FINAL PLAN | JULY 2023

# City of Manteca
# Water Shortage Contingency Plan

**PREPARED FOR**

City of Manteca

**PREPARED BY**

WEST YOST
Water. Engineered.

# City of Manteca
# Water Shortage Contingency Plan

**Prepared for**

## City of Manteca

**Project No. 265-60-22-12**


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| Project Manager: Rhodora Biagtan, PE | July 25, 2023<br>Date |
| QA/QC Review: Monique Day, PE | July 25, 2023<br>Date |

# Table of Contents



## LIST OF TABLES

# Table of Contents

## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| AB | Assembly Bill |
| AMI | Advanced Meter Infrastructure |
| AMR | Automated Meter Reading |
| AWIA | America's Water Infrastructure Act |
| AWSDA | Annual Water Supply and Demand Assessment |
| City | City of Manteca |
| County | San Joaquin County |
| CWC | California Water Code |
| Director | Director of Public Works |
| ERP | Emergency Response Plan |
| FEMA | Federal Emergency Management Agency |
| Legislature | California State Legislature |
| LHMP | Local Hazard Mitigation Plan |
| MG | Million Gallons |
| MMC | Manteca Municipal Code |
| PIO | Public Information Officer |
| RRA | Risk and Resilience Assessment |
| SB | Senate Bill |
| SSJID | South San Joaquin Irrigation District |
| UWMP | Urban Water Management Plan |
| WSCP | Water Shortage Contingency Plan |

## 1.0 INTRODUCTION

This plan presents the City of Manteca's (City) Water Shortage Contingency Plan (WSCP). The WSCP describes the City's strategic plan in preparation for and response to water shortages, with a goal to proactively prevent catastrophic service disruptions. It includes water shortage stages and associated actions that will be implemented in the event of a water supply shortage. As part of the WSCP, the City's legal authorities, communication protocols, compliance, and enforcement, and monitoring and reporting are included. Following the adoption of this WSCP, the City plans to update the City's Municipal Code (MMC) to support this WSCP.

A water shortage may occur due to several reasons, such as climate change, drought, and catastrophic events. Drought, regulatory action constraints, and natural and manmade disasters may occur at any time. A water shortage means that the available water supply is insufficient to meet the normally expected customer water use.

In 2018, the California State Legislature (Legislature) enacted two policy bills, (Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman)) (2018 Water Conservation Legislation), to establish a new foundation for drought planning to adapt to climate change and the resulting longer and more intense droughts in California. The 2018 Water Conservation Legislation set new requirements for water shortage contingency planning.

The City's WSCP has been updated so that it is consistent with the 2018 Water Conservation Legislation requirements. The City intends for this WSCP to be an adaptive management plan so that it may assess response action effectiveness and adapt to emergencies and catastrophic events. Refinement procedures and adoption requirements are provided in this plan to allow the City to modify this WSCP outside of the UWMP process.

## 2.0 WATER SUPPLY RELIABILITY ANALYSIS

This section relies on the water supply planning analysis and reliability findings from the City's 2020 Urban Water Management Plan (UWMP). The discussion below includes a summary of the City's existing and projected water use (from Chapter 4 of the City's 2020 UWMP), existing and planned water supplies by source (from Chapter 6 of the City's 2020 UWMP), and the water supply reliability assessment for 2025-2045 and the Drought Risk Assessment for 2021-2025 (from Chapter 7 of the City's 2020 UWMP).

The City's 2020 UWMP indicates that it can reliably meet its projected demands through 2045 in both normal and dry years. For a five-year drought beginning in 2021 (i.e., the Drought Risk Assessment), no water supply shortfalls are anticipated. In response to any supply shortfalls that may occur, the City may declare a water shortage stage (as described in Section 4.0).

Statewide water supply conditions and actions by surrounding agencies may impact the City's available water supply. A water shortage condition occurs when the supply of potable water available cannot meet ordinary water demands for human health and safety. The City may be able to foresee its water shortage condition in some cases, but an unforeseen sudden or emergency event (e.g., power outage or earthquake) may also cause a water shortage. In general, the City's water supply conditions may be affected by the following:

- Local surface water availability (Stanislaus River)
- Vulnerability to seismic events

- Changing environmental and regulatory requirements
- Climate change

In future years, the City will conduct an annual water supply and demand assessment in accordance with Section 3.0. The analysis associated with this WSCP was developed in the context of the City's water supply sources and reliability.

## 3.0 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

California Water Code (CWC) Section 10632.1 requires water suppliers to submit an Annual Water Supply and Demand Assessment (AWSDA) starting July 1, 2022. Water suppliers will also be required to submit an Annual Water Shortage Assessment Report beginning July 1, 2022. The assessment will need to be conducted for the current year's upcoming dry season and the next year, assuming that the next year will be a dry year. This WSCP provides the procedures for the City to conduct its Annual Water Supply and Demand Assessment. The findings from that assessment will provide information for City's Annual Water Shortage Assessment Report.

