Communication Protocols

The WSCP is a stand-alone document that can be amended, as needed, without amending the City's 2020 UWMP. The process for WSCP amendments and required public hearings are described in *Section 10 Plan Adoption, Submittal, and Implementation*.

### 8.1 Water Supply Reliability

*CWC 10632(a)(1)*

This section describes the findings related to water system reliability and key issues that may create a shortage condition. SDCWA's supply during a non-allocation dry period could exceed the supplies used during a normal year given the ability to purchase additional imported supplies from its wholesaler, Metropolitan Water District of Southern California (MWD). Further SDCWA projects sufficient supplies and carryover storage to meet demands in future single and multi-dry year scenarios, due to supply diversification and availability of supplies held in carryover storage (SDCWA 2021). The City's supply is determined to be reliable in normal year, single-dry year, and multiple-dry years scenarios, with additional supplies purchased from SDCWA to meet demands in dry years as needed. The City has also taken steps to bolster its local supplies, which are drought-proof, in order to reduce reliance on imported water supplies.

### 8.2 Legal Authorities

*CWC 10632(a)(7)*

Under California law, including California Water Code (CWC) Chapters 3.3 and 3.5 of Division 1, Parts 2.55 and 2.6 of Division 6, Division 13, and Article X, Section 2 of the California Constitution, the City Council is authorized to implement the water shortage actions outlined in this WSCP. In all water shortage cases, shortage response actions to be implemented will be at the discretion of the City

Council and will be based on an assessment of the supply shortage (determined by the City's annual supply and demand assessment, notification from SDCWA to member agencies, or other means as appropriate), customer response, and need for demand reductions.

It is noted that upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the state will defer to implementation of locally adopted water shortage contingency plans to the extent practicable. The City will coordinate with regional and local water suppliers for which it provided water supply services for possible proclamation of a local emergency as necessary.

### 8.3 Annual Water Supply and Demand Assessment Procedures

*CWC 10632(a)(2)*

The annual water supply and demand assessment (Annual Assessment) is a new requirement for UWMPs. The assessment is used to determine if there will be a shortfall in City water supplies for the current year and one dry year. This section describes the procedures used to 1) approve the Annual Assessment and 2) conduct the Annual Assessment. While the UWMP's Drought Risk Assessment (DRA) evaluates longer-term, multi-year water supply reliability, the Annual Assessment focuses on actual forecasted near-term water supply conditions (i.e., next 12 months). The steps and timing to complete the Annual Assessment and submit the final report are listed below to provide consistency year-after-year regardless of City staff changes:

1. March - April
  - a. City determines available local supplies.
  - b. City coordinates with SDCWA to gather necessary information for SDCWA to conduct its wholesaler Annual Assessment.
2. April-May
  - a. SDCWA announces member agency allocation determination for current year.
  - b. SDCWA determines carryover (and emergency storage apportionments if under emergency).
  - c. City conducts Annual Assessment:
    - i. City determines total available supply – inclusive of imported water supply.
    - ii. City determines infrastructure constraints (including water quality conditions limiting local sources).
    - iii. City determines expected demand for current year and one subsequent dry year, anticipated to be based on regional projections from SDCWA.
    - iv. City compares supply and demand and makes a determination of the water supply reliability (see *Section 8.2.6 Evaluation Criteria*).
3. June
  - a. City Council reviews and approves Annual Assessment determination.
  - b. City coordinates with SDCWA on submittal of the report. Annual Assessment report to be submitted to the state by July 1.

It should be noted that this timeline serves as a guideline for preparing the Annual Assessment and may be modified based on circumstances relevant at that time.

### **8.3.1 Decision-Making Process**

A formal decision-making process will occur each year to approve the water supply reliability determination of the Annual Assessment. The Annual Assessment will document anticipated shortages if any, triggered shortage response actions, associated compliance and enforcement actions, and communication actions. These results will be presented to the City Council for approval. If the Annual Assessment determines a potential supply shortage, the City Council's approval of the Annual Assessment, with potential coordination with SDCWA, will also serve as a formal declaration of any foreseen water shortage level, and trigger recommendations for specific shortage response actions.

### **8.3.2 City Water Supply Projection**

The City will evaluate the water system reliability for the coming year, while considering a subsequent dry year. Under normal (non-shortage) conditions, the City can purchase as much water as necessary from SDCWA to meet demands. When that supply (imported supply) is under shortage conditions, the amount of shortage (allocation of shortage) specific to the City is determined in a process lead by SDCWA. SDCWA uses the availability of the City's local supplies to determine the City's imported water allocation. In years where there is a shortage of imported water, the City's ability to access imported water depends on the availability of its local supplies. The evaluation of supply availability by SDCWA and by the City therefore depend on the availability of the City's local supplies. To inform SDCWA's allocation process, the City must describe and quantify, in AF, each source of City-owned water supply. The City's local water supply portfolio consists of desalinated groundwater, non-potable recycled water, and in the future, potable reuse. Imported water supplies include SDCWA imported water and in the event of regional shortages, SDCWA Carryover Storage supplies.

