

# 2020 Water Shortage Contingency Plan

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Prepared for  
Rainbow Municipal Water District  
Fallbrook, California  
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## List of Abbreviations

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|                 |   |
|-----------------|---|
| AFY             | acre-feet per year                              |
| AMI             | advanced metering infrastructure                |
| Annual          |   |
| Assessment      | annual water supply and demand assessment       |
| CWC             | California Water Code                           |
| District        | Rainbow Municipal Water District                |
| DWR             | Department of Water Resources                   |
| EOC             | Emergency Operations Center                     |
| ERP             | Emergency Response Plan                         |
| SCADA           | supervisory control and data acquisition system |
| PSAWR           | Permanent Special Agriculture Water Rate        |
| UWMP            | Urban Water Management Plan                     |
| Water Authority | San Diego County Water Authority                |
| WSCP            | Water Shortage Contingency Plan                 |



## Section 1

# Introduction

The Water Shortage Contingency Plan (WSCP) documents how Rainbow Municipal Water District (District) will respond in the event of a water shortage. A water shortage means that the available water supply cannot sufficiently meet the normally expected customer water use at a given point in time. This WSCP provides guidance for managing and mitigating a potential shortage of water supply. In the event of any water shortage emergencies, this WSCP should be followed in coordination with the District's emergency response plan.

The San Diego County Water Authority (Water Authority) is a wholesale water supplier that provides 100 percent of the supply to the District in normal years. The Water Authority has their own WSCP that guides their response to a water shortage.

The WSCP is an element of the District's Urban Water Management Plan (UWMP), both of which are updated every five years in accordance with the California Water Code and submitted to the Department of Water Resources (DWR). The WSCP must be able to be amended separately from the UWMP. As such there is the flexibility to be able to separate the WSCP from the UWMP for future needs.

The WSCP is structured as recommended by DWR in the 2020 Urban Water Management Plan Guidebook. The WSCP consists of the following elements:

- **Section 2:** Water Supply Reliability Analysis Summary
- **Section 3:** Annual Water Supply and Demand Assessment Procedures
- **Section 4:** Six Standard Water Shortage Stages
- **Section 5:** Shortage Response Actions
- **Section 6:** Emergency Response Plan
- **Section 7:** Communication Protocols
- **Section 8:** Compliance and Enforcement
- **Section 9:** Legal Authorities
- **Section 10:** Financial Consequences of WSCP Activation
- **Section 11:** Monitoring and Reporting
- **Section 12:** WSCP Refinement, Adoption, Submittal, and Availability



## Section 2

# Water Supply Reliability Analysis Summary

The water supply reliability analysis is documented in Section 7 of the UWMP. To comply with the Water Code, the analysis is summarized in this section. The reliability of supplies and the key issues that may create shortage conditions relative to the District's water supply portfolio are summarized below.

## 2.1 Water System Reliability

The water system reliability analysis to meet demands in normal, single dry, and multiple dry years over a five-year drought period is described narratively and in tabulated format in Section 7 of the UWMP. Historically, the Water Authority supply has been very reliable with only occasional supply reductions during droughts impacting California or the Colorado River Watershed. The District anticipates there will be no supply shortages within the District's service area in a normal year, single dry-year or multiple dry- years through 2045.

## 2.2 Key Risks for a Potential Shortage Condition

Though the District's supply is highly reliable, there are scenarios that could result in the District declaring water shortage stage conditions. For example, water shortage stages may be declared if the California Governor enacts an Executive Order calling for water demand reductions. Below is a list of the key risks to the District that could potentially result in a shortage condition.

- Regional drought circumstances that lead to water supply allocations/cutbacks from the Water Authority
- Regulatory restrictions enacted upon imported supplies
- Earthquakes or other hazards that may cause catastrophic failure of conveyances for water supplies imported via the Water Authority, which partially originate from the State Water Project or the Colorado River Aqueduct



## Section 3

# Annual Water Supply and Demand Assessment Procedures

The annual water supply and demand assessment (Annual Assessment) shall be conducted annually and submitted to DWR on or before July 1 of each year beginning with the first Annual Assessment due by July 1, 2022. The Annual Assessment forecasts near-term water supply conditions to ensure shortage response actions are triggered in a timely manner. The Annual Assessment is submitted to DWR with information on anticipated water supply shortages, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with this WSCP.