The procedures provided in this section are intended to assist the City in planning for potential, foreseeable shortage in water supplies. These procedures provide the steps the City needs to take that may lead to declaring a water shortage emergency and associated water shortage level (see Section 3) and implementation of water shortage response actions (see Section 4).

### 3.1 Decision-Making Process

The City will use the decision-making process described below to consistently determine its water supply reliability on an annual basis. The City may adjust and improve this process as needed.

The Director of Public Works (Director), or his/her designee, is responsible for preparing the City's Annual Assessment and Annual Water Shortage Assessment Report and for submitting the report to DWR by July 1st of each year. The Director will designate City staff to gather key data inputs described in Section 3.2 and conduct the assessment in accordance with Section 3.3. In June, the City will finalize the assessment based on South San Joaquin Irrigation District's (SSJID) anticipated water deliveries. City staff will present the Annual Assessment and Annual Water Shortage Assessment Report to the Director for review. If the Annual Assessment finds that available water supply will be sufficient to meet expected demands for the current year and one subsequent dry year, no further action will be required. City staff will submit the Annual Water Shortage Assessment Report to DWR by July 1 each year. The subsequent dry year may be similar to a single dry year as defined in Chapter 7 of the City's 2020 UWMP.

Should the Annual Assessment find that available supply will not meet expected demands, the City will coordinate interdepartmentally, with the region's other water service providers, and with San Joaquin County (County) for the possible proclamation of a local emergency. The Director, or his/her designee, will present the finalized assessment to the City Council, along with recommendations on water shortage condition determination and actions. Recommended actions may include declaration of a water shortage emergency, declaration of a water shortage stage, and water shortage actions.

Based on the findings of the Annual Assessment, the City Council will determine if a water shortage condition exists and, if needed, adopt a resolution declaring a water shortage emergency and an associated water shortage stage and authorizing water shortage actions. The Deputy Director of Public

Works will then prepare the City's Annual Water Shortage Assessment Report, incorporating the City Council determinations and approved actions.

The City will follow the schedule of activities shown in Table 1 for conducting the Annual Assessment and decision making. Due to variations in climate and hydrologic conditions, the start and end dates shown in the table are approximate and may be adjusted as needed. The intent of the schedule is to allow shortage response actions to effectively address anticipated water shortage conditions in a timely manner while complying with the State's reporting requirements. The start and end dates and the activities shown in this table are approximate and may be adjusted as needed.

**Table 1. Schedule of Assessment and Decision-Making Activities**

| Schedule | Task | Activity (Act) Decision (Dec) | Responsible Party |
|---|---|---|---|
| Assessment Activities | | | |
| February to March | Determine available water supply for current year and one subsequent dry year. Describe source and quantities considering factors affecting supply as described in Section 3.2. | ACT | City Staff |
| February to March | Plan for water demands for current year and one subsequent dry year. Describe demand types and quantities considering factors presented in Section 3.2. | ACT | City Staff |
| February to March | Using the methodology described in Section 3.3, calculate the City's water supply reliability for the current year and one subsequent dry year. | ACT | City Staff |
| Late March to Early May | Complete AWSDA based on expected water deliveries from SSJID | ACT | Deputy Director of Public Works |
| Late April or Early May | Review AWSDA and Annual Water Shortage Assessment Report and provide comments, if needed. | ACT | Director of Public Works |
| Decision Making Activities If Assessment Shows Available Supply May Not Meet Expected Demands | | | |
| Late April or Early May | Based on finalized determinations of AWSDA regarding water shortage condition and recommended actions, prepare recommendations on water shortage condition determination and actions. | DEC | Director of Public Works |
| Late April or Early May | Prepare ordinances or resolutions approving determinations and actions. | DEC | Director of Public Works |
| Early May | Coordinate interdepartmentally, with the region's water service providers, and with the County for the possible proclamation of a local emergency. | DEC | Director of Public Works |
| Early to Late May | Based on determinations of the AWSDA, prepare the Annual Water Shortage Assessment Report with recommendations on water shortage condition. Submit to Director. | ACT | City Staff |
| May | Present finalized determinations and recommendations to the City Council, along with ordinances or resolutions approving determinations and actions. | DEC | Director of Public Works |

| Table 1. Schedule of Assessment and Decision-Making Activities | | | |
|---|---|---|---|
| Schedule | Task | Activity (Act) Decision (Dec) | Responsible Party |
| May | Receive presentation of finalized determinations and recommendations. Make determination of degree of emergency and authorize water shortage response actions for implementation. | DEC | City Council |
| Late May | Review AWSDA and Annual Water Shortage Assessment Report and provide comments, if needed. | ACT | Director of Public Works |
| Late May to Early June | If a water shortage emergency condition is declared, implement the WSCP and the water shortage response actions as approved by the City Council. | DEC | Director of Public Works |
| Assessment and Report Submittal | | | |
| On or before July 1 | Finalize AWSDA and Annual Water Shortage Assessment Report and submit to DWR. | ACT | Deputy Director of Public Works |

## 3.2 Key Data Inputs

The AWSDA is required to evaluate supply and demands for the current year and one subsequent dry year. The following key data inputs will be used to evaluate the City's water supply reliability.