#### **Groundwater**

The City utilizes brackish groundwater from the Mission Basin subbasin of the San Luis Rey Valley Groundwater Basin as one of its local potable supplies. Groundwater is treated to potable standard at the Mission Basin Groundwater Purification Facility (MBGPF). The City's reliable average groundwater supply is 2,800 AFY and is not affected by single or multi-year drought because the City extracts less than the safe yield of the Mission Basin.

#### **Non-Potable Recycled Water**

The City's non-potable recycled water supply is produced at the San Luis Rey Water Reclamation Facility (SLRWRF), which has a current treatment capacity of 3.0 million gallons per day (MGD). Recycled water is delivered to irrigation customers in the City's Upper and Lower Conveyance systems and to Whelan Lake. Expansion of the recycled water distribution system is anticipated to meet projected demands of 3,000 AFY by 2025 and up to 5,040 AFY by 2030. This source of supply is reliable during single and multi-year droughts because it uses wastewater as its source, and the City produces sufficient wastewater to meet recycled water demands even in drought years.

#### **Indirect Potable Reuse**

The City is currently implementing its Pure Water Oceanside project, which will produce 3,360 AFY of fully advanced treated (FAT) water at the City's advanced water treatment (AWT) facility by 2025. This water will be injected into the Mission Basin and eventually treated at the MBGPF for indirect potable use. Similar to the City's non-potable recycled water, FAT water will be available for indirect potable reuse even during single and multi-year droughts.

### SDCWA Purchased Water

The City purchases water from SDCWA. SDCWA’s water supply portfolio consists of desalinated seawater, Colorado River water, and State Water Project water. Purchases from SDCWA are used to meet City demands after local supplies have been utilized. SDCWA’s desalinated seawater is a drought-proof supply, while its Colorado River water supplies that are independent of supplies purchased from MWD are highly reliable due to SDCWA’s prioritization for Colorado River allocations.

### SDCWA Carryover

If a potential water supply shortage is identified in SDCWA’s annual assessment, SDCWA will evaluate the use of stored water reserves from its Carryover Storage program. Carryover storage includes surface water in the San Vicente Reservoir and out-of-region groundwater storage in California’s Central Valley. There is 100,000 AF of storage capacity in San Vicente Reservoir and 70,000 AF of storage capacity in groundwater storage (SDCWA, 2021).

The available water supply evaluation used in the Annual Assessment will consider hydrological and regulatory conditions. The methodology for determining the available supply from each water supply source is presented in **Table 8-1**.

**Table 8-1: Supply Source Availability Evaluation Methodology**

Supply Source	Evaluation Methodology
Groundwater	Determine previous year’s production and apply potential production constraints.
Recycled Water (Non-Potable)	Determine previous year’s production and account for potential decreases in wastewater flow.
Potable Reuse	Determine previous year’s production and account for potential decreases in wastewater flow. This supply will not be available until 2025.
SDCWA Purchased Water	Allocation determined by SDCWA.
SDCWA Carryover	Determine available supply to the City based on SDCWA WSCP and the most recent information.

### 8.3.3 Planned Water Use for Current Year and Subsequent Dry Year

Unless otherwise specified, the Annual Assessment will use the City’s most recent unconstrained demand forecast to determine its current year water use. Unconstrained demand is defined as the City’s expected customer water need for the coming year prior to the application of shortage response actions. Specifically, the City will use the projected demands with passive and active conservation presented in *Section 4 System Water Use* (see **Table 4-2**). Additional real-time adjustments should be applied to account for factors such as weather, prior-year conditions, anticipated new demands for the year, and other factors pertinent to the land use and customer use patterns. Dry year demand is based on the single-dry year as defined in *Section 7 Supply Reliability Assessment* of the City’s 2020 UWMP.

The current year water use projection should then be revised to include adjustment factors to ensure enough supply is available to meet the anticipated higher demands in the subsequent dry year. Each year’s assessment will be informed by the characterizations in *Section 6 System Supplies* and other relevant factors and considerations at the time of the assessment.

### 8.3.4 Infrastructure Considerations

The City is required to describe the methodology for identifying existing water supply infrastructure capabilities and potential constraints. The City's existing water supply infrastructure is well-documented on the City's GIS system and continuously assessed by Water System Operations staff. Existing water supply infrastructure includes City-owned infrastructure and regional and imported water infrastructure. City-owned infrastructure includes water treatment plants, pipelines, pump stations, and groundwater wells. Regional and imported water infrastructure includes a seawater desalination plant, and SDCWA's aqueducts and regional pipelines. The City will evaluate existing water supply and capacities and any constraints for the current year and for one subsequent dry year for City-owned supplies and infrastructure, and will rely on SDCWA's assessment for water supplies, capacities, and constraints for regional supplies and infrastructure. City-owned infrastructure constraints may consider service area-level supply capabilities in the current year, such as shut-downs due to maintenance, construction impacts, and water quality impacts. Once constraints have been identified, the City will determine whether the total quantified water supply (as determined in Section 8.2.2 above) should be adjusted to account for these identified constraints. The City will coordinate with SDCWA to evaluate regional infrastructure constraints to determine how they would impact available City water supplies.