This section presents the decision-making process that the District will use each year to determine its water supply reliability. The District will conduct an annual water supply and demand assessment that follows the steps illustrated in Figure 3-1 and described below. The decision-making process also includes the key data inputs and assessment methodology that will be used to evaluate the District’s water supply and demand. The evaluation criteria, unconstrained demand, water supply, infrastructure considerations, and other factors are included in the steps. Once DWR finalizes the Annual Assessment guidelines, this process may be modified.

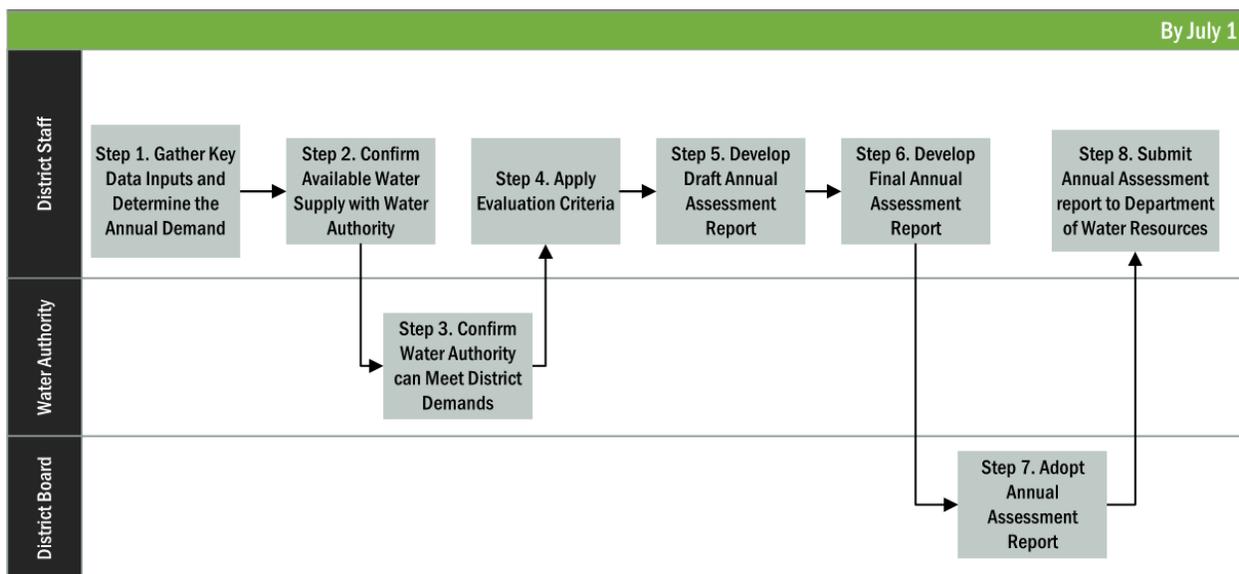


Figure 3-1. Annual Assessment Procedure and Decision-Making Process

### Step 1. District Gathers Key Data Inputs and Determines the Unconstrained Demand

Prior to March 1st of each year, the District will estimate unconstrained customer demand for the current year and one dry year using a method similar to that used by the District for its 2020 UWMP water demand projections. DWR defines unconstrained customer demand as the District’s water use before any projected demand reduction response actions are implemented due to WSCP activation. The projections shall be based on recent water use, while considering impacts on demand from

changing agricultural demands, climate patterns, potential service area expansion or population growth, and other influencing factors.

### **Step 2. District Coordinates with Water Authority to Confirm Available Water Supply**

Prior to March 1st of each year, the District will coordinate with the Water Authority to confirm that their available water supply will meet the District's unconstrained demand. The District receives 100 percent of its supply from the Water Authority without supply limitations in normal years. In times of drought, the Water Authority may determine a reduced annual water allocation for their member agencies based on a predetermined methodology.

### **Step 3: Water Authority Confirms Supply**

The Water Authority will confirm whether the available water supply can meet the District's water demands for the current year and one subsequent dry year. The Water Authority will determine their methodology for this analysis, but the basis of this methodology is as follows:

- Consider hydrological and regulatory conditions in the current year when making their determination.
- Consider how dry-year hydrological and regulatory conditions in the subsequent year may impact their water supplies
- Identify any water transmission or storage infrastructure constraints that may impact water supply deliveries to the District
- Provide descriptive text of the available water supply to the District for both scenarios

### **Step 4. Apply Evaluation Criteria**

The Annual Assessment is based on evaluating the key data inputs to determine water supply reliability. The water supply and demand information will be compared in an Excel table or other tool using a DWR specified timestep (i.e., monthly data, quarterly, or annual data), and reliability will be assessed by considering local conditions, potential supply uncertainties, and any possible constraints on water distribution infrastructure from events such as planned maintenance, construction, equipment outages, etc.