Planned water supplies will be used as input to the AWSDA for the current year and the following one dry year. In planning for water supplies, the following factors are considered:

- Hydrological conditions
- Regulatory conditions
- Contractual constraints
- Surface water quality conditions
- Infrastructure capacity constraints or changes
- Development Planning

Planned water supply sources and quantities will be described and be reasonably consistent with the supply projections in Chapter 6 (Water Supply Characterization) of the City's most recent UWMP. Should the supply sources and projections deviate significantly from the UWMP, the City will explain the difference.

Planned unconstrained water demands will be used as input to the AWSDA for the current year and the following one dry year. Unconstrained water demands are customer demands where no water conservation measures are in effect. In planning for water demands, the following factors are considered:

- Weather conditions
- Water year type
- Population changes (e.g., due to development projects)
- Anticipated new demands (e.g., changes to land use)

- Pending policy changes that may impact demands
- Infrastructure operations

Planned water demands types and quantities will be described and be reasonably consistent with the demand projections in Chapter 4 (Water Use Characterization) of the City's most recent UWMP. Should the demand projections deviate significantly from the UWMP, the City will explain the difference.

## 3.3 Assessment Methodology

In preparing the AWSDA, the City will use the following assessment methodology and evaluation criteria to evaluate the City's water supply reliability for the current year and following one dry year.

The City will prepare a spreadsheet to plan for current year and future year demands. Planned supply and demand inputs described in Section 3.2 will be entered in the spreadsheet in annual increments, or closer time intervals as necessary during water shortage conditions.

Supply and demand will be compared to determine the reliability of the City's water supply in the current year and the following one dry year. The City's water supply for the current year and the following dry year will be determined reliable if water supplies are equivalent to or exceed projected water demands. If water supply cannot meet anticipated water demands in the current year or the following dry year, the extent of the water shortage condition will be determined, and the City will prepare response actions in accordance with this WSCP. If a water shortage is anticipated, the AWSDA findings will be presented to the City Council, along with recommended actions for City Council consideration.

## 3.4 Adoption of the Annual Assessment

Each year, the City will conduct the AWSDA and develop the Annual Water Shortage Assessment Report, as outlined above, to determine whether a water shortage exists or is anticipated in the current or one subsequent dry year. The AWSDA and Annual Water Shortage Assessment Report will be presented to the Director of Public Works or designee, for review and approval.

If the AWSDA finds that available water supply will be adequate to meet expected demands for the current year and one subsequent dry year, no further action will be required. The approved report will be submitted to DWR by July 1 each year.

If the AWSDA finds that available supply will not meet expected demands, the City staff will present the findings and recommendations to the City Council at a public meeting, along with a resolution and ordinance (as needed) approving the findings and response actions. After the City Council acts, the City will implement the authorized water shortage response actions.

# 4.0 STANDARD WATER SHORTAGE LEVELS

To provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions, the 2018 Water Conservation Legislation mandates that water suppliers plan for six standard water shortage levels (also called shortage stages) that correspond to progressive ranges of up to 10, 20, 30, 40, 50 percent, and greater than 50 percent shortages from the normal reliability condition. Each shortage condition should correspond to additional actions water suppliers would implement to meet the severity of the impending shortages. A water shortage is the gap between available supply and projected demands.

The City's 2015 UWMP included five stages that addressed up to 50 percent gap between supply and demand. Table 2 presents the City's updated stages, which now address a greater than 50 percent gap between supply and demand and aligns with the State's standard stages. The City's water shortage levels apply to both foreseeable and unforeseeable water supply shortage conditions.

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

| Shortage Level | Percent Shortage Range | Shortage Response Actions |
|---|---|---|
| 1 | Up to 10 | Voluntary – 10 percent reduction in use |
| 2 | Up to 20 | Voluntary or mandatory – 20 percent reduction in use |
| 3 | Up to 30 | Mandatory – 30 percent reduction in use |
| 4 | Up to 40 | Mandatory – 40 percent reduction in use |
| 5 | Up to 50 | Mandatory – 50 percent reduction in use |
| 6 | Greater than 50 | Mandatory – more than 50 percent reduction in use |

As described in Section 3.0, the City will conduct an Annual Assessment to determine its water supply condition for the current year and a subsequent dry year. Preparing the Annual Assessment helps the City ascertain the need to declare a water shortage emergency and water shortage stage. In certain cases, the City may need to declare a water shortage emergency due to unforeseen water supply interruptions. When the City anticipates or identifies that water supplies may not be adequate to meet the normal water supply needs of its customers, the City Council may determine that a water shortage exists and consider a resolution to declare a water shortage emergency and associated stage. The shortage stage provides direction on shortage response actions.