### 8.3.5 Evaluation Criteria

The City relies on SDCWA to evaluate regional supply and demand and to evaluate water shortage levels. The City's supply and demand evaluation criterion are applied as minor adjustments to account for latest information on City-owned supplies or unpredicted changes in City demand. As such, the City will evaluate City-owned supply storage levels, changes in recycled water availability, changes in groundwater availability, and recent water demand trends to determine any deviations from the SDCWA Annual Assessment.

## 8.4 Drought Ordinance

The City has two ordinances in place to establish operational procedures for long-term (drought) and short-term (catastrophic) water shortages. The City is updating its drought ordinance to maintain consistency with SDCWA's 2021 Model Drought Ordinance, which was revised in 2021 to include the six state-mandated water shortage levels (see *Section 8.4* below). Shortage response actions described in this WSCP align with the City's new drought ordinance. The two existing ordinances are listed and described in further detail below, though are expected to be replaced with the upcoming new drought ordinance.

- Water Conservation Program and Drought Response Conservation Measures for Mandatory Water Reductions (Ordinance No. 08-OR0439-1)
- Updates to Water Conservation Program and Drought Response Conservation Measures (Ordinance No. 15-OR0276-1)

### **Water Conservation Program and Drought Response Conservation Measures for Mandatory Water Reductions (Ordinance No. 08-OR0439-1)**

Originally adopted in 1991, the July 2008 updates to the City's "Drought Ordinance" established regulations to be implemented during times of declared water shortages or declared water shortage emergencies. Ordinance No. 08-OR0439-1 establishes four levels of drought response actions, with increasing restrictions on water use in response to decreasing available supplies. This ordinance was

based on a model program developed by the SDCWA for its member agencies. A copy of the ordinance is included in **Appendix E**.

### **Updates to Water Conservation Program and Drought Response Conservation Measures (Ordinance No. 15-OR0276-1)**

The most recent amendment to the City’s “Drought Ordinance” occurred in May 2015 to incorporate Governor Brown’s 2014 state of emergency proclamation for drought and the 2015 Executive Order for 25% reduction of water use statewide. The City first escalated the drought response level from a Level 1 Drought Watch to a Level 2 Drought Alert in August 2014. SDCWA and its member agencies were able to analyze the effectiveness of the drought response program during this timeframe. The City then revised the Levels 1 and 2 drought conditions with the adoption of Ordinance No. 15-OR0276-1. A copy of the ordinance is included in **Appendix E**.

### **Amendment to Oceanside City Code, Chapter 37**

The City is amending its the Drought Ordinance to reflect the six state-mandated drought response levels. This amendment is anticipated to be passed in June 2021, and will amend Section 37 of the City Code, which currently reflects the Water Conservation Program and Drought Response Conservation Measures for Mandatory Water Reductions (Ordinance No. 08-OR-0439-1) described above. The water shortage levels and response actions included in this WSCP as described below reflects the proposed amendments to the City Code anticipated to be adopted in June 2021. A copy of the draft ordinance is included in **Appendix E**.

## **8.5 Water Shortage Levels and Shortage Response Actions**

### *CWC 10632(a)(3)*

Shortage levels in this WSCP have been standardized to the six required shortage levels to provide consistent regional and statewide approach to conveying the relative severity of waters supply shortage conditions. The water shortage levels shown in **Table 8-2** are a sequential, regulatory program of increasingly stringent prohibitions on the use of water delivered within the City. In addition to the shortage response actions associated with the City’s Drought Ordinance, this WSCP describes applicable supply augmentation, demand reduction, and operational change measures that can be implemented in times of shortages per water shortage level designation. When the City declares that a particular stage is in effect, City customers must comply with all regulations contained in the declared stage. In order to encourage water use efficiency and awareness, the City never operates below Level 1.

For the purposes of this WSCP, special water features are defined and analyzed separately from pools and spas. Non-pool and non-spas may use or be able to use recycled water, whereas pools and spas must use potable water for health and safety considerations. Special water features include, but are not limited to, ornamental fountains, lakes, and ponds.