### **Step 5. Develop Draft Annual Assessment Report**

The District will compile the draft Annual Assessment report using the key data inputs, evaluation criteria, and results of the analysis. The report will contain a description and quantification of each source of water supply for the current year and one subsequent dry year. The report will also identify and quantify any anticipated water supply shortages. If any water shortages are anticipated, the report will indicate which water shortage level of the Water Shortage Contingency Plan to recommend for initiation.

### **Step 6. Develop Final Annual Assessment Report**

The District will conduct an internal review and approval process of the draft, in order to prepare the Final Annual Assessment Report. The Final Report will be submitted to the District's Board of Directors for approval.

### **Step 7. Adopt Annual Assessment Report**

The District's Board of Directors will review and adopt the Annual Assessment report, declaring a water shortage if necessary.

### **Step 8. Submit Annual Assessment Report to DWR**

The District will submit the Annual Assessment report to DWR on or before July 1st of each year.

## Section 4

# Six Standard Water Shortage Stages

The District has developed a six-stage WSCP that defines the shortage levels based upon the percent of water supply shortage in comparison to unconstrained demand, as shown in Table 4-1. The District's WSCP contains six-stages to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions and align with the response action the District would implement to meet the severity of the impending shortages.

| Table 4-1. Water Shortage Contingency Plan Levels (DWR Table 8-1) |                                     |  |
|---|-------------------------------------|--|
| Shortage Level  | Percent Shortage Range <sup>1</sup> | Water Shortage Condition   |
| 1   | Up to 10%                           | Water supply conditions are sufficient to meet 90 to 100% of projected unconstrained demand for the next two years.    |
| 2   | Up to 20%                           | Water supply conditions are sufficient to meet 80 to 90% of projected unconstrained demand for the next two years.     |
| 3   | Up to 30%                           | Water supply conditions are sufficient to meet 70 to 80% of projected unconstrained demand for the next two years.     |
| 4   | Up to 40%                           | Water supply conditions are sufficient to meet 60 to 70% of projected unconstrained demand for the next two years.     |
| 5   | Up to 50%                           | Water supply conditions are sufficient to meet 50 to 60% of projected unconstrained demand for the next two years.     |
| 6   | >50%                                | Water supply conditions are sufficient to meet less than 50% of projected unconstrained demand for the next two years. |

*Notes: Water shortage condition is based on unconstrained demand compared to projected supply. Projected supply is based on water deliveries from the Water Authority.*



## Section 5

# Shortage Response Actions

Shortage response actions are aligned with the defined shortage levels defined in Table 4-1. Shortage response actions include locally appropriate supply augmentation actions and locally appropriate demand reduction actions such as operational changes, mandatory prohibitions against specific water use practices, and state mandated prohibitions. Each shortage response action is intended to reduce a portion of the gap between supplies and demand. The percent of water demand reduction for each action is estimated in Section 5.1.

## 5.1 Demand Reduction Actions

Prioritized use of available potable water during shortages is based on the difference between basic needs (i.e., drinking, toilet flushing) and discretionary uses (i.e., landscape irrigation), and legal requirements set forth in the California Water Code (CWC), Sections 350-358. Water reduction actions implemented during shortages will not affect the following water use types:

- Minimum health and safety allocations for interior residential needs (includes single family, multifamily, hospitals and convalescent facilities, retirement and mobile home communities, student housing, firefighting, and public safety)
- Commercial, industrial, institutional/governmental operations, where water is used for manufacturing, to meet minimum health and safety allocations for employees and visitors, or to maintain jobs and economic base of the community, but not for landscape uses
- Commercial growers or nurseries

Locally appropriate demand reduction actions to adequately respond to shortages are specified in Table 5-1 on page 5-3. Table 5-1 includes:

- Demand reduction actions by shortage level. All demand reduction actions in lower levels continue to be implemented as the shortage level increases, unless otherwise noted in the table.
- Estimated annual reduction in water by volume and percent for each demand reduction action.
- Customer Outreach/Penalty, charge, or other enforcement for each demand reduction action.

The assumptions and references for the estimated annual reduction in water by volume are provided in Attachment A.

### 5.1.1 Special Water Feature Distinction

Water features that are not pools or spas are analyzed and defined separately from pools and spas in the WSCP. Non-pool or non-spa water features including ponds, lakes, waterfalls, and fountains that do not require the use of potable water for health and safety considerations, are defined as decorative water features and recreational water features and are included as such in the response actions and are enforced and monitored as part of the WSCP process.

