

# Water Shortage Contingency Plan



**Eastern Municipal Water District**

**June 2021**

## Table of Contents

|  |    |
|--|----|
| Introduction .....   | 1  |
| 1.0 Water Supply Reliability Analysis.....                                     | 1  |
| 2.0 Annual Water Supply and Demand Assessment Procedures .....                 | 2  |
| 2.1 Decision Making Process.....   | 2  |
| 2.2 Data and Methodologies .....   | 3  |
| 2.2.1 Evaluation Criteria .....  | 3  |
| 2.2.2 Water Supply.....  | 3  |
| 2.2.3 Unconstrained Customer Demand.....                                       | 3  |
| 2.2.4 Planned Water Use for Current Year Considering Dry Subsequent Year ..... | 3  |
| 2.2.5 Infrastructure Considerations .....                                      | 3  |
| 2.2.6 Other Factors .....  | 3  |
| 3.0 Six Standard Water Shortage Levels.....                                    | 3  |
| 3.1 Wholesale Shortage Levels .....  | 3  |
| 3.2 Retail Shortage Levels .....   | 7  |
| 4.0 Shortage Response Actions.....   | 11 |
| 4.1 Supply Augmentation .....  | 11 |
| 4.2 Demand Reduction Actions and Mandatory Use Restrictions .....              | 11 |
| 4.3 Operational Changes .....  | 14 |
| 4.4 Additional Mandatory Restrictions.....                                     | 14 |
| 4.5 Emergency Response Plan.....   | 15 |
| 4.6 Seismic Risk Assessment and Mitigation Plan .....                          | 16 |
| 4.7 Shortage Response Action Effectiveness.....                                | 16 |
| 5.0 Communication Protocols .....  | 17 |
| 6.0 Compliance and Enforcement.....  | 18 |
| 6.1 Wholesale.....   | 18 |
| 6.2 Retail .....   | 18 |
| 6.3 Penalties.....   | 18 |
| 6.4 Appeals and Exemption Process .....  | 19 |
| 7.0 Legal Authorities .....  | 19 |
| 8.0 Financial Consequences of WSCP.....  | 20 |
| 9.0 Monitoring and Reporting.....  | 21 |
| 10.0 WSCP Refinement Procedures.....   | 22 |
| 11.0 Special Water Feature Distinction.....                                    | 22 |
| 12.0 Plan Adoption, Submittal, and Availability.....                           | 22 |
| 13.0 Attachment: EMWD Code Title 5, Article 10.....                            | 23 |
| 14.0 Attachment. Resolution of Adoption for WSCP.....                          | 32 |



## Introduction

This document represents the Water Shortage Contingency Plan (WSCP) adopted by Eastern Municipal Water District (EMWD). The document follows the structure recommended in guidance documents prepared by the California Department of Water Resources (DWR). The numbering of Sections 1 through 12 corresponds with the numbered sections in the UWMP Guidebook.

Recognizing the need to preserve and protect public health and safety, EMWD's WSCP applies regulations and restrictions on the delivery and consumption of potable outdoor and indoor water use during water shortages. EMWD's WSCP, originally adopted by ordinance, is now Article 10 to Title 5 of EMWD's Administrative Code. A draft revision of Article 10 to reflect the changes incorporated in this document is attached to this WSCP.

The WSCP is based on the following priorities:

- Public safety, health and welfare
- Sustaining economic vitality
- Quality of life

Restrictions are structured to protect the safety, health and welfare of the public and minimize the impact a water shortage may have on the local economy and quality of life. This is done mainly through the use of EMWD's allocation-based tiered rate structure, focusing on those customers with wasteful behaviors first and then targeting other customers as a shortage becomes more severe.

This plan addresses actions that EMWD would take as a wholesale supplier and as a retail supplier. EMWD is a member agency of the Metropolitan Water District of Southern California (Metropolitan) and receives imported water supplies from Metropolitan. Wholesale customers are allocated water using the formula and methodology in Metropolitan's Water Supply Allocation Plan (WSAP).

For retail customers, over ninety percent of EMWD's customers are either single-family residential, multi-family residential or landscape customers. These customers are subject to allocation-based tiered rates. There are four tiers in EMWD's rate structure; the first two tiers apply to indoor and outdoor use respectively, the third tier is applied to water use up to 50 percent above the Tier 1 and 2 budgets, and Tier 4 is applied to any water use in excess of Tier 3. In times of water shortage, the thresholds for Tiers 2 and 3 are reduced as shortage levels increase. Under the most extreme shortage conditions, no outdoor water use is allowed, and indoor water use may be restricted up to 50 percent.

Commercial, Industrial, and Institutional (CII) and agricultural customers must also reduce demand during periods of shortage. These customers face event-driven penalties and could face fines if found violating water use restrictions.

EMWD has prepared this plan and is adopting it alongside its 2020 Urban Water Management Plan (UWMP). The WSCP is a separate document from the UWMP. EMWD will continue to monitor the effectiveness of this WSCP, and if the need arises to modify this plan, EMWD will follow the update procedures described in Section 12.

### 1.0 Water Supply Reliability Analysis

This section provides a summary of the supply reliability analysis presented in the UWMP and highlights key issues that could create a shortage condition.

EMWD's supplies are highly reliable and have proven to be resilient even under drought conditions. Therefore, under a typical dry year scenario, EMWD would expect little to no impact to the availability of its local supplies. However, EMWD may increase deliveries from Metropolitan to account for any increases in demand resulting from the hydrologic conditions. After several dry years, Metropolitan could face reduced supply capabilities during the next five years. If a shortage occurs, Metropolitan may implement its water supply allocation plan for member agencies in order to preserve storage reserves. The WSAP charges significantly higher rates for water deliveries over the allocated amount for each member agency but does not physically limit the volume of deliveries that a member agency may take.

The full reliability analysis is presented in Chapter 7 of EMWD's UWMP. Although that analysis demonstrates that the region's urban water supply is reliable, there are potential issues that could create a shortage condition. These include:

- An extended drought more severe than historic events, possibly impacted by climate change
- A natural disaster or a malevolent act that disrupts delivery of imported water from the Colorado River or the SWP
- An extended and wide-spread power outage
- Reductions in imported water supply due to environmental restrictions related to endangered species or habitat protection
- Identification of a currently unregulated contaminant that affects the region's groundwater supply
- Regulatory mandates to reduce water use

Water shortage contingency planning provides a way to plan for these risks and anticipate actions that should be implemented to manage the impacts. This plan describes how EMWD intends to respond to such shortage events.

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

EMWD will be required to prepare an Annual Water Supply and Demand Assessment, referred to by DWR as the Annual Assessment, and submit it to DWR each year, beginning July 1, 2022. The Annual Assessment is intended to meet requirements of Water Code Section 10632.1 and present an assessment of the likelihood of a water shortage occurring during the next 12 months. This section of the WSCP outlines the procedures that EMWD will use to prepare the Annual Assessment. The procedures defined in this section will allow EMWD to follow a consistent annual procedure for making the determination of whether to activate the WSCP.

The procedures for declaring a shortage are identified in Section 5.1004 of EMWD's administrative code, which states that,

EMWD's General Manager shall request the Board of Directors to authorize and implement the provisions of the Plan. The request shall be made at a regular or special meeting of the Board of Directors, to implement provisions of the Plan. The Board of Directors has the authority to initiate or terminate the water shortage contingency measures described in this Plan.

## **2.1 Decision Making Process**

EMWD will use the following procedures in preparing the Annual Assessment.

1. In February and March of each year, EMWD staff will review available data related to anticipated supplies and demands. EMWD staff will coordinate with Metropolitan and with EMWD's wholesale customers on the regional outlook for water supply reliability.
2. In May of each year, EMWD staff will present a recommendation to the EMWD Board of Directors for approval. The board will approve the determination of supply reliability and will take actions to implement shortage response actions, if needed. The assessment and recommendations for implementation of shortage response actions will be posted publicly in EMWD's board agenda for the meeting.
3. In June of each year, EMWD will prepare the Annual Assessment with required information and submit it to DWR.

The timeline may be modified to reflect updated information available from Metropolitan. Metropolitan will be preparing its own Annual Assessment each year. The draft WSCP published by Metropolitan describes a process of preparing the Annual Assessment for approval by the Metropolitan Board of Directors in June of each year. EMWD staff would seek to make EMWD's Annual Assessment reflective of the information provided by Metropolitan.

## 2.2 Data and Methodologies

This section describes the data and methodologies that will be used by EMWD to evaluate water system reliability for the coming year, while considering that the year to follow could be dry.

### 2.2.1 Evaluation Criteria

EMWD will rely on locally applicable criteria for each Annual Assessment. These criteria will include the annual reports prepared to describe conditions in the groundwater basin and annual updates provided by Metropolitan on its supply reliability.