## 5.0 SHORTAGE RESPONSE ACTIONS

CWC Section 10632(a)(4) requires shortage response actions that align with the defined shortage levels. The City's shortage response actions consist of a combination of demand reduction, supply augmentation, and operational changes. The City's suites of response actions are dependent on the event that precipitates a water shortage level, the time of the year the event occurs, the water supply sources available, and the condition of its water system infrastructure.

The City plans to use a balanced approach, combining demand reduction, supply augmentation, and operational changes to respond to the event and the resulting water shortage level. The City will adapt its implementation of response actions to close the gap between water supplies and water demand and meet the water use goals associated with the declared water shortage level.

Meters allow the City to compare current water demands with demand reduction goals and adjust its shortage response actions accordingly. The City water system is fully equipped with meters which can be read remotely and can be read monthly to track the extent of the effectiveness of the City's response actions. The City is in the process of equipping the water system service connections with a cloud-based advanced meter infrastructure (AMI) which can be read in real time to track demand reduction goals. The City anticipates that all customer meters will be AMI within the next five years.

Water production and water use can be compared to previous periods. This continuous monitoring allows the City to assess water system demands and compare it with its water demand reduction goals. The City may then adjust its shortage response actions as needed to balance demands with available water supplies. For example, the City may intensify its public outreach or more vigorously enforce compliance

with water use prohibitions if needed water demand reduction goals are not met for any specific shortage level. Conversely, the City may reduce public outreach frequency or decrease compliance actions if demand reduction goals are exceeded.

The shortage response actions discussed below may be considered as tools that allow the City to respond to water shortage conditions. Shortage response actions are initiated at the shortage levels shown and continue to be implemented at higher shortage levels. Because the City may continuously monitor and adjust its response actions to reasonably equate demands with available supply, the extent to which the gap between water supplies and water demand will be reduced by implementation of each action is difficult to quantify and is provided as an estimate. Certain response actions, such as public outreach and enforcement, support the effectiveness of other response actions and do not have a quantifiable effect on their own.

## 5.1 Demand Reduction Actions

During water shortage conditions, the City plans to reduce demand by implementing the actions shown in Table 3. Demand reduction actions are organized by the triggering water shortage level, and each action includes an estimate of how much its implementation will reduce the shortage gap. For each demand reduction action, Table 3 also indicates if the City uses compliance actions such as penalties, charges, or other enforcement. Demand reduction actions are initiated at the shortage levels shown and will continue to be implemented at higher shortage levels.