Under all conditions and stages, the WSCP prohibits using potable water in an ornamental fountain or other decorative water feature, except where the water is part of a recirculating system. At Shortage Level 4 all decorative water features that use potable water must be drained and kept dry.

## 5.2 Supply Augmentation and Other Actions

Locally appropriate supply augmentation actions and operational changes are listed in Table 5-2. Because the District is reliant on water deliveries from the Water Authority, localized supply augmentation options are currently limited.

Table 5-1. Demand Reduction Actions (DWR Table 8-2)

| Shortage Level | Demand Reduction Actions   | How much is this going to reduce the shortage gap? (AFY) | How much is this going to reduce the shortage gap? (%) | Additional Explanation or Reference   | Penalty, Charge, or Other Enforcement?                                     |
|----------------|--|--|--|---|--|
| 1 through 5    | Landscape - Restrict or prohibit runoff from landscape irrigation                    | 43   | 0.30   | Prohibit the application of potable water on outdoor landscapes in a manner that causes excessive runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots or structures.          | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 6    | Other - Require automatic shut off hoses   | 43   | 0.30   | Prohibit the use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use. <sup>a</sup>     | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 6    | Other - Prohibit use of potable water for washing hard surfaces                      | 87   | 0.61   | Prohibit the application of potable water to driveways and sidewalks.   | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 6    | Water Features - Restrict water use for decorative water features, such as fountains | 43   | 0.30   | Prohibit the use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system.  | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 5    | Landscape - Other landscape restriction or prohibition                               | 43   | 0.30   | Prohibit the application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall. <sup>a</sup>  | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 6    | CII - Restaurants may only serve water upon request                                  | 4  | 0.03   | Prohibit the serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased. | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1              | Landscape - Limit landscape irrigation to specific days                              | 760  | 5.31   | Limit residential and commercial landscape irrigation to no more than three (3) assigned days per week on a schedule established by the General Manager and posted by the District. <sup>a</sup>  | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 5    | Landscape - Prohibit certain types of landscape irrigation                           | 16   | 0.11   | Prohibit the irrigation with potable water of ornamental turf on public street medians.   | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |
| 1 through 5    | Landscape - Prohibit certain types of landscape irrigation                           | 129  | 0.90   | Prohibit the irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California   | None in Shortage Level 1, Customer Outreach/Penalty above Shortage Level 1 |

| Table 5-1. Demand Reduction Actions (DWR Table 8-2) |  |  |  |   |  |
|---|--|--|--|---|--|
| Shortage Level                                      | Demand Reduction Actions                                   | How much is this going to reduce the shortage gap? (AFY) | How much is this going to reduce the shortage gap? (%) | Additional Explanation or Reference   | Penalty, Charge, or Other Enforcement? |
|   |  |  |  | Building Standards Commission and the Department of Housing and Community Development.  |  |
| 3 through 5   | Landscape - Limit landscape irrigation to specific days    | 1,032  | 7.21   | Limit residential and commercial landscape irrigation to no more than two (2) assigned days per week on a schedule established by the General Manager and posted by the District. <sup>a</sup>  | Customer Outreach/Penalty              |
| 3 through 5   | Landscape - Limit landscape irrigation to specific times   | 597  | 4.17   | Limit lawn watering and landscape irrigation using sprinklers to no more than ten (10) minutes per watering station per assigned day. This provision does not apply to landscape irrigation systems using water efficient devices, including but not limited to weather-based controllers, drip/micro-irrigation systems and stream rotor sprinklers. <sup>a</sup>  | Customer Outreach/Penalty              |
| 2 through 6   | Offer Water Use Surveys                                    | 574  | 4.01   | Offer District customers water use surveys to identify existing passive leaks or inefficiencies in plumbing or irrigation systems.  | Incentive                              |
| 4 through 6   | Moratorium or Net Zero Demand Increase on New Connections  | 120  | 0.84   | No new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, will serve letters, certificates, or letters of availability) shall be issued, unless (1) a valid, unexpired building permit has already been issued for the project; (2) In the opinion of the District Board of Directors the project is necessary to protect the public's health, safety, and welfare; or (3) The applicant provides substantial evidence of an enforceable binding commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the District. | None                                   |
| 3 through 5   | Landscape - Prohibit certain types of landscape irrigation | 557  | 3.89   | Water landscaped areas, including trees and shrubs located on residential and commercial properties, and not irrigated by a landscape irrigation system governed by section 5 (b) (1), on the same schedule set forth in section 5 (b) (1) by using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation. <sup>a</sup>  | Customer Outreach/Penalty              |