### 2.2.2 Water Supply

EMWD's anticipated supplies will be quantified for the near-term future, and descriptive text will be used to note any anticipated reductions in supply.

### 2.2.3 Unconstrained Customer Demand

EMWD will prepare an estimate of unconstrained demand (as the term is used in Water Code Section 10632(a)(2)(B)(i)). The estimated demand will be calculated using the demand projection approach described in the UWMP, in combination with updated data for connections, climate, changes in land use, and recent water usage history.

### 2.2.4 Planned Water Use for Current Year Considering Dry Subsequent Year

EMWD will describe the anticipated use of water supplies for the coming year, with the anticipation that the following year will be dry. The supplies will be characterized in a manner consistent with the UWMP, in combination with updated data for climate and recent observations.

### 2.2.5 Infrastructure Considerations

EMWD will describe any potential infrastructure constraints on the ability to deliver adequate supplies to meet expected customer demands in the coming year. EMWD will show that its system of wells, desalters, filtration plants, pipelines, pump stations, and storage tanks have adequate capacity to deliver the anticipated demands. EMWD will describe any anticipated capital projects that are intended to address constraints in production, treatment, or distribution.

### 2.2.6 Other Factors

EMWD will describe any specific locally applicable factors that could influence or disrupt supplies. EMWD will also describe unique local considerations that are considered as part of the annual assessment.

## 3.0 Six Standard Water Shortage Levels

Since the preparation of the 2015 UWMP, the California Water Code (CWC) has been amended to define six standard shortage levels. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50- percent, and greater than 50-percent shortage compared to the normal reliability condition). If an agency elects to retain an existing set of shortage levels from its previous WSCP, then the document must provide a crosswalk to relate the existing stages to the six standard stages. This crosswalk is shown in Table 3.

EMWD's plan addresses these stages in actions it will take as a wholesale supplier and as a retail supplier.

### 3.1 Wholesale Shortage Levels

During mandatory water shortage stages, wholesale customers will be required to reduce their retail water demands such that they are equivalent to EMWD's retail water demand reductions. If Metropolitan

imposes limited supply allocations on EMWD and other member agencies, supply to EMWD's wholesale customers will be allocated using the formula and methodology based on Metropolitan's WSAP. EMWD will establish base period demands and then adjust them for growth and changes in local supply.

At each stage, wholesale customers will not experience shortages on the wholesale level that are greater than one-and-a-half times the percentage shortage of regional water supplies. The wholesale customers will also not face a retail shortage less than the regional shortage. Credits will be given for conservation and investment in local supplies. Penalty rates apply for use over allocations.

As a wholesale supplier, EMWD will maintain consistency with Metropolitan's plan where possible. The stages in Metropolitan's 2020 WSCP are shown in Table 1.

The stages for EMWD's wholesale plan are shown in Table 2.

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**Table 1. Metropolitan Shortage Stages and Response Actions**

| Shortage Stage | Shortage Percentage | Shortage Response  | Effectiveness   |
|----------------|---------------------|--|---|
| 1              | Up to 10%           | Take from Storage<br>Execute Flexible Supplies<br>Implement Demand Reduction<br>Implement Water Supply Allocation Plan | <ul style="list-style-type: none"> <li>• 0 to 100% met by Storage</li> <li>• 0 to 100% met by Flexible Supplies</li> <li>• 0 to 20% of total retail water use met by voluntary Demand Reduction</li> <li>• 0 to 50% of total base demand met by WSAP supply allocation</li> </ul> |
| 2              | 10% to 20%          | Take from Storage<br>Execute Flexible Supplies<br>Implement Demand Reduction<br>Implement Water Supply Allocation Plan | <ul style="list-style-type: none"> <li>• 0 to 100% met by Storage</li> <li>• 0 to 100% met by Flexible Supplies</li> <li>• 0 to 20% of total retail water use met by voluntary Demand Reduction</li> <li>• 0 to 50% of total base demand met by WSAP supply allocation</li> </ul> |
| 3              | 20% to 30%          | Take from Storage<br>Execute Flexible Supplies<br>Implement Demand Reduction<br>Implement Water Supply Allocation Plan | <ul style="list-style-type: none"> <li>• 0 to 100% met by Storage</li> <li>• 0 to 100% met by Flexible Supplies</li> <li>• 0 to 20% of total retail water use met by voluntary Demand Reduction</li> <li>• 0 to 50% of total base demand met by WSAP supply allocation</li> </ul> |
| 4              | 30% to 40%          | Take from Storage<br>Execute Flexible Supplies<br>Implement Demand Reduction<br>Implement Water Supply Allocation Plan | <ul style="list-style-type: none"> <li>• 0 to 100% met by Storage</li> <li>• 0 to 100% met by Flexible Supplies</li> <li>• 0 to 20% of total retail water use met by voluntary Demand Reduction</li> <li>• 0 to 50% of total base demand met by WSAP supply allocation</li> </ul> |
| 5              | 40% to 50%          | Take from Storage<br>Execute Flexible Supplies<br>Implement Demand Reduction<br>Implement Water Supply Allocation Plan | <ul style="list-style-type: none"> <li>• 0 to 100% met by Storage</li> <li>• 0 to 100% met by Flexible Supplies</li> <li>• 0 to 20% of total retail water use met by voluntary Demand Reduction</li> <li>• 0 to 50% of total base demand met by WSAP supply allocation</li> </ul> |
| 6              | More than 50%       | Take from Storage<br>Execute Flexible Supplies<br>Implement Demand Reduction<br>Implement Water Supply Allocation Plan | <ul style="list-style-type: none"> <li>• 0 to 100% met by Storage</li> <li>• 0 to 100% met by Flexible Supplies</li> <li>• 0 to 20% of total retail water use met by voluntary Demand Reduction</li> <li>• 0 to 50% of total base demand met by WSAP supply allocation</li> </ul> |

**Table 2. Wholesale Water Shortage Contingency Plan Levels (DWR Table 8-1)**

| Shortage Level   | Percent Shortage Range | Water Shortage Condition  |
|--|------------------------|---|
| 1  | Up to 10%              | Supply watch. Customers will be asked to reduce up to 10% of demand voluntarily.  |
| 2  | Up to 25%              | Supply alert. Customers will be asked to reduce 25% of demand voluntarily.  |
| 3  | Up to 25%              | Mandatory Waste Reduction. At this stage efforts will be focused on a mandatory reduction of excessive water use.   |
| 4  | Up to 50%              | Mandatory Outdoor Reduction. At this stage efforts will be focused on mandatory reduction of outdoor water use.   |
| 5  | >50%                   | Severe shortage or catastrophic incident<br><br>Mandatory Indoor Reduction. At this stage efforts will be focused on mandatory reduction of indoor water use. This stage would only be implemented in response to a catastrophic loss of supplies requiring a 50 percent or more reduction in demand. |
| NOTES: EMWD has built flexibility into its WSCP. Stages are not directly tied to water supply conditions. The WSCP can be implemented as needed to meet a reduction in demand or to respond to other conditions. |                        |   |

EMWD’s previous WSCP was updated in 2019 and included five stages. EMWD has elected to retain its five shortage stages and provide a crosswalk to relate the existing stages to the six standard shortage levels. Because the existing Levels 3, 4, and 5 include sub-stages, EMWD will be able to better align its shortage levels and response actions with the six standard levels. This crosswalk is shown in Table 3.

**Table 3. Crosswalk from EMWD Stages to Six Standard Levels**

| EMWD Shortage Stage | Supply Condition/Shortage                | Percent Shortage Range |  | DWR Standard Level | Shortage Level |
|---------------------|--|------------------------|--|--------------------|----------------|
| 1                   | Supply Watch                             | Up to 10%              |  | 1                  | <= 10%         |
| 2                   | Supply Alert                             | Up to 25%              |  | 2                  | 10 – 20%       |
| 3                   | Mandatory Waste Reduction                | Up to 25%              |  | 3                  | 20 – 30%       |
| 4                   | Mandatory Outdoor Reduction              | Up to 50%              |  | 4                  | 30 – 40%       |
|                     |  |                        |  | 5                  | 40 – 50%       |
| 5                   | Severe Shortage or Catastrophic Incident | > 50%                  |  | 6                  | > 50%          |

### 3.2 Retail Shortage Levels

The WSCP limits water demand during times of shortage in five stages. These stages can be triggered when there is water deficiency caused by limitations on supply or by limitations on EMWD’s delivery system. The plan shall be implemented in case of a long or short-term water deficiency, or in case of an emergency water shortage.

EMWD will implement an appropriate stage based on current water conditions such as:

- EMWD water supply conditions and storage levels
- Statewide water supply conditions
- Local water supply and demand conditions
- Metropolitan WSAP implementation or other actions requiring a reduction in water demand
- Actions of surrounding agencies

Higher stages will be implemented as shortages continue and/or if customer response does not bring about desired water savings.