**Table 8-2: Water Shortage Contingency Plan Levels**

DWR Table 8-1 Retail: Water Shortage Contingency Plan Levels		
Shortage Level	Percent Supply Reduction	Shortage Response Actions
1	Up to 10%	Limited irrigation hours unless using drip/micro-irrigation. If not using irrigation system, irrigation with buckets, hand-held hose with shut-off nozzle, or low-volume non-spray irrigation. Repair water leaks within 5 days of notification, and use non-potable water for construction when available.
2	Up to 20%	All restrictions under Level 1 plus additional limits on landscape irrigation frequency and duration. Leaks must be repaired within 72 hours of notification, and use of decorative water features prohibited unless using recirculated water.
3	Up to 30%	All restrictions under Level 1 and Level 2 plus additional limits on landscape irrigation, prohibition on washing vehicles (with exceptions), and repair of leaks within 48 hours of notification. Consideration of annexations will be suspended.
4	Up to 40%	All restrictions under Levels 1, 2, and 3 plus prohibition on filling or re-filling ornamental lakes or ponds except as needed to sustain aquatic life of significant value.
5	Up to 50%	All restrictions under Levels 1, 2, 3, and 4, plus prohibition of all landscape irrigation except crops and products for nurseries and commercial growers, with some exception. All leaks must be repaired within 24 hours of notification. The City may establish water allocation at Level 5, and will prohibit new potable water services, temporary meters, and permanent meters, with some exceptions.
6	>50%	All restrictions under Levels 1, 2, 3, 4, and 5, plus prohibition of all landscape irrigation with exception of crops and landscape products of commercial growers and nurseries, as well as exceptions for fire protection, erosion control, threatened species, livestock, public works projects, and environmental mitigation projects.

The City’s Drought Ordinance establishes regulations to be implemented during the water shortage levels with increasing restrictions on water use in response to worsening drought conditions and decreasing available supplies. During a Water Shortage Level 1 condition, water waste is prohibited and the City encourages consumers to follow the Water Shortage Level 1 water conservation measures through local and regional public education and awareness measures. During a Water Shortage Level 2 condition or higher, the established water conservation measures and water use restrictions are mandatory and violations are subject to criminal, civil, and administrative penalties and remedies specified in this ordinance and as provided by the City’s Administrative or Municipal Code.

At all times, the following water use restrictions are in place within the City’s service area:

- Stop the use of potable water to wash paved surfaces, except when necessary to alleviate safety or sanitation hazards
- Stop water waste resulting from inefficient landscape irrigation and onto non-targeted areas
- Use recirculating ornamental fountains only

- Wash vehicles using a bucket and hand-held hose with a shutoff nozzle, mobile high pressure/low volume system, or at commercial site that recirculates water onsite
- Restaurants serve water only upon request
- Hotel and other commercial lodging offer guest the option of not laundering towels and linens daily

### **Water Shortage Level 1**

A Drought Response Level 1 condition occurs when SDCWA notifies its member agencies that supply shortages may occur due to drought. During these conditions, member agencies are encouraged to implement voluntary demand reduction of up to 10% to ensure sufficient supplies will be available to meet anticipated demands. The City's never operates at a level below Drought Response Level 1 in order to encourage water use efficiency at all times.

During a Drought Response Level 1, the City actively promotes water efficiency through public education and outreach to increase public awareness of the need to implement the water conservation measures listed in **Table 8-2**. The conservation practices encouraged during a Level 1 condition include:

- Water landscaped areas not irrigated by an irrigation system by using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation
- Irrigate residential and commercial landscapes before 10 a.m. or after 6 p.m. only. Watering is permitted at any time when a drip/micro-irrigation system/equipment is used.
- Irrigate nursery and commercial grower's products before 10 a.m. or after 6 p.m. only; Watering is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Watering of livestock is permitted at any time
- Repair all water leaks within five days of notification by the City
- Use non-potable water for construction purposes when available

### **Water Shortage Level 2**

A Drought Response Level 2 condition occurs when SDCWA notifies its member agencies that demand reductions of up to 20% are required in order to maintain sufficient supplies to meet anticipated demands. The City declares a Level 2 condition through adoption of a resolution by City Council. With the declaration of a Level 2 drought condition, mandatory water use restrictions are implemented. All restrictions under Level 1 must continue to be adhered to, with the addition of the following mandatory measures:

- Limit landscape irrigation to no more than three assigned days per week. This does not apply to commercial growers or nurseries unless under order by the governor or the State.
- Limit irrigation using sprinklers to no more than ten minutes per assigned day. This does not apply to landscape irrigation systems using water efficient devices.
- Water landscaped areas not irrigated by an irrigation system by using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation, on same schedule as landscape irrigation (three days per week in dry season, one day per week in wet season)

- Repair all leaks within 72 hours upon notification by the City
- Stop operation of ornamental fountains or other decorative water features unless recirculated water is used

### **Water Shortage Level 3**

A Drought Response Level 3 condition occurs when SDCWA notifies its member agencies that demand reduction of up to 30% is required in order to have sufficient supplies available to meet anticipated demands. All water users shall continue to comply with water conservation measures under Level 1 and Level 2 during a Drought Response Level 3 with the addition of the following mandatory conservation measures:

- Limit landscape irrigation to no more than two assigned days per week. This does not apply to commercial growers or nurseries.
- Water landscaped areas not irrigated by an irrigation system by using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation on same schedule as landscape irrigation.
- Stop washing vehicles except at commercial carwashes that re-circulate water or by high pressure/low volume wash systems.
- Repair all leaks within 48 hours upon notification by the City

The City will suspend consideration of annexations to its service area when a Drought Response level 3 condition is declared.