**Table 5-1. Demand Reduction Actions (DWR Table 8-2)**

| Shortage Level | Demand Reduction Actions  | How much is this going to reduce the shortage gap? (AFY) | How much is this going to reduce the shortage gap? (%) | Additional Explanation or Reference   | Penalty, Charge, or Other Enforcement? |
|----------------|---|--|--|---|--|
| 3 and 4        | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner            | 132  | 0.92   | Repair all leaks within seventy-two (72) hours of notification by the District unless other arrangements are made with the General Manager.   | Customer Outreach/Penalty              |
| 3 through 6    | Other water feature or swimming pool restriction  | 43   | 0.30   | Stop filling or re-filling swimming pools, spas, ornamental fountains, lakes, ponds, or other water features, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a drought response level under this ordinance. | Customer Outreach/Penalty              |
| 4 through 5    | Landscape - Limit landscape irrigation to specific days                                     | 611  | 4.27   | During the months of November through May, landscape irrigation is limited to no more than once per week on a schedule established by the General Manager and posted by the District. This section shall not apply to commercial growers or nurseries.  | Customer Outreach/Penalty              |
| 4 through 6    | Other water feature or swimming pool restriction  | 43   | 0.30   | All decorative water features that use potable water must be drained and kept dry   | Customer Outreach/Penalty              |
| 4 through 6    | Other - Prohibit vehicle washing except at facilities using recycled or recirculating water | 43   | 0.30   | Stop washing vehicles except at commercial carwashes that recirculate water, or by high pressure/low volume wash systems.   | Customer Outreach/Penalty              |
| 4              | Other   | 1,322  | 9.24   | The District may establish up to a 10% reduction in water allocation for any property served by the District. <sup>b</sup>  | Customer Outreach/Penalty              |
| 5              | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner            | 66   | 0.46   | Repair all leaks within forty-eight (48) hours of notification by the District unless other arrangements are made with the General Manager.   | Customer Outreach/Penalty              |
| 5              | Other   | 2,645  | 18.84  | The District may establish up to a 20% reduction in water allocation for any property served by the District <sup>b</sup>   | Customer Outreach/Penalty              |
| 6              | Landscape - Prohibit all landscape irrigation   | 1,942  | 13.57  | Stop all landscape irrigation <sup>ac</sup>   | Customer Outreach/Penalty              |
| 6              | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner            | 397  | 2.77   | Repair all water leaks within twenty-four (24) hours of notification by the District unless other arrangements are made with the General Manager  | Customer Outreach/Penalty              |

| Table 5-1. Demand Reduction Actions (DWR Table 8-2) |                          |  |  |  |  |
|---|--------------------------|--|--|--|--|
| Shortage Level                                      | Demand Reduction Actions | How much is this going to reduce the shortage gap? (AFY) | How much is this going to reduce the shortage gap? (%) | Additional Explanation or Reference  | Penalty, Charge, or Other Enforcement? |
| 6   | Other                    | 3,967  | 27.72  | The District may establish up to a 30% reduction in water allocation for any property served by the District. <sup>b</sup> | Customer Outreach/Penalty              |

Notes:

- a. This reduction action shall not apply to commercial growers or nurseries.
- b. The District may establish a water allocation for any property served by the District using a method that does not penalize persons for previous implementation of conservation methods or the installation of water saving devices. The decision to establish a water allocation and the method utilized to determine the amount of the allocation shall be at the sole discretion of District.
- c. If recycled water is available, it may be used to (1) maintain trees and shrubs on a limited schedule and by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation, (2) maintain existing landscaping necessary for fire protection as specified by the Fire Marshal of the local fire protection agency having jurisdiction over the property to be irrigated, (3) maintain existing landscaping for erosion control, (4) maintain landscaping within active public facilities, including parks and playing fields, day care centers, school grounds, cemeteries, and golf course greens, provided that such irrigation does not exceed two (2) days per week, (5) provide watering of livestock, and (6) supply public works projects and actively irrigated environmental mitigation projects.