When implementation of the WSCP is triggered by anticipated limitations in supply or delivery, EMWD’s General Manager shall request the Board of Directors to authorize and implement the provisions of the WSCP. The request shall be made at a regular or special meeting of the Board of Directors, to implement provisions of the WSCP.

The Board of Directors has the authority to initiate or terminate the water shortage contingency measures described in the WSCP. When a water shortage emergency occurs, the WSCP authorizes the General Manager to declare the extent of a potable water shortage emergency and to implement the appropriate water shortage contingency measures.

EMWD’s retail shortage levels are identified in Table 4. The first two stages of the WSCP are voluntary, while the successive stages are mandatory and include sub-stages to reflect changes to the tiered rate structure.

**Table 4. Retail Water Shortage Contingency Plan Levels (DWR Table 8-1)**

| Shortage Level   | Percent Shortage Range | Water Shortage Condition  |
|--|------------------------|---|
| 1  | Up to 10%              | Supply watch. Customers will be asked to reduce up to 10% of demand voluntarily.  |
| 2  | Up to 25%              | Supply alert. Customers will be asked to reduce 25% of demand voluntarily.  |
| 3  | Up to 25%              | Mandatory Waste Reduction. At this stage efforts will be focused on a mandatory reduction of excessive water use.   |
| 4  | Up to 50%              | Mandatory Outdoor Reduction. At this stage efforts will be focused on mandatory reduction of outdoor water use.   |
| 5  | >50%                   | Severe shortage or catastrophic incident<br><br>Mandatory Indoor Reduction. At this stage efforts will be focused on mandatory reduction of indoor water use. This stage would only be implemented in response to a catastrophic loss of supplies requiring a 50 percent or more reduction in demand. |
| NOTES: EMWD has built flexibility into its WSCP. Stages are not directly tied to water supply conditions. The WSCP can be implemented as needed to meet a reduction in demand or to respond to other conditions. Levels 3 through 5 include three sub-stages each. |                        |   |

Each level in Table 4 represents an anticipated reduction in the supplies that would normally be available to the agency. These supply reductions could be the result of a variety of potential causes including natural forces, system component failure or interruption, regulatory actions, contamination, or any combination thereof.

The stages involve voluntary and mandatory conservation measures and restrictions, depending on the causes, severity, and anticipated duration of the water supply shortage. The locally appropriate shortage response actions that would be taken at each level to address the resulting gap between supplies and demands are described in the following section.

EMWD’s process for initiating or terminating stages is outlined in Section 5.1007 of EMWD’s Administrative Code, which notes that,

The General Manager will recommend the appropriate stage of response to a water shortage based on the best information available at the time. Conditions that will be considered include:

- EMWD water supply conditions and storage levels
- Statewide water supply conditions
- Local water supply and demand conditions
- Metropolitan Water Supply Allocation Plan implementation or other actions requiring a reduction in water demand
- Actions by surrounding agencies

As water supply conditions either deteriorate or improve, the General Manager will return to the Board to revise the appropriate stage of response. It shall not be necessary to implement any stage prior to another; the stages may be implemented in any reasonable order.

In the event the State or local agencies, through executive action, emergency legislation or other actions, impose conditions, requirements, or procedures that are not included in the EMWD water shortage Contingency Plan, the General Manager is authorized to implement such measures as are reasonably required to bring EMWD’s actions in each stage into functional conformity with such conditions, requirements, or procedures.

The actions in each stage are identified in Section 5.1009 of EMWD's administrative code and are summarized in Table 5. Table 5 is not a required element of the WSCP but is presented as a consolidated summary of the actions identified in the EMWD administrative code.

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**Table 5. Summary of Stages and Actions**

| Stage              | 1. Supply Watch  | 2. Supply Alert   | 3. Mandatory Waste Reduction  | 4. Mandatory Outdoor Reduction  | 5. Mandatory Indoor Reduction   |
|--------------------|--|---|---|---|---|
| <b>Description</b> | At this stage, efforts will be focused on encouraging voluntary reduction of up to 10 percent. Customers can reduce demand by following the water use efficiency requirements of Section 5, Article 6 - Water Conservation of the Administrative Code. Other actions may be encouraged as appropriate. | At this stage efforts will be focused on a voluntary reduction of up to 25 percent. Customers can reduce demand by following the water use efficiency requirements of Section 5, Article 6 - Water Conservation of the Administrative Code.   | At this stage, efforts will be focused on a mandatory reduction of excessive water use. Customers can reduce demand by following the conserving actions detailed in Stages 1 and 2.   | At this stage efforts will be focused on a mandatory reduction of outdoor water use.<br><br>Customers can reduce demand by following the conserving actions required in Stages 1 through 3 and limiting watering or irrigating of lawn, landscape or other vegetated areas with sprinklers to the following schedule:<br><br>a) June through August – A maximum of two days a week; and<br>b) September through May – A maximum of one day a week.  | At this stage efforts will be focused on a mandatory reduction of indoor water use. This stage would only be implemented in response to a catastrophic loss of supplies requiring a 50 percent or more reduction in demand.   |
| <b>Actions</b>     |  | Voluntary customer actions could include the following:<br><br>a) Reduce watering or irrigating of lawn, landscape or other vegetated areas with sprinklers by one day a week;<br>b) All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system repaired within 48 hours;<br>c) Refrain from filling or re-filling of ornamental lakes or ponds; and<br>d) Refrain from using potable water to wash or clean a vehicle, including but not limited to, any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not. | For tiered customers:<br><br>a) Stage 3a: No variances or adjustments will be allowed for filling swimming pools, establishing landscape or leaks that are not repaired within 48 hours;<br>b) Stage 3b: Excessive tier budgets (Tier 3 Budgets for residential customers, Tier 2 Budgets for non-residential) will be decreased by up to 50 percent; and<br>c) Stage 3c: Excessive tier budgets (Tier 3 Budgets for residential customers, Tier 2 Budgets for non-residential) will be decreased by up to 100 percent.<br><br>Observation of any water waste in opposition to restrictions listed in Section 5, Article 6 - Water Conservation of the Administrative Code or under this or any previous stage of the Plan are subject to the following penalties:<br><br>a) For multi-family, commercial, institutional, industrial, agricultural, and landscape accounts:<br>(1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;<br>(2) For a second violation a surcharge in the amount of \$100.00 shall be added to the Customer's water bill;<br>(3) For a third violation a surcharge in the amount of \$200.00 shall be added to the Customer's water bill; and<br>(4) For a fourth and any subsequent violation a surcharge of \$300.00 shall be added to the Customer's water bill.<br>b) For single-family residential accounts:<br>(1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;<br>(2) For a second violation a surcharge in the amount of \$25.00 shall be added to the Customer's water bill;<br>(3) For a third violation a surcharge in the amount of \$50.00 shall be added to the Customer's water bill; and<br>(4) For a fourth and any subsequent violation a surcharge of \$100.00 shall be added to the Customer's water bill. | For tiered customers:<br><br>a) Stage 4a: Outdoor water budgets will be decreased by 10 percent;<br>b) Stage 4b: Outdoor water budgets will be decreased by up to 50 percent; and<br>c) Stage 4c: Outdoor water budgets will be decreased by up to 100 percent and the irrigation of non-functional turf by multi-family residential, commercial, industrial, and institutional customers is prohibited.<br><br>Observation of any water waste in opposition to restrictions listed in Section 5, Article 6 - Water Conservation of the Administrative Code or under this or any previous stage of the Plan, or the irrigation of non-functional turf by multi-family residential, commercial, industrial, and institutional customers when the District is in Stage 4c or higher are subject to the following penalties:<br><br>a) For multi-family, commercial, institutional, industrial, agricultural, and landscape accounts:<br>(1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;<br>(2) For a second violation a surcharge in the amount of \$200.00 shall be added to the Customer's water bill;<br>(3) For a third violation a surcharge in the amount of \$400.00 shall be added to the Customer's water bill; and<br>(4) For a fourth and any subsequent violation a surcharge of \$600.00 shall be added to the Customer's water bill.<br>b) For single-family residential accounts:<br>(1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;<br>(2) For a second violation a surcharge in the amount of \$50.00 shall be added to the Customer's water bill;<br>(3) For a third violation a surcharge in the amount of \$100.00 shall be added to the Customer's water bill; and<br>(4) For a fourth and any subsequent violation a surcharge of \$200.00 shall be added to the Customer's water bill. | For tiered customers:<br><br>a) Stage 5a: Indoor water budgets will be decreased by 10 percent;<br>b) Stage 5b: Indoor water budgets will be decreased by up to 30 percent; and<br>c) Stage 5c: Indoor water budgets will be decreased by up to 50 percent.<br><br>Commercial, Industrial, Institutional, Agricultural customers and any other customer without a water budget will be given a water budget based on historical water use. Allocations will be decreased in stages and the current Tier 4 rate will be applied to any use above the decreased allocation.<br><br>a) Stage 5a: Budgets will be decreased by 10 percent;<br>b) Stage 5b: Budgets will be decreased by up to 30 percent; and<br>c) Stage 5c: Budgets will be decreased by up to 50 percent.<br><br>Restrictions and penalties implemented in earlier stages shall also remain in effect. |
| <b>Enforcement</b> | Demand reduction will be encouraged through the ongoing enforcement listed in Section 5, Article 6 - Water Conservation of the Administrative Code including EMWD's water budget based tiered rate and penalties for run off.  | Demand reduction will be encouraged through the ongoing enforcement listed in Section 5, Article 6 - Water Conservation of the Administrative Code including EMWD's water budget based tiered rate and penalties for run off.   | Demand reduction will be enforced through changes to EMWD's water budget-based tiered rate structure and observation-based penalties:   | Demand reduction will be enforced through changes to EMWD's water budget based tiered rate structure and observation-based penalties:   | Demand reduction will be enforced through changes to EMWD's water budget based tiered rate structure and penalties for run off as detailed in Section 5, Article 6 - Water Conservation of the Administrative Code.   |