| Table 3. Demand Reduction Actions (DWR Table 8-2) | | | | |
|---|---|---|---|---|
| Shortage Level | Demand Reduction Actions<br>***Drop down list***<br>*These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.* | How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)* | Additional Explanation or Reference *(optional)* | Penalty, Charge, or Other Enforcement?<br>***For Retail Suppliers Only***<br>*Drop Down List* |
| *Add additional rows as needed* | | | | |
| 1 | Expand Public Information Campaign | Reduce water use up to 1% | Encourage water users to reduce water waste | Yes |
| 1 | Other | Reduce water use up to 5% | City water customers shall reduce water use by 10% | Yes |
| 1 | Other - Prohibit use of potable water for washing hard surfaces | Reduce water use up to 1% | | Yes |
| 1 | Other - Require automatic shut of hoses | Reduce water use up to 1% | | Yes |
| 1 | CII - Restaurants may only serve water upon request | Reduce water use up to 1% | Manteca Municipal Code: 13.04.210 | Yes |
| 2 | Expand Public Information Campaign | Reduce water use up to 1% | Encourage water users to reduce water waste | Yes |
| 2 | Other | Reduce water use up to 5% | City water customers shall reduce water use by 20% | Yes |
| 2 | Landscape - Other landscape restiction or prohibition | Reduce water use up to 5% | | Yes |
| 2 | CII - Other CII restriction or prohibition | Reduce water use up to 1% | | Yes |
| 2 | Water Features - Restrict water use for decorative water features, such as fountains | Reduce water use up to 1% | | Yes |
| 2 | Other - Require automatic shut of hoses | Reduce water use up to 1% | | Yes |
| 2 | Landscape - Limit landscape irrigation to specific times | Reduce water use up to 10% | Outdoor watering restricted to 2 days per week. | Yes |
| 3 | Expand Public Information Campaign | Reduce water use up to 1% | Encourage water users to reduce water waste | Yes |
| 3 | Other | Reduce water use up to 5% | City water customers shall reduce water use by 30% | Yes |
| 3 | Other | Reduce water use up to 1% | Prohibit vehicle washing unless use of a bucket and hose equipped with a self-closing valve. | Yes |
| 3 | Landscape - Prohibit certain types of landscape irrigation | Reduce water use up to 5% | | Yes |
| 3 | Landscape - Other landscape restriction or prohibition | Reduce water use up to 5% | New or expanding landscapes is limited to drought tolerant trees, shrubs and ground cover. No new turf grass shall be placed, hydroseeded or laid | Yes |
| 3 | Other - Prohibit vehicle washing except at facilities using recycled or recirculating water | Reduce water use up to 5% | | Yes |
| 3 | Pools - Allow filling of swimming pools only when an appropriate cover is in place. | Reduce water use up to 1% | | Yes |
| 3 | CII - Other CII restriction or prohibition | Reduce water use up to 1% | Operators of hotels, motels, and other commercial establishments offering lodging shall post in each room and site a notice of water shortage condition, approved by the Public Works Director | Yes |
| 4 | Expand Public Information Campaign | Reduce water use up to 3% | Encourage water users to reduce water waste | Yes |
| 4 | Other | Reduce water use up to 3% | City water customers shall reduce water use by 40% | Yes |
| 4 | Landscape - Prohibit certain types of landscape irrigation | Reduce water use up to 5% | Irrigation of any landscaping except trees or drought tolerant plantings is prohibited | Yes |
| 4 | Landscape - Other landscape restriction or prohibition | Reduce water use up to 5% | All nonresidential users are to reduce irrigation by 40% for existing landscapes | Yes |
| 4 | Moratorium or Net Zero Demand Increase on New Connections | Reduce water use up to 3% | No new water service connections or commitments for new water service shall be put in place | Yes |
| 4 | Other water feature or swimming pool restriction | Reduce water use up to 1% | Filling pools and spas is prohibited | Yes |
| 5 | Expand Public Information Campaign | Reduce water use up to 3% | Encourage water users to avoid water waste | Yes |
| 5 | Other | Reduce water use up to 3% | City water customers shall reduce water use by 50% | Yes |
| 5 | Moratorium or Net Zero Demand Increase on New Connections | Reduce water use up to 3% | No new water service connections or commitments for new water service shall be put in place | Yes |
| 6 | Other | Reduce water use up to 3% | City water customers shall reduce water use by 60% | Yes |

## 5.2 Additional Mandatory Restrictions

In addition to demand reduction actions, the City has the following mandatory water restrictions set forth in MMC Section 13.04.210. Under Stages 1 to 6, the use of water in any of the following manners are restricted:

A. 1. For washing of sidewalks, driveways, patios, parking lots, aprons or other non-landscaped exterior ground areas, except as allowed by a city issued washing permit for the washing of driveways, parking lots, aprons and other non-landscaped areas of commercial and industrial properties for the purpose of maintaining the area in a clean, safe and sanitary condition;

2. All businesses proposing to water wash areas identified in subsection (A)(1) shall obtain a washing permit from the public works department;

3. Use potable water to irrigate turf at commercial, industrial, or institutional properties that is not regularly used for human recreational purposes or for civic or community events can be reduced in commercial, industrial, and institutional areas to protect local water resources and enhance water resiliency;

B. Watering of landscaping, washing of exterior buildings or filling of swimming pools:

1. Except at locations bearing a street address ending in an even number on Tuesday, and Saturday;

2. Except at locations bearing a street address ending in an odd number on Wednesday, and Sunday;

3. At any location between the hours of twelve noon to six p.m. on any day;

4. At all locations and all times, watering of landscapes is prohibited on Monday, Thursday, and Friday;

5. The following shall not be subject to the watering day and time restrictions:

a. All locations within twenty-one days of landscape installation;

b. Manteca public golf course, City parks, the City Hall complex, and Manteca Unified School District landscapes;

c. Private Parks or other landscaped areas larger than 4 acres;

d. Landscape irrigation exclusively using drip irrigation and/or micro spray irrigation systems;

6. Irrigating outdoors during and within forty-eight hours following measurable (at a minimum any amount of rainfall that generates run-off or puddles) rainfall;

C. Taking of water from any fire hydrant except by regularly constituted fire protection agencies or provided a permit for construction water has been obtained through the public works department;

D. Allowing the escape of water through leaks, breaks or malfunction in the user's plumbing or distribution system for more than twenty-four hours after discovery thereof by, or notice thereof to, the user;

E. Washing of automobiles or boats except:

1. By use of a quick-acting positive shut-off nozzle on the hose or bucket and sponge;

2. At a commercial car wash;

F. Serving water by restaurants except upon request of a customer;

G. Irrigation that causes water runoff onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

H. Using potable water in decorative water features that do not recirculate the water;

I. Operating evaporated coolers which are not equipped with a recirculating pump;

J. Recreational activities that require a constant flow of potable water;

K. Hotels and motels must offer their guests the option to not have their linens and towels laundered daily, and prominently display this option in each guest room.