| Table 5-2. Supply Augmentation and Other 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? (AFY) | How much is this going to reduce the shortage gap? (%) | Additional Explanation or Reference   |
| 1 through 6  | Expand Public Information Campaign                              | 217.30   | 1.5  | Offer workshops, increased use of bill inserts  |
| 2 through 6  | Expand Public Information Campaign                              | 43.46  | 0.3  | Promotion of District-wide advanced metering infrastructure (AMI) hourly water use data to communicate with customers. The District offers rebates for AMI capable meters to their customers so they can easily access insights into their water use. |

### 5.3 Shortage Response Action Effectiveness

The purpose of implementing demand reduction and supply augmentation actions is to reduce water demand and increase other sources of supply to make up for the water shortage gaps. If implemented, the demand reduction and supply augmentation actions outlined in Table 5-1 and Table 5-2 will allow the District to sufficiently meet the water shortage gaps at each shortage level. Table 5-3 presents the WSCP shortage gap reduction goals and compares them to the total shortage gap reduction possible if all demand reduction and supply augmentation actions are implemented for the associated shortage level.

| Table 5-3. Shortage Gap Reduction from Demand Reduction and Supply Augmentation Actions |                |    |    |    |    |     |
|---|----------------|----|----|----|----|-----|
|   | Shortage Level |    |    |    |    |     |
|   | 1              | 2  | 3  | 4  | 5  | 6   |
| WSCP Shortage Gap Reduction Goal (%)  | 10             | 20 | 30 | 40 | 50 | >50 |
| Shortage Gap Reduction due to Demand Reduction Actions (%) <sup>a</sup>                 | 8              | 19 | 28 | 42 | 50 | 55  |
| Shortage Gap Reduction due to Supply Augmentation Actions (%) <sup>a</sup>              | 2              | 2  | 2  | 2  | 2  | 2   |
| Total Shortage Gap Reduction (%)  | 10             | 21 | 30 | 44 | 52 | 57  |

a. Based upon assumed reduction percentages from Table 5-1 and compared to total actual water use for 2020.

b. Based upon assumed supply augmentation percentages from Table 5-2 and compared to total actual water use for 2020.

## Section 6

# Emergency Response Plan

A catastrophic water shortage could occur when a natural disaster such as an earthquake results in damage to water supply conveyances, other state water infrastructure, or District water facilities. This could possibly result in deficient water supplies for the region and/or the District. In response to potential natural disasters and other emergencies, the District prepared an Emergency Response Plan (ERP) in 2018. The ERP includes standardized response and recovery procedures to minimize customer water service interruptions and to prevent, minimize, and mitigate human injury and infrastructure damage resulting from emergencies or disasters of human-made or natural origin. The information contained in the ERP is intended to prepare and guide staff and inform emergency response agencies. The ERP includes plans, procedures, lists, and identification of equipment that may be useful during an emergency. The ERP includes the following sections:

- **Section 1:** Introduction
- **Section 2:** Emergency Planning Process
- **Section 3:** Mutual Aid System
- **Section 4:** Water System Information and Hazard Identification
- **Section 5:** Preparedness Phase Operations
- **Section 6:** Response Phase Overview
- **Section 7:** EOC Staff Assignments and Responsibility
- **Section 8:** Restoration and Recovery Phase
- **Section 9:** Mitigation Phase

Additionally, the ERP provides specific guidelines for the four items listed below. These guidelines will give District emergency responders support when determining the necessary response actions to manage an incident in a timely manner.

- Establishing an Emergency Operations Center (EOC) including the location and resources required, as well as a secondary EOC if the primary EOC is compromised.
- Organization and responsibilities of the EOC personnel to evaluate and direct the overall response to the emergency.
- Strategies for emergency response, repair, and restoration of the water system.
- Responsibilities of District personnel during the emergency response.

## 6.1 Seismic Risk Assessment and Mitigation Plan

A seismic risk assessment of the District's critical water system assets, including storage tanks, pump stations, and critical transmission and distribution pipelines was conducted. This assessment includes a description of the likelihood of occurrence near the critical facilities, a list of the assets that may be impacted, potential impacts, and suggested mitigation measures. The seismic risk assessment is documented as a technical memorandum, and it is included as Attachment A.



## Section 7

# Communication Protocols

Timely and effective communication is a key element of water shortage contingency planning implementation. The District's communication protocols and procedures in the event of a water shortage are intended for activation only with District Board authorization. Under a water shortage condition, the District would assess the actual water supply and demand information and conditions to determine whether activating the WSCP is warranted. If activation is warranted, the General Manager will call for an emergency Board meeting to request District Board authorization, if needed. The District would recommend activation of the appropriate stage and request District Board authorization to initiate the measures necessary to achieve the appropriate demand reduction target. The public would be encouraged to understand and be involved in the decision-making process and provide feedback to the District Board on such an action.