## 4.0 Shortage Response Actions

This section describes the shortage response actions that would be taken by EMWD at each shortage level. These actions have been grouped into categories including:

- Supply Augmentation Actions
- Demand Reduction Actions and Mandatory Use Restrictions
- Operational Changes

### 4.1 Supply Augmentation

For long-range planning, EMWD continues to evaluate opportunities for transfers, exchanges, and other purchases of imported water to increase supply reliability. These programs are described in the supply sections of the UWMP.

Metropolitan’s WSCP identifies actions it has taken to be in a position to augment supplies during dry periods. These actions are summarized in Metropolitan’s WSCP.

EMWD has not identified specific supply augmentation actions that would be taken to address a short-term water shortage. The standard categories of supply augmentation actions are shown in Table 6.

**Table 6. Supply Augmentation Actions (DWR Table 8-3)**

| Shortage Level | Supply Augmentation Methods and Other Actions by Water Supplier | How much is this going to reduce the shortage gap? | Additional Explanation or Reference |
|----------------|---|--|-------------------------------------|
|                | Transfers   |  |                                     |
|                | Exchanges   |  |                                     |
|                | Other purchases   |  |                                     |
|                | New recycled water  |  |                                     |
|                | Rain seeding  |  |                                     |
|                | Stored emergency supply   |  |                                     |
|                | Other actions (describe)  |  |                                     |
| NOTES:         |   |  |                                     |

### 4.2 Demand Reduction Actions and Mandatory Use Restrictions

The demand reduction actions that will be implemented at each shortage level are shown in Table 7. The format of Table 7 is based on the standard submittal table defined by DWR. The column titled, “Penalty, Charge, or Enforcement” is a Yes/No field to characterize whether there is a penalty, charge, or enforcement action associated with implementing the demand reduction action. This field is a required field in the standard submittal table defined by DWR.

EMWD utilizes consumption reduction methods to reduce demands for potable water within its service area. EMWD’s methods include supplementing its water conservation program during WSCP implementation and implementing its allocation-based tiered rate billing structure by progressively reducing allocations for tiers as higher stages of the WSCP are implemented. Consumption reduction methods that can be used in EMWD’s service area are summarized in Table 7.

**Table 7. Demand Reduction Actions (DWR Table 8-2)**

| Shortage Level | Demand Reduction Actions   | How much is this going to reduce the shortage gap? | Additional Explanation or Reference  | Penalty, Charge, or Other Enforcement? |
|----------------|--|--|--|--|
| 1-5            | Expand Public Information Campaign   | N/A  | EMWD will continue to implement its conservation program and may supplement programs during WSCP implementation.   | No                                     |
| 1              | Other - Prohibit use of potable water for washing hard surfaces                  | N/A  | Except for health or sanitary reasons  | Yes                                    |
| 1              | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | N/A  | Repair leaks within 48 hours of occurrence   | Yes                                    |
| 1              | Landscape - Limit landscape irrigation to specific times                         | N/A  | Only between 9:00 p.m. and 6:00 a.m. except when:<br>-manually watering<br>-establishing new landscape<br>-temperatures are predicted to fall below freezing<br>-it's for very short periods of time to adjust or repair an irrigation system  | Yes                                    |
| 1              | Landscape - Prohibit certain types of landscape irrigation                       | N/A  | Unattended irrigation systems using potable water are prohibited unless they are limited to no more than fifteen (15) minutes watering per day, per station. This limitation can be extended for:<br>-Very low flow drip irrigation systems when no emitter produces more than two (2) gallons of water per hour<br>-Weather based controllers or stream rotor sprinklers that meet a 70% efficiency | Yes                                    |
| 1              | Landscape - Restrict or prohibit runoff from landscape irrigation                | N/A  | Avoid over watering or watering of hardscape and the resulting runoff  | Yes                                    |
| 1              | Other water feature or swimming pool restriction                                 | N/A  | Decorative fountains must be equipped with a recycling system  | Yes                                    |
| 1              | Other  | N/A  | Allowing water to run while washing vehicles is prohibited   | Yes                                    |
| 1              | Other  | N/A  | Install new landscaping with low-water demand trees and plants. New turf shall only be installed for functional purposes   | Yes                                    |
| 1              | Landscape - Other landscape restriction or prohibition                           | N/A  | Watering during rain, or within 48 hours after measurable rain, is prohibited  | Yes                                    |
| 2              | Landscape - Other landscape restriction or prohibition                           | Medium   | Reduce watering or irrigating of lawn, landscape or other vegetated areas with sprinklers by one day a week  | Yes                                    |
| 2              | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | Medium   | All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system repaired within 72 hours  | Yes                                    |
| 2              | Other water feature or swimming pool restriction                                 | Low  | Refrain from filling or re-filling of ornamental lakes or ponds  | Yes                                    |

| Shortage Level | Demand Reduction Actions                                  | How much is this going to reduce the shortage gap? | Additional Explanation or Reference   | Penalty, Charge, or Other Enforcement? |
|----------------|---|--|---|--|
| 2              | Other   | Medium   | Refrain from using potable water to wash or clean a vehicle, including but not limited to, any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not   | Yes                                    |
| 3              | Implement or Modify Drought Rate Structure or Surcharge   | High   | Stage 3 progressively reduces the tier 3 allocation. Any water used over the allocations for tiers 1-3 is charged at the tier 4 rate <sup>2</sup> .   | Yes                                    |
| 3a             | Other   | Medium   | No variances or adjustments will be allowed for filling swimming pools, establishing new landscapes or leaks that are not repaired within 48 hours  | Yes                                    |
| 3b             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 3 (Excessive Use) water budget decreased by 50%  | Yes                                    |
| 3c             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 3 (Excessive Use) water budget decreased by 100%   | Yes                                    |
| 4              | Implement or Modify Drought Rate Structure or Surcharge   | High   | Stage four eliminates the tier 3 allocation and progressively reduces the tier 2 allocation. Any water used over the allocations for tiers 1-2 is charged at the tier 4 rate <sup>2</sup> .                                       | Yes                                    |
| 4              | Landscape - Other landscape restriction or prohibition    | Medium   | Watering or irrigating of lawn, landscape, or other vegetated areas with sprinklers should be limited to the following schedule:<br>-June – August: A maximum of two days a week<br>-September – May: A maximum of one day a week | Yes                                    |
| 4a             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 2 (Outdoor Use) water budget decreased by 10%  | Yes                                    |
| 4b             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 2 (Outdoor Use) water budget decreased by up to 50%  | Yes                                    |
| 4c             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 2 (Outdoor Use) water budget decreased by up to 100%   | Yes                                    |
| 5              | Implement or Modify Drought Rate Structure or Surcharge r | High   | Stage 5 eliminates the tier 3 and 4 allocations and progressively reduces the tier 1 allocation. Any water used over the allocations for tiers 1 is charged at the tier 4 rate <sup>2</sup> .                                     | Yes                                    |
| 5a             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 1 (Indoor Use) water budget decreased by 10%   | Yes                                    |
| 5b             | Implement or Modify Drought Rate Structure or Surcharge   | High   | Tier 1 (Indoor Use) water budget decreased by 30%   | Yes                                    |

| Shortage Level  | Demand Reduction Actions                                | How much is this going to reduce the shortage gap? | Additional Explanation or Reference  | Penalty, Charge, or Other Enforcement? |
|---|---|--|--|--|
| 5c  | Implement or Modify Drought Rate Structure or Surcharge | High   | Tier 1 (Indoor Use) water budget decreased by 50%  | Yes                                    |
| 5   | Implement or Modify Drought Rate Structure or Surcharge | High   | CII, Agricultural, and any other customer without a water budget will be given a water budget based on historical water use, and allocations will be reduced according to the percentages listed for stages 5a-5c (up to 50 percent) | Yes                                    |
| <p>Notes: EMWD has four tiers in its allocation-based tiered rate structure for residential customers. Some non-residential customers are also on an allocation-based rate structure, but these customers have only three tiers. Tier 4 usage for residential customers and Tier 3 usage for non-residential customers are classified as wasteful usage, which is defined as water use exceeding 150% of a customer’s water budget. The current wasteful rate varies across the service area but ranges from \$11.62 to \$12.75 per hundred cubic feet as of 1/1/2021</p> |   |  |  |  |