### **Water Shortage Level 4**

A Drought Response Level 4 condition occurs when SDCWA declares a water shortage emergency and notifies its member agencies that a demand reduction of up to 40% is required to in order for the City to have maximum water supplies available to meet anticipated demands. The City will declare a Level 4 in the manner and on the grounds provided in CWC Section 350. All water conservation measures under Levels 1, 2, and 3 shall continue to be adhered to with the addition of the following measure:

- Stop filling or re-filling ornamental lakes or ponds, except to the extent needed to sustain aquatic life of significant value, provided that such animals were actively managed within the water feature prior to declaration of a drought response level

### **Water Shortage Level 5**

A Drought Response Level 5 condition occurs when SDCWA declares a water shortage emergency and notifies its member agencies that a demand reduction of up to 50% is required to in order for the City to have maximum water supplies available to meet anticipated demands. The City will declare a Level 5 in the manner and on the grounds provided in CWC Section 350. All water conservation measures under Levels 1, 2, 3, and 4 shall continue to be adhered to with the addition of the following measures:

- Stop all landscape irrigation, except crops and landscape products of commercial growers and nurseries, with the exception of 1) maintenance of trees and shrubs watered consisted with methods and timing described in Water Shortage Level 3, 2) required for fire protection

as specified by the Fire Marshal, 3) required for erosion control, 4) maintenance of rare plants or plants supporting rare animals, 5) maintenance of landscaping within active public parks, playing fields, day care centers, schools, cemeteries, and golf course greens provided that such irrigation does not exceed two days per week, 6) watering of livestock, and 7) public works projects and actively irrigated environmental mitigation projects.

- Repair all water leaks within 24 hours upon notification by the City

The City may establish a water allocation for properties within its service area. Additionally, with the declaration of a Drought Response Level 5 condition, no new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statement of immediate ability to serve or provide potable water service shall be issued, with exceptions for 1) a project with a valid unexpired building permit, 2) a project necessary to protect public health, safety, and welfare, and 3) applicants providing substantial evidence of an enforceable commitment that water demands will be offset prior to provision of new water meters.

### **Water Shortage Level 6**

A Drought Response Level 6 condition occurs when SDCWA declares a water shortage emergency and notifies its member agencies that a demand reduction of more than 50% is required in order for the City to have maximum water supplies available to meet anticipated demands. The City will declare a Level 6 in the manner and on the grounds provided in CWC Section 350. All water conservation measures under Levels 1, 2, 3, 4, and 5 shall continue to be adhered to with the addition of the following measure:

- Stop all landscape irrigation, except crops and landscape products of commercial growers and nurseries, with the exception of maintenance required for fire protection as specified by the Fire Marshal, maintenance for erosion control, maintenance of rare plants or plants supporting rare animals, watering of livestock, and public works projects and actively irrigated environmental mitigation projects.

## **8.6 Demand Reduction Actions**

As described above, the City implements mandatory water use restrictions with the Shortage Levels 2, 3, 4, 5 and 6. **Table 8-3** presents the City's demand reduction actions and indicates at which shortage level the action takes effect.

**Table 8-3: Demand Reduction Actions**

<b>DWR Table 8-2: Demand Reduction Actions</b>				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (percentage)	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Landscape - Limit landscape irrigation to specific times	6%	Irrigation must take place before 10 a.m. or after 6 p.m. Watering allowed when using drip/micro-irrigation system/equipment used.	No
1	Other - Require automatic shut of hoses	2%		No
1	CII - Other CII restriction or prohibition	0.1%	Limit landscape irrigation to specific times for nursery or commercial growers	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%	Leaks must be repaired within 5 days	No
1	Other	0.1%	Non-potable water must be used for construction purposed when available	No
2	Landscape - Limit landscape irrigation to specific days	8%	Limited to three assigned days per week. Does not apply to commercial growers or nurseries unless under order from governor or State. f	Yes
2	Landscape - Other landscape restriction or prohibition	5%	Limit irrigation using sprinklers to no more than 10 minutes per day. Does not apply to systems using water efficient devices.	Yes
2	Other - Require automatic shut off hoses	2%		Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Leaks must be repaired within 72 hours	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	1%	With the exception of features that use re-circulated water	Yes
3	Landscape - Limit landscape irrigation to specific days	16%	Residential and commercial landscape irrigation limited to two assigned days per week.	Yes
3	Other - Require automatic shut off hoses	2%		Yes