The list below outlines the specific communication methods to inform customers, the public, interested parties, and local, regional, and the state government of any current or anticipated water shortage stage and the associated water demand reduction actions:

- Customers, the public, and other interested parties:
  - Announcements on District website homepage
  - Press releases via the River Village News
  - Public information and awareness program with workshops, park signage, water bill inserts, and educational programs at schools
- Local, regional, and state government
  - Email officials at cities and counties impacted by the water shortage
  - Email or place phone call to designated officials at regional and state level (DWR)



## Section 8

# Compliance and Enforcement

The District adopted Ordinance No 16-10: An Ordinance of Rainbow Municipal Water District Adopting a Drought Response Conservation Program in June 2016 which provides a description of penalties and the District's authority to fine or terminate water service. The ordinance will be revised in accordance with the water shortage stages, demand reduction actions, and other measures outlined in this WSCP. The ordinance will go before the District's Board for approval after the WSCP has been revised and adopted.

### 8.1 Ensuring Ordinance Compliance

When water shortage stages are enacted, the District will ensure compliance with the ordinance by launching education and communication programs with District customers. If violations are identified, the fines described in Section 8.2 may apply if the offender has already been issued a warning. In the event of a water shortage, customers participating in the Permanent Special Agriculture Water Rate (PSAWR) program must affirmatively accept the condition that service may be interrupted during water supply shortages before other classes of water service are interrupted. During shortages, the District notifies customers participating in PSAWR through, newsletters, mailers, and the District website.

### 8.2 Enforcement of Demand Reduction Actions

Any person who uses, causes to be used, or permits the use of water in violation of the ordinance is guilty of an offense punishable as outlined below. Each day that a violation of the ordinance occurs is a separate offense.

Similarly, the District will ensure compliance with and enforce provisions of the WSCP reduction actions taken at each shortage level as noted in Table 5-1 by the following means:

- Prior to issuing administrative fines for violations, the District will first conduct public outreach and issue a warning to customers not in compliance. The District will provide the customer with a fact sheet about water shortage demand reduction actions to explain why the measures are in place.
- Administrative fines may be levied for each subsequent violation, with increasing fees as follows:
  - \$100 for a first violation.
  - \$200 for a second violation within one year from occurrence of the first violation.
  - \$500 for each additional violation within one year of the first violation.
- Installation of a flow-restricting device in the meter.
- Violations may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than 30 days or by a fine not exceeding \$1,000, or by both as provided in CWC section 377.
- Willful violations of the mandatory conservation measures and water use restrictions applicable during a Level 6 Drought Emergency condition may be enforced by discontinuing service to the property at which the violation occurs, as provided by CWC section 356.

All remedies provided for herein shall be cumulative and not exclusive.

### 8.3 Exemptions and Appeals

If, due to unique circumstances, a specific requirement of this WSCP would result in undue hardship and disproportionate impact to a District customer, then an exemption may be granted or conditionally granted by following the procedures detailed below.

1. **Request an Exemption or Appeal.** The customer shall submit a letter to the District requesting an exemption or appeal.
2. **Provide supporting documentation.** The exemption application shall be accompanied by photographs, maps, drawings, and other information, including a written statement of the applicant.
3. **Basis is found to support exemption.** An exemption shall be granted only if the District finds, based on the information provided in the application, supporting documents, any additionally requested information, and the District's records of water use information for the property, all of the following:
  - a. The exemption does not grant special privilege inconsistent with those available to all other District customers.
  - b. Unique circumstances specific to the applicant are found to have a disproportionate impact on the property or use that exceeds the impacts to customers generally.
  - c. The granted exemption will not cause harm to adjacent properties and will not impede the District's ability to fulfill the purpose of the WSCP.

The rationale and reason for the exemption request is not common, recurrent, or general in nature.

**Approval Authority.** The General Manager shall exercise approval authority and act upon any completed application no later than 30 days after submittal and may approve, conditionally approve, or deny the exemption. The applicant requesting the exemption shall be promptly notified in writing of any action taken. Unless specified otherwise at the time an exemption is approved, the variance applies to the subject property during the term of the mandatory shortage response.

**Appeals to the District Board of Directors.** An applicant may appeal a decision or condition of the General Manager on a variance application. The appeal must be in the form of a written request for a hearing and shall state the grounds for the appeal. At a public meeting, the District Board of Directors shall act as the approval authority and review the appeal. The decision of the District Board of Directors is final.