### 4.3 Operational Changes

EMWD has identified operational changes that could be made to help address a short-term gap between demands and available supplies. These include:

- Improved monitoring and analysis of customer water usage
- Reductions in flushing of hydrants and dead-end lines
- Expediting planned system improvement projects that include reduction in water loss (e.g., replacement of water mains that are experiencing higher rates of leaks and breaks)

### 4.4 Additional Mandatory Restrictions

EMWD has identified a series of restrictions that will be implemented at different shortage levels. These prohibitions are included in the demand reduction actions in Table 7.

The WSCP prohibitions and reduction methods are organized by customer groups with different limitations on each group. Stages 1 and 2 start with voluntary measures. As the water deficiency increases, measures become mandatory and are intended to lead to the needed reduction in water demand.

The WSCP targets a reduction in demand in specific tiers for single-family residential, multi-family residential and landscape customers. Table 8 summarizes the required reduction in each tier by stage.

**Table 8. Tiered-Rate Water Reduction Requirements**

| Stage | Tier 1<br>Indoor Use  | Tier 2<br>Outdoor Use | Tier 3<br>Excessive Use | Tier 4<br>Wasteful Use |
|-------|---|-----------------------|-------------------------|------------------------|
| 1     | Voluntary Reduction up to 10%   |                       |                         |                        |
| 2     | Voluntary Reduction up to 25%   |                       |                         |                        |
| 3a    | No variances or adjustments will be allowed for filling swimming pools, establishing new landscapes or leaks that are not repaired within 48 hours. |                       |                         |                        |
| 3b    |   |                       | 50% reduction           |                        |
| 3c    |   |                       | 100% reduction          |                        |
| 4a    |   | 10% reduction         | 100% reduction          |                        |
| 4b    |   | up to 50% reduction   | 100% reduction          |                        |
| 4c    |   | up to 100% reduction  | 100% reduction          |                        |
| 5a    | 10% reduction   | 100% reduction        | 100% reduction          |                        |
| 5b    | 30% reduction   | 100% reduction        | 100% reduction          |                        |
| 5c    | 50% reduction   | 100% reduction        | 100% reduction          |                        |

In Stage 5, CII customers, agricultural customers and any other customer without a water budget will be assigned a water budget based on historical water use. Allocations will be decreased according to the percentages listed for Stages 5a-5c, and the current Tier 4 rate will be applied to any use above the decreased allocation value.

In order to reduce EMWD's retail demand in the case of deficiency in water supply, EMWD developed water use efficiency requirements that are to be followed at all times. Additional prohibitions on end uses are implemented at higher stages of water shortage in addition to the on-going water use efficiency requirements. As part of EMWD's WSCP, voluntary and mandatory water use reductions are expected through the on-going enforcement of the water use efficiency requirements, EMWD's water allocation-based tiered rates, and penalties for run off. The previous sections summarize the water use efficiency requirements and additional prohibitions for each stage of EMWD's WSCP. Under the most extreme deficiencies, these prohibitions would reduce demand by more than 50 percent.

#### 4.5 Emergency Response Plan

The Water Code requires that an agency's WSCP address catastrophic water shortages and plans to address them. This information can be addressed in the agency's Emergency Response Plan (ERP). Each agency's ERP can contain sensitive information related to potential vulnerabilities or impacts of natural disasters or malevolent acts. Therefore, these documents are not typically made publicly available.

EMWD is a member of the California Water/Wastewater Agency Response Network (CalWARN), which supports and promotes emergency preparedness. More information about CalWARN is available at their web site at [www.calwarn.org](http://www.calwarn.org).

EMWD's process for declaring an emergency water shortage is outlined in Section 5.1004(b) of the EMWD Administrative Code, which notes that

By adopting this Plan, the Board of Directors authorizes the General Manager to declare the extent of a potable water shortage emergency and to implement the appropriate water shortage contingency measures. The General Manager shall report such water shortage conditions and the level of response to the Board of Directors in a timely manner.

The declaration of the Board of Directors shall be made by public announcement and shall be published in a newspaper of general circulation. The declaration shall become effective immediately upon such publication.

To protect EMWD customers in the case of an emergency, EMWD has developed the Water Shortage Emergency Operations Plan (WSEOP). This plan determines the operation response to many types of emergencies. It specifies chain of command and provides the authority to respond. Elements of that response can include interdepartmental staff notification and mobilization; activation of alternative water supply sources (i.e., interagency connections), use of temporary pumping facilities; use of power generators; public notification; and activation of conservation measures. An emergency is defined as any time period when Metropolitan or EMWD facilities are incapable of supplying potable water. An emergency could be caused by a natural disaster such as an earthquake or through facility failures. The WSEOP describes the coordination required between operational staff, management, community involvement staff and other EMWD employees. In addition, communication and cooperation will be required with the community and other agencies such as the Division of Drinking Water and Metropolitan. In the event that one or more water supply sources are unavailable, remaining sources of supply will be maximized to meet demand. If needed, the WSCP could be implemented to conserve water and reduce demand. If an electrical or gas power outages occur, some of EMWD's booster facilities have backup generators. Facilities without redundant power sources may be served on a priority basis by portable generators.

EMWD's service area (retail and wholesale) is dependent on Metropolitan for approximately half of its supply. Metropolitan has prepared for emergencies using a combination of storage, facility design and redundant power sources. Emergency storage requirements are based on the potential for a major earthquake that renders major water transportation facilities out of service for six months. Assuming 100 percent of its supplies are unavailable for six months, Metropolitan has enough water storage to sustain 75 percent of normal year firm deliveries. In the event of a major power outage, water supply can be delivered by gravitational feed from recreational reservoirs, including Diamond Valley Lake Reservoir. For treatment plants, Metropolitan has backup power generators in place in case of electrical outages. Additional information about addressing catastrophic supply interruption can be found in Metropolitan's 2020 UWMP.

#### **4.6 Seismic Risk Assessment and Mitigation Plan**

Water Code Section 10632.5 requires agencies to assess seismic risk to water supplies as part of their WSCP. The code also requires a mitigation plan for managing seismic risks.

In lieu of conducting their own seismic risk assessment, which can be a lengthy process, suppliers can comply with the Water Code requirement by submitting the relevant local hazard mitigation plan or multi-hazard mitigation plan.

EMWD participated in the development of the Riverside County Local Hazard Mitigation Plan, which was updated in 2018. The Riverside County LHMP is available on the Riverside County web site at <https://rivcoemd.org/LHMP>.

The Riverside County LHMP includes an assessment of the region's vulnerability to a broad range of hazards, including earthquakes. It also describes mitigation strategies and actions to reduce the impacts of a seismic event. The other participating agencies continue to include seismic risk assessment in their planning process for system improvements.

EMWD has also prepared a 2017 Hazard Mitigation Plan to describe a risk assessment and mitigation plan for seismic events in its service area.

#### **4.7 Shortage Response Action Effectiveness**

EMWD has estimated the effectiveness of shortage response actions in terms of relative impact on reducing the gap between expected supplies and demands. These estimates were developed using industry resources and observations from recent operating history at the agency. These estimates have been included in Table 7.

## 5.0 Communication Protocols

Timely and effective communication is a key element of WSCP implementation. EMWD will need to inform customers, the general public, and other government entities of WSCP actions taken during a water shortage (either one derived from the Annual Assessment, an emergency, or catastrophic event).

EMWD works closely with Metropolitan and neighboring water agencies in implementing communication strategies during water shortages.

The communication protocols to be used by EMWD at each shortage level are summarized in Table 9.