These restrictions are in addition to State mandated prohibitions. The City will enforce both State-mandated prohibitions in addition to its own restrictions.

## 5.3 Supply Augmentation and Other Actions

The City has approximately 3.8 million gallons (MG) of potable water storage within the City's service area, to manage daily operations and mitigate the effects of a short-term (days) water supply interruption. As part of the City's operations, the City conducts annual construction projects to repair and replace water distribution system infrastructure to reduce water system losses.

In a water shortage emergency, the City may pursue purchased water supplies from water suppliers adjacent to the City boundaries to mitigate the shortage gap. Supply augmentation and other actions that the City may implement during water supply emergencies are summarized in Table 4 below.

**Table 4. Supply Augmentation and Other Actions (DWR Table 8-3)**

| Submittal Table 8-3: Supply Augmentation and Other Actions | | | |
|---|---|---|---|
| Shortage Level | Supply Augmentation Methods and Other Actions by Water Supplier<br>***Drop down list***<br>*These are the only categories that will be accepted by the WUEdata online submittal tool* | How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)* | Additional Explanation or Reference *(optional)* |
| *Add additional rows as needed* | | | |
| 1-4 | Expand Public Information Campaign | 5-10% | Intensify public information and educational outreach programs |
| 5 | Implement Drought Surcharge | 10-20% | The City of Manteca will consider implementation of drought rates. |
| 6 | Transfers | Up to the shortage gap | The City of Manteca will coordinate with adjacent water suppliers. |

## 5.4 Locally Appropriate Operational Changes

During a water shortage of any level, the City may elect to implement operational measures to support implementation of the WSCP. This may include hiring temporary workers, reassigning staff, and/or increasing overtime to provide staffing for a range of efforts, such as conducting Water Waste Patrols, implementing the communication protocols, responding to customer service requests, scheduling, and conducting site assessments and consultations, processing incentive and rebate applications, and conducting compliance and enforcement efforts. The City may also elect to lower water system pressure and limit water main flushing and treatment vessel backwashing. Operational changes will be considered at each level of water shortage to determine whether and when to implement such measures.

## 5.5 Emergency Response Plan

The City's water shortage levels outlined in Section 4.0 apply to both foreseeable and unforeseeable water supply shortage conditions, including catastrophic water shortage conditions.

The City's Emergency Response Plan (ERP) addresses catastrophic water shortage conditions. The ERP outlines response procedures associated with unforeseeable incidents such as a regional power outage, earthquake, infrastructure failure, and other events. The ERP includes actions to be taken in preparation for, during, and recovery from such events. To protect the security of the City's water system, the ERP is retained by the City as a confidential document.

## 5.6 Seismic Risk Assessment and Mitigation Plan

CWC Section 10632.5(a) requires that UWMPs include a seismic risk assessment and mitigation plan to assess and mitigate a water system's seismic vulnerabilities. A Local Hazard Mitigation Plan (LHMP) or Risk and Resilience Assessment (RRA) may be incorporated in this UWMP to meet this requirement if it addresses seismic risk.

The City is located within San Joaquin County. As such, the San Joaquin County 2023 Local Hazard Mitigation Plan (2023 LHMP), provides relevant information regarding local seismic risk. The 2023 LHMP was submitted to the Federal Emergency Management Agency (FEMA), which found it in conformance with Title 44 Code of Federal Regulations Part 201.6 Local Mitigation Plans, and was adopted by the County on April 11, 2023.[1] The 2023 LHMP considered the risk of the region to earthquakes and found that the likelihood and magnitude of a significant incident are minimal.[2] Thus, the 2023 LHMP is not included in this UWMP.

The City developed an RRA in 2020 in accordance with the America's Water Infrastructure Act (AWIA). The RRA systematically evaluated the City's assets, threats, and risks, and evaluated countermeasures that might be implemented to minimize overall risk to the system. Vulnerability to natural hazards, including earthquakes, was assessed based on the City's level of preparation/resilience, active response capability, and ability to recover.

[1] San Joaquin County. San Joaquin County Local Hazard Mitigation Plan. January 2023. https://www.sjgov.org/department/oes/local-hazard-mitigation-planning

[2] San Joaquin County 2023 Local Hazard Mitigation Plan, p. 38.

The City's efforts in addressing its few seismic vulnerabilities are in progress. To protect the security of the City's water system, the RRA is retained by the City as a confidential document.