<b>DWR Table 8-2: Demand Reduction Actions</b>				
<b>Shortage Level</b>	<b>Demand Reduction Actions</b>	<b>How much is this going to reduce the shortage gap? (percentage)</b>	<b>Additional Explanation or Reference</b>	<b>Penalty, Charge, or Other Enforcement?</b>
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	1%		Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%	Leaks must be repaired within 48 hours	Yes
4	Other water feature or swimming pool restriction	1%	Stop filling or re-filling ornamental lakes or ponds except to the extent needed to sustain aquatic life	Yes
5	Landscape – Prohibit all landscape irrigation	22%	With the exception of crops and landscape products of commercial growers and nurseries or other listed exceptions	Yes
5	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	5%	Leaks must be repaired within 24 hours	Yes
6	Landscape - Prohibit all landscape irrigation	25%	With the exception of crops and landscape products of commercial growers and nurseries or other listed exceptions	Yes
<b>NOTES:</b>				

### 8.7 Operational Change Measures and Other Actions

The City of also provides operational change measures to reduce water use in the most restrictive stages. These methods are listed in **Table 8-4**.

**Table 8-4: Operational Change Measures and Other Actions**

DWR Table 8-3: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap? (percentage)	Additional Explanation or Reference
1	Expand Public Information Campaign	2%	
3-6	Implement or Modify Drought Rate Structure or Surcharge	4%	
4-6	Moratorium or Net Zero Demand Increase on New Connections	4%	
6	Other	10%	Water allocations may be established
NOTES:			

### 8.8 Monitoring, Reporting, and Refinement of Procedures

*CWC 10632(a)(9)*

Under normal conditions, the City monitors water sales and deliveries on a monthly basis. It also continually monitors water levels at Weese WFP to gauge water supply and demand conditions. All of the City’s water connections are metered with each individual meter read monthly. The City prepares monthly sales and delivery reports which are reviewed and compared to reports and statistics from prior months and the same period of the prior year. Under shortage conditions, the City will determine water savings made from implementing the stages of the WSCP by reviewing and comparing production reports. Each customer or customer group can be evaluated for compliance with conservation requirements.

The WSCP is an adaptive management plan that can be revised and refined to ensure its shortage response actions are effective and produce desired results. Results of monitoring and reporting efforts will be used to evaluate the effectiveness of shortage actions. If certain procedure refinements or new actions are identified by City staff, or suggested by customers or other interested parties, the City Council has the authority to quickly incorporate and implement such refinements to the WSCP, as needed.

## 8.9 Penalties and Charges

*CWC 1063(a)(6)*

The City of Oceanside does have provisions for penalties and charges for excessive use and mandatory prohibition violations. These are shown in **Table 8-5**.

**Table 8-5: Penalties and Charges**

Penalties or Charges	Stage When Penalty Takes Effect
Section 37.109 of the City Code provides that penalties for violation of the code sections related to water conservation are punishable as misdemeanor crimes under section 1.7 (a) (1) of the City Code with fines not to exceed \$1,000 or imprisonment for a term not exceeding six months or both.	2
The City's Water Conservation Ordinance includes provisions that water service can also be discontinued or limited to any customer who uses excessive water in a drought.	2

## 8.10 Revenue and Expenditure Impacts of Water Shortage

*CWC 10632(a)(7)*

It is difficult to precisely gauge the revenue and expenditure impacts of implementation of the WSCP. The plan provides for prohibitions on outdoor water use and requests for indoor use reductions, enforced by misdemeanor penalties for violation. Ultimate impacts will be based upon a mix of responses to these requirements and overall public cooperation in saving water in additional ways. Revenue will be reduced through lower water sales. However, the City will see this compensated to some degree by lower water purchase, pumping and treatment charges.

During the most recent drought, the City has experienced revenue impacts. The following is the City's estimate for revenue loss due to conservation efforts, most significantly in CY 2015 as a result of the State's Emergency Conservation Regulation. These figures assume that percent reductions have a direct offset on all volumetric based charges (i.e., water sales, SDCWA surcharges, clean water surcharge). Estimates are based on data that was available and should be used for judging order of magnitude only. It should also be noted that these estimates do not represent direct reductions to the City's net operating revenues, because there are offsetting reductions in expenditures that also occur with reduced consumption levels.

- FY 2014/15 – Approximately -9.4% consumption reduction from FY 2013/14 levels, which resulted in approximately \$2 million in reduced revenues
- FY 2015/16 – Approximately -17.5% consumption reduction from FY 2014/15 levels, which will total -25% reduction in consumption (and associated revenue reduction) from FY 2013/14 levels

For planning purposes, it is assumed that City's consumption reduction targets are met for each WSCP stage. Revenue losses are proportional to the commodity rate revenue not received, less variable cost reductions for treated water purchases from the SDCWA. No additional costs are assumed for WSCP (code) enforcement because it is assumed that enforcement will be completed using existing staff. While most water savings are likely to accrue from reduced outdoor water use there will also be revenue losses from somewhat less sewage produced and treated. For purposes here, and since the

City charges a commodity charge on estimated sewage flow and can control that charge, revenue losses are assumed to be offset by collection and treatment cost reductions.