**Table 9. Communication Protocols**

| Water Shortage Level  | Typical Response Actions  | Communications Protocols and Processes   |
|---|---|--|
| 1   | Limit landscape irrigation to specific times  | Postings on web site   |
| 2   | Reduce watering or irrigating of lawn, landscape, or other vegetated areas with sprinklers by one day a week  | Outreach through social media  |
| 3   | Implement or Modify Drought Rate Structure or Surcharge   | Bill inserts, bill messages, letters to customers, cable TV slides, emails to customers. |
| 4   | Watering or irrigating of lawn, landscape, or other vegetated areas with sprinklers should be limited to the following schedule:<br>-June – August: A maximum of two days a week<br>-September – May: A maximum of one day a week | Door hangers, regional campaign utilizing billboard advertisements, ad placements        |
| 5   | Implement or Modify Drought Rate Structure or Surcharge   | Direct contacts with customers   |
| Notes: Communications protocols and processes are cumulative in nature. |   |  |

Section 5.1002 of the EMWD Administrative Code notes that,

EMWD will periodically provide the public with information about the Plan, including conditions under which each stage of the Plan is to be initiated or terminated and the conservation response measures to be implemented in each stage. This information will be provided by means of public events, website, press releases, bill inserts, etc.

Section 5.1008 of the EMWD Administrative Code notes that,

When EMWD determines that a potable water shortage condition exists, any or all of the following notification procedures may be implemented:

- (a) Notify the general public stakeholders, elected officials and other key decision-makers regarding the situation, actions to be taken, goals customers are intended to achieve, and how these actions will be implemented.
- (b) The public at large will be informed of the situation and actions EMWD will be taking. Communications will occur through any of the following: billing inserts, special mailings, telephone contact, e-mail, social media, roadway signage, water conservation booths, and other booths in the community, speaker's bureau, community association meetings, newsletters, and education programs, etc. Literature appropriate to the drought circumstance will be provided

regarding the potable water shortage condition, conservation methods, and water-savings devices.

(c) Use of all forms of media will be employed. This would include public service announcements on radio and cable television, social media as well as earned media and advertisements in local newspapers.

(d) EMWD's web site, [www.emwd.org](http://www.emwd.org), will be the central location for messaging and customer communications.

## 6.0 Compliance and Enforcement

This section describes how EMWD will ensure compliance with and enforce provisions of the WSCP.

### 6.1 Wholesale

Section 5.1011 of the EMWD Administrative Code notes that,

During mandatory water shortage stages, wholesale customers will be required to reduce their retail water demand equivalent to EMWD's retail water demand reduction. If Metropolitan has limited supply allocations to EMWD and other member agencies; supply to wholesale customers may be allocated using a formula and methodology based on the Metropolitan Water Supply Allocation Plan.

Potential penalties for not reducing demand could be up to 4 times the Metropolitan Tier 2 rate.

### 6.2 Retail

For Stages 1 and 2 of the WSCP, demand reduction is voluntary; but it will be encouraged through the on-going enforcement of EMWD's water budget based tiered rates and penalties for runoff. Stage 3 of the WSCP is focused on a mandatory reduction of excessive water use through following the conserving actions detailed in Stages 1 and 2. Beginning with Stage 3, event-driven penalties can be imposed for violating any of the restrictions in the WSCP.

Demand reductions will be enforced through changes to EMWD's water budget based tiered rate structure and observation-based penalties. Violations of the water runoff requirement are cumulative over a 12-month period. Table 10 lists penalties for event driven restrictions.

### 6.3 Penalties

The penalties for non-compliance imposed by EMWD are summarized in Table 10.

**Table 10. Event-Driven Penalties and Charges**

| Stage | Customer Category                              | First Violation | Second Violation | Third Violation | Fourth and Subsequent Violations |
|-------|--|-----------------|------------------|-----------------|----------------------------------|
| 3     | Single-Family                                  | Written Notice  | \$25 Fine        | \$50 Fine       | \$100 Fine                       |
|       | Multi-Family, CII, Agricultural, and Landscape | Written Notice  | \$100 Fine       | \$200 Fine      | \$300 Fine                       |
| 4-5   | Single-Family                                  | Written Notice  | \$50 Fine        | \$100 Fine      | \$200 Fine                       |
|       | Multi-Family, CII, Agricultural, and Landscape | Written Notice  | \$200 Fine       | \$400 Fine      | \$600 Fine                       |

Any funds collected from penalties will be dedicated to funding EMWD's conservation programs.

## 6.4 Appeals and Exemption Process

This section describes the appeals and exemption processes. Where feasible, specific exemptions can be identified and defined. Where not feasible, the process to appeal or obtain an exemption should be detailed.

Section 5.1010 of the EMWD Administrative Code notes that,

All variance requests and appeals will be processed according to Section 5, Article 6 – Water Conservation of the Administrative Code.

## 7.0 Legal Authorities

This section describes the legal authorities that the agency relies upon to implement the shortage response actions and the associated enforcement actions.

EMWD's Administrative Code provides it with the legal authority to implement the WSCP. The Water Shortage Contingency Plan is portrayed in Chapter 5, Article 10 of the Administrative Code. A draft of Article 10 is attached to this document.

In accordance with Water Code Chapter 3 (commencing with Section 350) of Division 1 general provisions regarding water shortage emergencies, EMWD shall declare a water shortage emergency in the event of a catastrophic interruption in supply.

EMWD shall coordinate with any city 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). Including a list of and 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.

The cities and counties in the EMWD service area are shown in Table 11.

**Table 11. City and County Coordination on Proclamation of Emergencies**

| City or County        | Contact                         |
|-----------------------|---------------------------------|
| Riverside County      | Emergency Management Department |
| City of Hemet         | Emergency Services Coordinator  |
| City of Perris        | Emergency Services Coordinator  |
| City of San Jacinto   | Emergency Services Coordinator  |
| City of Beaumont      | Emergency Services Coordinator  |
| City of Canyon Lake   | Emergency Services Coordinator  |
| City of Menifee       | Emergency Services Coordinator  |
| City of Moreno Valley | Emergency Services Coordinator  |
| City of Murrieta      | Emergency Services Coordinator  |
| City of Perris        | Emergency Services Coordinator  |
| City of Riverside     | Emergency Services Coordinator  |
| City of San Jacinto   | Emergency Services Coordinator  |
| City of Temecula      | Emergency Services Coordinator  |

## 8.0 Financial Consequences of WSCP

This section describes the anticipated financial consequences to EMWD of implementing the WSCP. The description includes potential reductions in revenue due to lower water sales and increased expenses associated with implementing the shortage response actions.

Potential financial impacts could include

- Reduced revenue from reduced water use
- Increased staff costs for tracking, reporting, patrolling, and enforcing restrictions
- Economic impacts associated with water-dependent businesses in the service area

Potential mitigation measures include

- Adjusting customer water budgets to increase the volume of water billed at the higher rate
- using financial reserves
- reducing operation and maintenance expenses
- deferring capital improvement projects
- reducing future projected operation and maintenance expenses
- increasing fixed readiness-to-serve charge
- increasing commodity charge and water adjustment rates to cover revenue shortfalls
- other financial management mechanisms

As a result of a water shortage or emergency situation, there may be a reduction of revenue from water sales. To protect EMWD from financial hardship in such a situation, a financial reserve account (Rate Stabilization Reserve) has been established to meet the fixed costs associated with water delivery that may not be met in the case of reduced water sales.

Potential impacts to EMWD are summarized in Table 12, and potential mitigation measures are summarized in Table 13.

**Table 12. Actions and Conditions that Impact Revenue and Expenditures**

| Type                     | Category                     | Description   |
|--------------------------|------------------------------|---|
| Reduction in Revenue     | Reduced Water Sales          | Water sales are approximately 40% of EMWD's annual revenue. A reduction in the demand of water by 50% would also mean a reduction in revenue from water sales of 50% leaving a shortfall of approximately 20% of EMWD annual revenue. This reduction would be offset in part by a reduction in the cost of water purchased from Metropolitan.                         |
| Increase in Expenditures | Increased Staff Cost         | Staff costs for implementing the WSCP could vary depending on the stage triggered by a deficiency in water supply. Stages 1 and 2 would probably be implemented with only current staff members. Stages 3 or 4 of the plan may require additional staff to implement. The amount and level of staff will vary greatly depending on the public's response to the plan. |
| Increase in Expenditures | O&M Cost                     | Operations and maintenance cost may be minimally impacted by the implementation of the WSCP, but these costs are projected to have minimal impact on EMWD's total revenue.  |
| Increase in Expenditures | Cost of Supply and Treatment | Cost of supply would decrease due to a decrease in demand and would offset some of the costs associated with reduced water sales.   |
| Increase in Expenditures | Public Outreach Costs        | Costs associated with informing the public about implementing the WSCP will vary based on the public's response and the stage of the plan implemented.  |

**Table 13 Measures to Mitigate Fiscal Consequences**

| Name of Measure         | Summary of Effect  |
|-------------------------|--|
| Rate Adjustment         | Part of the WSCP is the ability to impose a penalty rate. This could offset some of the lost revenue due to a decrease in water sales.                               |
| Reserve Policy          | EMWD, as a matter of policy, keeps a reserve of funds equivalent to 90 days of operational expenses. This reserve fund could be used to mitigate revenue shortfalls. |
| Rate Stabilization Fund | EMWD has a rate stabilization fund available to offset increased costs and decreased sales.  |

## 9.0 Monitoring and Reporting

This section describes how the agency will monitor and report on implementation of the WSCP. EMWD will gather data on key water use metrics and use the data to evaluate the effectiveness of response actions in achieving their intended water use reduction purposes. EMWD will also gather data on customer compliance to evaluate the effectiveness of enforcement actions. EMWD will gather and report data at frequencies adequate to meet reporting requirements established by the State Water Resources Control Board and other government agencies.