## 6.0 COMMUNICATION PROTOCOLS

In the event of a water shortage, the City must inform their customers, the general public and interested parties, and local, regional, and state entities. Communication protocols for foreseeable and unforeseeable events are provided in this section. In any event, timely and effective communication must occur for appropriate response to the event. City staff are provided with City email accounts to communicate internally and externally.

### 6.1 Communication for Foreseeable Events

Water shortage may be foreseeable when the City conducts its AWSDA as described in Section 3.0. When the City determines the potential of a water shortage event, the City Council may determine and declare a water shortage emergency. The City will hold a duly noticed public meeting to present the current or predicted shortage. At the public meeting, the City Council will determine if a water shortage emergency condition exists and the degree of the emergency. The City Council will consider the shortage response actions triggered or anticipated to be triggered by the shortage level. As necessary, the City Council will act on the water shortage emergency declaration, associated water shortage level, and shortage response actions.

The City will follow the communication protocols and procedures below and may trigger any of them at any water shortage level.

1. If a water shortage emergency is anticipated, the City will coordinate interdepartmentally, with the region's water service providers, and with the County for the possible proclamation of a local emergency.
2. The City will issue a public notice for a City Council meeting during which the AWSDA findings and recommendations for a water shortage emergency and shortage response actions are presented.
3. The City will communicate actions to customers, the general public, and interested parties through a combination of bill stuffers and newsletters, website, social media posts, press releases, and blog posts.
4. The City will communicate actions to relevant local, regional, and state officials and entities primarily through email correspondence.

### 6.2 Communication for Unforeseeable Events

A water shortage may also occur during unforeseeable events such as earthquakes, fires, infrastructure failures, civil unrest, and other catastrophic events. The City's ERP provides specific communication protocols and procedures to convey actions during these events. The City may trigger these communication protocols, depending on the event. In general, communications and notifications will proceed along the identified chain of command. All City staff are provided their communication responsibilities. The ERP also provides a list of relevant contacts to notify at the local, regional, and state level.

# 7.0 COMPLIANCE AND ENFORCEMENT

This section describes how the City will ensure compliance with and enforcement of provisions of this WSCP. The City's procedures include protocols for treatment of violations and actions associated with more egregious levels of violation. The procedures include appeal and exemption processes.

## 7.1 Compliance and Enforcement Procedures

When a water shortage is anticipated, the City Council will adopt a resolution declaring a water shortage emergency condition and the regulations and restrictions that should be enforced in response to the declared water shortage level.

The City is metered system-wide, at production facilities and at each customer connection. Thus, water use can be quantified and compared to determine users' extent of compliance to water reduction requirements. The City may also become aware of non-compliance through water waste reporting by the general public, the City's online reporting tool, City staff inspections, and/or manual review of customer use data.

MMC Chapter 1.10 applies for violation of regulations and restrictions associated with the water shortage emergency declaration. When the City becomes aware of violations, a written notice of the violation will be delivered to the customer at the premises or by first class mail and posted in a conspicuous location at the premises. A copy of the notice will also be mailed to the regularly billed customer for water use at the premises. The notice will describe the violation and request that it be corrected, cured, or abated within a reasonable period of time as determined by the City under the circumstances. The notice will include a list of potential consequences for failure to comply with the notice, including fines. Should the violation persist, the City may assess civil penalties per MMC Chapter 1.10 Article V. Civil penalties may be assessed at a daily rate as determined by the City. In addition to fines, the City may collect administrative costs incurred in the investigation, inspection, and reinspection of the property.

## 7.2 Appeal Process

MMC Chapter 1.10 outlines the appeal process for City customers. If a customer wishes to appeal the City's decision, they must submit a written appeal to the Director of Public Works, or designee, within ten calendar days of service of the notice. The Director of Public Works will request the City Attorney to appoint a hearing officer and to schedule a day, time, and place for an appeal hearing. Written notice regarding the hearing will be served at least ten calendar days prior to the hearing to the appealing customer.

# 8.0 LEGAL AUTHORITIES

The MMC Sections 13.04.210 and 13.04.220 support the City's ongoing water use restrictions, including provisions for enforcement. The MMC does not contain provisions for additional restrictions on water use during water shortages. Should a water shortage occur, the City would need to adopt an emergency ordinance to restrict water use as needed. The emergency ordinance would support the City's water shortage contingency actions, including regulations and restrictions to be enacted in event of a water shortage.

At the time of a water shortage emergency, the City Council will, by resolution, declare a state of water shortage emergency and empower enactment of the WSCP. A water shortage emergency declaration will be in effect upon proper findings made by the City Council and remain in effect until the City Council finds and declares by resolution that the water shortage emergency condition has abated, has changed in degree, or no longer exists.

When a water shortage is determined, the City will coordinate interdepartmentally, with the region's water service providers, and with the County for the possible proclamation of a local emergency in accordance with under California Government Code, California Emergency Services Act (Article 2, Section 8558).