### 8.11 Measures to Overcome Impacts

Impacts during Drought Response Levels 1 through 6 would likely be absorbed by City reserves without requiring a rate increase provided the shortage condition did not persist for more than a year. Impacts beyond a year or impacts from a greater level of shortage would need to be individually assessed. Measures to reduce expenses would be considered during a shortage such as reduction in capital expenditures, deferring non-critical maintenance items and deferring filling of personnel vacancies. Should revenue loss impacts begin to affect essential water system operations, the City has established a drought rate structure to offset loss of revenue.

As a conservation measure, the City has established a Drought Rate Structure, per Ordinance No. 09-OR0336-1, to be implemented to achieve the water reduction targets established in the City’s Drought Ordinance in the event of mandatory water reductions. These drought rates are being updated to reflect the WSCP and the six state-mandated water shortage levels. The following tables (**Table 8-6**, **Table 8-7**, and **Table 8-8**) show the rate increases to be implemented during each water shortage level, following passage of the updated drought ordinance.

Because the City’s accounts are fully metered, accounting for actual consumption can be monitored. Water production records will be examined monthly and compared against historical average monthly consumption data for that period. These data will be analyzed to assess any need for alterations to the WSCP.

**Table 8-6: Water Shortage Level 3 Rates - Up to 30% Mandatory Reduction**

<b>Ordinance Level 3 Drought Alert Rates: up to 30% Mandatory Reduction</b>			
<b>Service Fee Surcharge (per account): 10% higher than the current monthly rate (per meter equivalent)</b>			
<b>Commodity Charge:</b> 1 unit = 748 gallons	<b>Range</b>	<b>Reduction up to 10% - Increase Over Current Rate</b>	<b>Reduction up to 20% - Increase Over Current Rate</b>
<b>Single Family</b>			
	0-13 units	0%	0%
	14-20 units	25%	60%
	21+ units	45%	100%
<b>Multi Family</b>			
	0-7 units	0%	0%
	8-14 units	20%	55%
	15+ units	40%	109%
<b>Irrigation</b>			
	per unit	20%	40%
<b>Non-Residential/ Commercial Agricultural</b>			
	per unit	15%	25%

**Table 8-7: Water Shortage Level 4 Rates - Up to 40% Mandatory Reduction**

<b>Ordinance Level 4 Drought Alert Rates: up to 40% Mandatory Reduction</b>		
<b>Service Fee Surcharge (per account): 25% higher than the current monthly rate (per meter equivalent)</b>		
<b>Commodity Charge:</b> 1 unit = 748 gallons	<b>Range</b> 1 unit = 748 gallons	<b>Increase over Current Rate</b>
<b>Single Family</b>		
First Tier	0-11 units	0%
Second Tier	12-18 units	70%
Third Tier	19+ units	120%
<b>Multi Family</b>		
First Tier	0-7 units	0%
Second Tier	8-12 units	65%
Third Tier	13+ units	115%
<b>Irrigation</b>	per unit	60%
<b>Non-Residential/ Commercial Agricultural</b>	per unit	40%

**Table 8-8: Water Shortage Levels 5 and 6 Rates - Above 40% Mandatory Reduction**

<b>Ordinance Level 5 and 6 Drought Alert Rates: Above 40% Mandatory Reduction</b>		
<b>Service Fee Surcharge (per account): 30% higher than the current monthly rate (per meter equivalent)</b>		
<b>Commodity Charge:</b> 1 unit = 748 gallons	<b>Range</b>	<b>Increase over Current Rate</b>
<b>Single Family</b>		
First Tier	0-5 units	0%
Second Tier	6-10 units	80%
Third Tier	11+ units	150%
<b>Multi Family</b>		
First Tier	0-4 units	0%
Second Tier	5-8 units	75%
Third Tier	9+ units	145%
<b>Irrigation</b>	per unit	80%
<b>Non-Residential/ Commercial Agricultural</b>	per unit	50%

## 8.12 Catastrophic Supply Interruption

CWC 10632(a)(3)

To prepare for a potential catastrophic water supply interruption, the City has been diversifying its local water supply sources. As described in *Section 6 System Supplies*, the City is pursuing expansion of groundwater use, implementation of potable reuse, and exploring the potential for future seawater

desalination opportunities. Development of local supplies helps to reduce risk of supply interruption from larger, more extensive imported water systems (whose supplies could be affected by events distant from the City, and whose size presents additional opportunities for an interruption event), while regional efforts to diversify supplies, such as the Carlsbad Desalination Plant, provide additional sources of supply. In addition, the City has multiple interties with neighboring agencies (see *Section 6 System Supplies*), and has developed additional relationships with its neighbors through the North San Diego Water Reuse Coalition.