EMWD will monitor water use by customers using its billing systems and operational control systems to monitor production and consumption. EMWD measures and determines the actual water savings made

by implementing each stage of the WSCP by relying on water meters that record the production and consumption of water. Each level of the WSCP has an associated target reduction for metered water use.

## **10.0 WSCP Refinement Procedures**

EMWD will monitor the implementation of this plan to evaluate its effectiveness as an adaptive management tool. The monitoring and reporting program described in Section 9 will provide information on the effectiveness of the shortage response actions during any shortage levels that may be invoked. If EMWD determines that the shortage response actions are not effective in producing the desired results, it will initiate a process to refine the WSCP. EMWD will consider the addition of new shortage response actions, or changing the levels when shortage response actions are implemented. Suggestions for refinements will be collected from agency staff, customers, industry experts, and the general public. EMWD will work with Metropolitan and EMWD's wholesale customers to share data and suggestions for refinement to identify opportunities to increase the effectiveness of the WSCP while maintaining alignment with other agencies in the region when possible.

EMWD will review the WSCP's description of procedures for the Annual Assessment each year while preparing the Annual Assessment and make adjustments as needed.

## **11.0 Special Water Feature Distinction**

EMWD has distinguished swimming pools and spas as recreational water features, while non-pool and non-spa water features are considered decorative water features. This distinction is used in the shortage response actions because decorative water features have the potential to use recycled water, while pools and spas (recreational water features) must use potable water for health and safety considerations.

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

EMWD adopted this WSCP with the 2020 UWMP. The UWMP and WSCP were made available for public review during May of 2021. A public hearing was held on June 30, 2021 to allow public input on the draft UWMP and the WSCP.

EMWD's board of directors considered adoption of the UWMP and the WSCP at a meeting on June 30, 2021. The resolution of adoption is included as an attachment.

This WSCP will be submitted to DWR through the WUEData portal on or before the deadline of July 1, 2021.

This WSCP will be available to the public on the agency's web site. Notice will be provided to cities and counties in the service area that the WSCP is available on the agency's web site.

If EMWD identifies the need to amend this WSCP, it will follow the same procedures for notification to cities, counties and the public as used for the UWMP and for initial adoption of the WSCP. The draft amended WSCP will be made available for public review, and the agency's governing board will hold a public hearing to receive comments on the draft amended WSCP. Once the agency's governing board adopts the amended WSCP, the amended plan will be submitted to DWR and the California State Library, and it will be made available to the public and the cities and counties in the service area through placement on the agency's web site.

## 13.0 Attachment: EMWD Code Title 5, Article 10

### **ARTICLE 10 – WATER SHORTAGE CONTINGENCY PLAN<sup>1</sup>**

#### **5.1001 DECLARATION OF PURPOSE AND PRINCIPLES**

In accordance with Water Code 10632 requirements, Eastern Municipal Water District (EMWD) is responsible for conserving the available water supply, protecting the integrity of water supply facilities (infrastructure), and implementing a contingency plan in times of drought, supply reductions, failure of water distribution systems or emergencies. Particular emphasis is placed on use of domestic (potable) water, sanitation, fire protection, and preserving public health, welfare, and safety, in addition to minimizing the adverse impacts of water supply shortage or other water supply emergency conditions that do not include recycled water. Therefore, EMWD hereby adopts regulations and restrictions on the delivery and consumption of water use during water shortages.

#### Financial Impacts

In the event that EMWD was to implement the Water Shortage Contingency Plan(the Plan), it is recognized that the reductions in sales would impact the revenues that would normally be generated. To the extent that this reduction negatively impacts the coverage of its fixed related costs (those that are not tied to volume), EMWD will utilize its Rate Stabilization Reserve to mitigate any shortfall.

#### Priorities

The Plan is based on the following priorities:

- Public safety, healthy, and welfare
- Sustaining economic vitality
- Quality of life

#### **5.1002 PUBLIC EDUCATION**

EMWD will periodically provide the public with information about the Plan, including conditions under which each stage of the Plan is to be initiated or terminated and the conservation response measures to be implemented in each stage. This information will be provided by means of public events, website, press releases, bill inserts, etc.

#### **5.1003 COORDINATION WITH REGIONAL WATER PLANNING GROUPS**

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<sup>11</sup> Article 10 added to Title 5 by Resolution No. 2014-033 on March 26, 2014.

Coordination and implementation of this Plan are in concert with regional waterplanning groups including MWD and EMWD sub-agencies – Lake Hemet Municipal Water District, Nuevo Water Company, Rancho California Water District, and the cities of Perris, Hemet, and San Jacinto.

#### **5.1004 SHORTAGE DECLARATION PROCESS**

##### **(a) Long and Short Term Water Deficiencies**

Driven by the requirements outlined in Water Code 10632, and the demand for potable water expected to be in excess of the water supply, EMWD's General Manager shall request the Board of Directors to authorize and implement the provisions of the Plan. The request shall be made at a regular or special meeting of the Board of Directors, to implement provisions of the Plan. The Board of Directors has the authority to initiate or terminate the water shortage contingency measures described in this Plan.

##### **(b) Emergency Water Shortage Response**

By adopting this Plan, the Board of Directors authorizes the General Manager to declare the extent of a potable water shortage emergency and to implement the appropriate water shortage contingency measures. The General Manager shall report such water shortage conditions and the level of response to the Board of Directors in a timely manner. The declaration of the Board of Directors shall be made by public announcement and shall be published in a newspaper of general circulation. The declaration shall become effective immediately upon such publication.

#### **5.1005 APPLICATION**

The water shortage contingency measures of the Plan shall apply to all persons, customers, and properties utilizing potable water provided by EMWD. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, agencies, associations, and all other legal entities.

#### **5.1006 DEFINITIONS**

For the purposes of this Plan, the following definitions shall apply:

Commercial, Industrial, and Institutional (CII): Includes, but is not limited to, any type of non-profit establishments, governmental entities, schools, retail establishments, hotels, motels, restaurants, car washes, and office buildings.

Conservation: Those practices, techniques, and technologies that reduce the consumptions of

water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that supply is conserved and made available for future or alternative uses.

Customer: Any person, company, agency, or organization using water supplied by EMWD.

EMWD: Eastern Municipal Water District.

Domestic water: Used for personal needs or for household or sanitary purposes such as drinking, bathing, cooking, sanitation, or for cleaning a residence, business, industry, or institution. Also used for landscape irrigation.

Household: Residential premises served by the customer's meter.

Landscape irrigation use: The irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, rights-of-way and medians.

Long Term Shortage: A prolonged shortage of water supplies expected to last at least a year.

Potable water: Filtered/treated water suitable for drinking; also used for household needs and landscape irrigation.

Short Term Shortage: A shortage of water supplies expected to last less than a year.

Water Shortage Contingency Plan: The Plan as defined by this document.

Water shortage: A condition in which the existing or projected potable water supply available to EMWD is not adequate to meet the water requirements of its customers. This condition may be the result of factors including, but not limited to, voluntary or mandatory curtailment of EMWD's allocation from the MWD, drought, emergency conditions or failures of water distribution systems.

Water shortage period: The period beginning on the effective date of the Board of Director's approval of implementing EMWD's Water Shortage Contingency Plan, and ending on the date of the Board of Director's finding that a potable water shortage no longer exists.

#### **5.1007            PROCESS FOR INITIATION/TERMINATION OF WATER SHORTAGE CONTINGENCY STAGES AND MODIFICATION OF ACTIONS TAKEN IN EACH STAGE<sup>2</sup>**

The General Manager will recommend the appropriate stage of response to a water shortage based on the best information available at the time. Conditions that will be

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<sup>2</sup> Section 5.1007 amended by Resolution No. 2014-098 on July 2, 2014.

considered include:

- EMWD water supply conditions and storage levels
- Statewide water supply conditions
- Local water supply and demand conditions
- MWD Water Supply Allocation Plan implementation or other actions requiring a reduction in water demand
- Actions by surrounding agencies

As water supply conditions either deteriorate or improve, the General Manager will return to the Board to revise the appropriate stage of response. It shall not be necessary to implement any stage prior to another; the stages may be implemented in any reasonable order.