In a duly noticed meeting, the City Council will determine whether a water shortage emergency condition exists and, if so, the degree of the emergency and what regulations and restrictions should be enforced in response to the shortage. The City shall declare a water shortage emergency in accordance with CWC Chapter 3 of Division 1.

> *California Water Code Division 1, Section 350*
>
> *…The governing body of a distributor of a public water supply…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 water shortage emergency declaration triggers communication protocols described in Section 6.0 and compliance and enforcement actions described in Section 7.0.

## 9.0 FINANCIAL CONSEQUENCES OF WSCP

Because the City bills its customers in part per unit volume of water consumed, the City may experience a reduction in revenue upon implementation of water shortage stages. The City policy is to maintain adequate water fund reserves in the event water shortage and subsequent demand reduction measures impact the City's revenue. The City is currently conducting a water rate study. As part of the study, the City may consider a drought rate structure. A drought surcharge would allow the City to recover revenue shortfalls accrued against a rate stabilization fund as a result of prolonged demand reductions during water shortage conditions.

The City anticipates that reduced water sales will lead to a reduction in revenue, based on decline in water sales and corresponding quantity rate charge. Although recovery of revenues may be pursued with City-approved drought surcharges, higher rates may result in further declines in water usage beyond water use targets and further reduction in water revenues.

The City also anticipates increased costs from implementing the WSCP:

- Increased staff costs: salaries, benefits, materials and supplies for various staff and new hires required to administer and implement water shortage contingency program measures and actions
- Increased O&M cost: Operations and maintenance costs associated with alternative sources of water supply, reduced system flows, or water quality challenges
- Increased cost of supply and treatment: purchase and treatment costs of new water supply or additional treatment due to existing source shortfalls

The City water rates include a variable cost portion of the water Operation and Maintenance fee that is usually greater than 70 percent of the average monthly water bill, not including the debt service fees. In

2008, the City completed a rate study that was adopted by the City Council.[3] The rate study described the potential effects of demand management measures and recommended that the City establish a water utility rate stabilization reserve.

## 10.0 MONITORING AND REPORTING

The City water system is fully metered, from its water supply sources to individual customer meters. These meters may be used as monitoring tools for compliance and reporting purposes. The City's water system is fully set up for automated meter reading (AMR); the City plans to upgrade the entire system to AMI as soon as reasonably possible. AMI allows the City to monitor customer water usage in real time as necessary for assessing compliance with demand reduction actions and helping customers achieve the reduction goal.

If reduction goals are not met through implementation of the WSCP (during any water shortage Stage), the Director will notify the City Council, and more aggressive action will be taken. Additionally, if it is determined that this WSCP requires refinements in order to achieve reduction targets, the City will revise the WSCP according to the procedures discussed in Section 11.0 and then adopt it and make it available as discussed in Section 12.0.

## 11.0 WSCP REFINEMENT PROCEDURES

This WSCP is an adaptive management plan. It is subject to refinements as needed to ensure that the City's shortage response actions and mitigation strategies are effective and produce the desired results. Based on monitoring described in Section 10.0 and the need for compliance and enforcement actions described in Section 7.0, the City may adjust its response actions and may modify its WSCP. When a revised WSCP is proposed, the revised WSCP will undergo the process described in Section 13.0 for adoption by the City Council and distribution to the County, its customers, and the general public.

Feedback from City staff and the public is important in refining or incorporating new actions. The City seeks input from staff who interface with customers to gauge the effectiveness of its response actions and for response action ideas. The City seeks input from its customers and the general public through its website and through regularly scheduled City Council meetings.

Customer water meter data may be evaluated for each customer sector or each individual customer. The City tracks water use violations and may evaluate their frequency to determine restrictions that customers may not be able to meet. This evaluation may also show water demand reduction actions that customers may effectively implement.

## 12.0 SPECIAL WATER FEATURE DISTINCTION

The City distinguishes special water features, such as decorative fountains and ponds, differently from pools and spas. Special water features are regulated separately. Regulations under MMC Section 13.04.210 prohibit the use of potable water in decorative water features unless the water is recirculated. Decorative water features are also distinguished from pools and spas in the demand reduction actions identified in Table 3.

[3] The Reed Group, Inc. 2008. *City of Manteca Water Rate Study*. September 2008.

## 13.0 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This WSCP is adopted concurrently with the City's 2020 UWMP, by separate resolution on July 18, 2023. Prior to adoption, a duly noticed public hearing was conducted. A hard copy and electronic copy of this WSCP will be submitted to DWR within 30 days of adoption.

No later than 30 days after submittal to DWR, copies of this WSCP will be available at the City's offices. A copy will also be provided to the County. An electronic copy of this WSCP will also be available for public review and download on the City's website.