The City's Emergency Plan identifies the Construction and Engineering Branch of the Utilities Department as responsible for the restoration of water and wastewater facilities. In the event of a water emergency, this branch is responsible for surveying and restoring disrupted systems, developing a damage assessment, and assisting other branches with construction or engineering needs.

### 8.13 Seismic Risk Assessment and Mitigation Plan

*CWC 10632.5.(a)*

Urban water suppliers are required to include within its WSCP a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. An urban water supply may comply with this requirement by submitting a copy of the most recently adopted multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the multihazard mitigation plan addresses seismic risk.

**Appendix H** includes a copy of the *Multi-jurisdictional Hazard Mitigation Plan for the City of Oceanside, California* (MHM Plan). The MHM Plan was prepared with input from the City and under the federal Disaster Mitigation Act of 2000. Seismic risk is considered and addressed throughout the plan. The MHM Plan identified seismic risks including earthquakes and tsunamis due to the City's history of earthquakes and proximity to both local faults and the Pacific Ocean. The City's hazard mitigation goals includes adopting building, engineering, and fire codes and zoning ordinances that promote disaster-resistant development, and reducing possibility of damage to critical facilities or infrastructure due to earthquakes and tsunamis (including retrofitting reservoirs to seismic standards).

### 8.14 Communication Protocol for Current or Predicted Shortage

A current or predicted shortage, as determined by the Annual Assessment, will be communicated to the public upon submittal of the Annual Assessment Report in June of any given year. Communications by Water Shortage Level are outlined by the City's drought ordinances, and will be carried over to any future ordinance updates. These communications are described in the following subsections. The City also reports which shortage level is in effect when it submits its monthly water use data to the SWRCB. In addition to the formal noticing to the public the City will do at the varying Water Shortage Levels, as noted in **Table 8-4** above, the City will expand its public information campaign starting in Water Shortage Level 1, which will also serve as a means of communicating Water Shortage Levels and required actions. This information campaign may include bill inserts, public service announcements, or other outreach efforts.

#### 8.14.1 Water Shortage Level 1

The existence of a Water Shortage Level 1 condition may be declared by the Water Utilities Director upon a written determination of the existence of the facts and circumstances supporting the determination. A copy of the written determination shall be filed with the Oceanside City Clerk and provided to the Oceanside City Council. The Water Utilities Director may publish a notice of the

determination of existence of Water Shortage Level 1 condition in one or more newspapers, including a newspaper of general circulation within the City of Oceanside. The City may also post notice of the condition on its website.

#### **8.14.2 Water Shortage Level 2, Level 3, Level 4, or Level 5**

The existence of Water Shortage Level 2, Level 3, Level 4, or Level 5 conditions may be declared by resolution of the Oceanside City Council adopted at a regular or special public meeting held in accordance with State law. The mandatory conservation measures applicable to Shortage Levels 2, 3, or 4 conditions shall take effect on the tenth (10) day after the date the response level is declared. Within five (5) days following the declaration of the response level, the City shall publish a copy of the resolution in a newspaper used for publication of official notices.

#### **8.14.3 Water Shortage Level 6**

The existence of a Water Shortage Level 6 condition may be declared in accordance with the procedures specified in California Water Code sections 351 and 352. The mandatory conservation measures applicable to Water Shortage Level 6 conditions shall take effect on the tenth (10) day after the date the response level is declared. Within five (5) days following the declaration of the response level, the City shall publish a copy of the resolution in a newspaper used for publication of official notices.

The Oceanside City Council may declare an end to a Water Shortage Level by the adoption of a resolution at any regular or special meeting held in accordance with State law.

### **8.15 Communication Protocol for Triggered or Anticipated to Be Triggered Shortage Response Action**

The public will be notified about triggered or anticipated to be triggered shortage response actions. The implementation of shortage response actions associated with any water shortage level will take effect on the tenth (10th) day after the date the shortage response action is declared. Within five (5) days following the declaration of the shortage response action, the Water Utilities Director will publish a notice giving the extent, terms, and conditions around the use and consumption of water a minimum of one time for three (3) consecutive days in the City of Oceanside's official newspaper.

### **8.16 Catastrophic Communications**

In the event of a catastrophic supply interruption that requires water use to be quickly prioritized for or limited to essential public health and safety needs, the City will immediately deploy appropriate strategies from Water Shortage Levels 1 through 6. In addition, outreach messaging will reflect emergency conditions and the need to focus on health and public safety. The City may also consider potential joint news release/new events with public health officials or incident commanders to announce conditions and explain needed action. Finally, the City will ensure ongoing coordination with emergency response services with daily advisories or alerts as needed.