In the event the State or local agencies, through executive action, emergency legislation or other actions, impose conditions, requirements, or procedures that are not included in the District water shortage Contingency Plan, the General Manager is authorized to implement such measures as are reasonably required to bring the District's actions in each stage into functional conformity with such conditions, requirements, or procedures.

#### **5.1008 PUBLIC NOTIFICATION PROCEDURES**

When EMWD determines that a potable water shortage condition exists, any or all of the following notification procedures may be implemented:

- (a) Notify the general public stakeholders, elected officials and other key decision-makers regarding the situation, actions to be taken, goals customers are intended to achieve, and how these actions will be implemented.
- (b) The public at large will be informed of the situation and actions EMWD will be taking. Communications will occur through any of the following: billing inserts, special mailings, telephone contact, e-mail, social media, roadway signage, water conservation booths, and other booths in the community, speaker's bureau, community association meetings, newsletters, and education programs, etc. Literature appropriate to the drought circumstance will be provided regarding the potable water shortage condition, conservation methods, and water-savings devices.
- (c) Use of all forms of media will be employed. This would include public service announcements on radio and cable television, social media as well as earned media and advertisements in local newspapers.

- (d) EMWD's web site, [www.emwd.org](http://www.emwd.org), will be the central location for messaging and customer communications.

### **5.1009 WATER SHORTAGE CONTINGENCY PLAN STAGES AND ENFORCEMENT<sup>3</sup>**

EMWD will implement an appropriate stage based on current water conditions. Higher stages will be implemented as shortages continue and/or if customer response does not bring about desired water savings. Restrictions, penalties, and enforcement will build on each other as higher stages are implemented.

#### **Stage 1: Supply Watch**

At this stage, efforts will be focused on encouraging voluntary reduction of up to 10 percent. Customers can reduce demand by following the water use efficiency requirements of Section 5, Article 6 - Water Conservation of the Administrative Code. Other actions may be encouraged as appropriate.

Demand reduction will be encouraged through the on-going enforcement listed in Section 5, Article 6 - Water Conservation of the Administrative Code including EMWD's water budget based tiered rate and penalties for run off.

#### **Stage 2: Supply Alert**

At this stage efforts will be focused on a voluntary reduction of up to 25 percent. Customers can reduce demand by following the water use efficiency requirements of Section 5, Article 6 - Water Conservation of the Administrative Code. Voluntary customer actions could include the following:

- (a) Reduce watering or irrigating of lawn, landscape or other vegetated areas with sprinklers by one day a week;
- (b) All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system repaired within 48 hours;
- (c) Refrain from filling or re-filling of ornamental lakes or ponds; and
- (d) Refrain from using potable water to wash or clean a vehicle, including but not limited to, any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not.

Demand reduction will be encouraged through the ongoing enforcement listed in Section 5,

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<sup>3</sup> Section 5.1009 amended by Resolution No. 2015-011 on March 18, 2015; amended by Resolution No. 2015-103 on August 19, 2015; amended by Resolution No. 2016-016 on January 20, 2016; amended by Resolution No 2017-152 on December 20, 2017.

Article 6 - Water Conservation of the Administrative Code including EMWD's water budget based tiered rate and penalties for run off.

### Stage 3: Mandatory Waste Reduction

At this stage, efforts will be focused on a mandatory reduction of excessive water use. Customers can reduce demand by following the conserving actions detailed in Stages 1 and 2. Demand reduction will be enforced through changes to EMWD's water budget-based tiered rate structure and observation-based penalties:

For tiered customers:

- (a) Stage 3a: No variances or adjustments will be allowed for filling swimming pools, establishing landscape or leaks that are not repaired within 48 hours;
- (b) Stage 3b: Excessive tier budgets (Tier 3 Budgets for residential customers, Tier 2 Budgets for non-residential) will be decreased by up to 50 percent; and
- (c) Stage 3c: Excessive tier budgets (Tier 3 Budgets for residential customers, Tier 2 Budgets for non-residential) will be decreased by up to 100 percent.

Observation of any water waste in opposition to restrictions listed in Section 5, Article 6 - Water Conservation of the Administrative Code or under this or any previous stage of the Plan are subject to the following penalties:

- (a) For multi-family, commercial, institutional, industrial, agricultural, and landscape accounts:
  - (1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;
  - (2) For a second violation a surcharge in the amount of \$100.00 shall be added to the Customer's water bill;
  - (3) For a third violation a surcharge in the amount of \$200.00 shall be added to the Customer's water bill; and
  - (4) For a fourth and any subsequent violation a surcharge of \$300.00 shall be added to the Customer's water bill.
- (b) For single-family residential accounts:
  - (1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;

- (2) For a second violation a surcharge in the amount of \$25.00 shall be added to the Customer's water bill;
- (3) For a third violation a surcharge in the amount of \$50.00 shall be added to the Customer's water bill; and
- (4) For a fourth and any subsequent violation a surcharge of \$100.00 shall be added to the Customer's water bill.

#### Stage 4: Mandatory Outdoor Reduction

At this stage efforts will be focused on a mandatory reduction of outdoor water use.

Customers can reduce demand by following the conserving actions required in Stages 1 through 3 and limiting watering or irrigating of lawn, landscape or other vegetated areas with sprinklers to the following schedule:

- (a) June through August – A maximum of two days a week; and
- (b) September through May – A maximum of one day a week.

Demand reduction will be enforced through changes to EMWD's water budget based tiered rate structure and observation based penalties:

For tiered customers:

- (a) Stage 4a: Outdoor water budgets will be decreased by 10 percent;
- (b) Stage 4b: Outdoor water budgets will be decreased by up to 50 percent; and
- (c) Stage 4c: Outdoor water budgets will be decreased by up to 100 percent and the irrigation of non-functional turf by multi-family residential, commercial, industrial, and institutional customers is prohibited.

Observation of any water waste in opposition to restrictions listed in Section 5, Article 6 - Water Conservation of the Administrative Code or under this or any previous stage of the Plan, or the irrigation of non-functional turf by multi-family residential, commercial, industrial, and institutional customers when the District is in Stage 4c or higher are subject to the following penalties:

- (a) For multi-family, commercial, institutional, industrial, agricultural, and landscape accounts:
  - (1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;
  - (2) For a second violation a surcharge in the amount of \$200.00 shall be added to the Customer's water bill;
  - (3) For a third violation a surcharge in the amount of \$400.00 shall

- be added to the Customer's water bill; and
- (4) For a fourth and any subsequent violation a surcharge of \$600.00 shall be added to the Customer's water bill.
- (b) For single-family residential accounts:
- (1) For the first violation, the District shall issue a written notice of fact of such violation to the Customer;
- (2) For a second violation a surcharge in the amount of \$50.00 shall be added to the Customer's water bill;
- (3) For a third violation a surcharge in the amount of \$100.00 shall be added to the Customer's water bill; and
- (4) For a fourth and any subsequent violation a surcharge of \$200.00 shall be added to the Customer's water bill.

#### Stage 5: Mandatory Indoor Reduction

At this stage efforts will be focused on a mandatory reduction of indoor water use. This stage would only be implemented in response to a catastrophic loss of supplies requiring a 50 percent or more reduction in demand.

Demand reduction will be enforced through changes to EMWD's water budget based tiered rate structure and penalties for run off as detailed in Section 5, Article 6 - Water Conservation of the Administrative Code:

For tiered customers:

- (a) Stage 5a: Indoor water budgets will be decreased by 10 percent;
- (b) Stage 5b: Indoor water budgets will be decreased by up to 30 percent; and
- (c) Stage 5c: Indoor water budgets will be decreased by up to 50 percent.

Commercial, Industrial, Institutional, Agricultural customers and any other customer without a water budget will be given a water budget based on historical water use. Allocations will be decreased in stages and the current Tier 4 rate will be applied to any use above the decreased allocation.

- (a) Stage 5a: Budgets will be decreased by 10 percent;
- (b) Stage 5b: Budgets will be decreased by up to 30 percent; and
- (c) Stage 5c: Budgets will be decreased by up to 50 percent.

Restrictions and penalties implemented in earlier stages shall also remain in effect.

#### **5.1010 APPEALS PROCESS**

All variance requests and appeals will be processed according to Section 5, Article 6 –

Water Conservation of the Administrative Code.

**5.1011 WHOLESALE SUPPLY ALLOCATION AND PENALTIES**

During mandatory water shortage stages, wholesale customers will be required to reduce their retail water demand equivalent to EMWD's retail water demand reduction. If MWD has limited supply allocations to EMWD and other member agencies; supply to wholesale customers may be allocated using a formula and methodology based on the MWD Water Supply Allocation Plan.

Potential penalties for not reducing demand could be up to 4 times the MWD Tier2 rate.

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**14.0 Attachment. Resolution of Adoption for WSCP**

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