## Section 9

# Legal Authorities

The District's legal authority to enforce demand reduction measures during water shortages is codified by local ordinance, Rainbow Drought Ordinance 16-10: An Ordinance of Rainbow Municipal Water District Adopting a Drought Response Conservation Program.

The District shall declare a water shortage emergency condition in accordance with CWC Chapter 3 (commencing with Section 350) of Division 1 as stated below:

“Declaration of water shortage emergency condition. The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.”

The District 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.)



## Section 10

# Financial Consequences of WSCP Activation

The financial consequence of implementing the WSCP include potential revenue reductions and expense increases for the District. The District has estimated the costs associated with the revenue losses and has developed mitigation actions to reduce these impacts.

### 10.1 Potential Revenue Reductions and Expense Increases

Upon implementation of a shortage stage and the associated reduction actions, the District anticipates that revenues generated from the quantity charge component of customers' bills would be reduced proportionately to the water shortage percentage. In addition to reduced revenues, the District may also experience increased expenses due to the need for staff to carry out monitoring and enforcement actions identified by each shortage stage.

### 10.2 Mitigation Actions to Address Revenue Reductions

Throughout extended water shortage periods, the District would attempt to avoid rate adjustments.

Potential mitigation actions include:

- Use of financial reserves - The District has financial reserves to address decreased water sales during a water shortage.
- Postponement of capital improvements - The District could delay work on non-essential capital improvements until water sales become more sustainable.

### 10.3 Cost of Compliance

For the District to ensure its customers comply with the ordinance and CWC Chapter 3.3, Excessive Residential Water Use During Drought, additional costs will be incurred. These costs are associated with the increased costs for monitoring and enforcement of water use reduction measures.



## Section 11

# Monitoring and Reporting

The District will monitor and report implementation of the WSCP by collecting, tracking, and analyzing appropriate data for the purposes of monitoring reduction in customer water demands, customer compliance, and meeting state reporting requirements. Potable water use figures are recorded daily by District staff. The District operates its water system on a computerized supervisory control and data acquisition system (SCADA), which allows instantaneous viewing of water system conditions.

During a Shortage level 1 or 2, District staff would compare the daily and monthly water distribution totals to the target distribution totals to verify that the appropriate reduction goal is being met. The District Engineering and CIP Program Manager reviews the monthly distribution reports and determines if further action is required to meet demand reduction goals. Monthly distribution reports shall be sent to the District Board. If reduction goals are not met, the District Engineering and CIP Program Manager would notify the District Board so that corrective action is considered and/or taken.

During a Shortage Level 3 and higher, the procedure described above would be followed, with the addition of a weekly distribution report to the General Manager.



## Section 12

# WSCP Refinement, Adoption, Submittal, and Availability

As part of the District's commitment to ensuring reliable supplies, the WSCP will be adopted by the District Board and made available to the public.

### 12.1 Refinement Procedures

The WSCP is routinely updated to ensure water demand reduction actions and supply augmentation measures continue to accurately reflect the District's planned response to water shortage outages. The modifications to this WSCP for 2020 were adjusted to comply with the 2019 CWC revisions. Experience with recent drought conditions and recommendations from the Water Authority for regional consistency in water shortage contingency planning also played a role in the revisions to this WSCP.

Review and update of the WSCP shall occur in parallel with the update of the UWMP, at a minimum of every five years. However, the WSCP may also be updated independently of the UWMP and with greater frequency, at the District's discretion.

### 12.2 Adoption, Submittal, and Availability

The updated WSCP shall be adopted, submitted, and made available as part of the same process for the 2020 UWMP per the CWC requirements. During each WSCP review and update process, the revised WSCP will go through internal review prior to adoption by the District's Board. The WSCP must be reviewed and adopted prior to or in conjunction with the UWMP review and adoption process. The WSCP may also be periodically amended independently of the UWMP, as needed. In either instance, the public review period and adoption process follows that which is defined in Government Code 6066. The associated notifications for the public hearing process and the Board adoption resolution for the WSCP are provided as appendices to the UWMP.

The updated WSCP shall be made available on the District's website no later than 30 days after it is adopted. The WSCP shall also be available as an appendix to the UWMP document, which will be posted to the District's website and DWR's public Water Use Efficiency data portal website. The UWMP and its WSCP appendix will also be submitted to the California State Library and be available for review in hardcopy format in the District's offices during normal working hours.



## **Attachment A: Seismic Risk Assessment and Mitigation Plan**

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