

City of Yuba City Water Shortage Contingency Plan



Adopted: July 20, 2021

[excerpt from Chapter 6 of 2020 Urban Water Management Plan]

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Chapter 6

Water Shortage Contingency Plan

This Water Shortage Contingency Plan (WSCP) addresses the requirements in Water Code Section 10632 of the Urban Water Management Planning Act (The Act). The WSCP is incorporated into the 2020 Urban Water Management Plan (UWMP) and is used by the City of Yuba City (the City or Yuba City) to respond to water shortage contingencies as they may arise. The WSCP addresses possible conditions in which the water supply available to customers of the City is insufficient to meet the normally expected customer water use at a given point in time due to drought, regulatory action constraints, and natural and man-made disasters. This WSCP describes the City's strategy for allocating water during such water supply shortages, while assuring customers that at all times it will meet the minimum health and safety requirements of a drinking water purveyor.

This WSCP consists of the following required elements:

1. An analysis of water supply reliability.
2. Procedures for conducting an annual water supply and demand assessment.
3. Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage.
4. Shortage response actions that align with the defined shortage levels.
5. Communication protocols and procedures.
6. Customer compliance, enforcement, appeal, and exemption procedures.
7. A description of legal authorities.
8. A description of financial consequences.
9. Monitoring and reporting requirements.
10. Reevaluation and improvement procedures.
11. Special Water Feature Distinction.
12. Plan Adoption, Submittal, and Availability.

The Act contains specific requirements for each of these elements.¹ As required by Water Code Section 10632 this WSCP is incorporated into the UWMP, yet it is also a stand-alone plan that is adopted

¹ California Water Code Section 10632, available at:
(https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=WAT§ionNum=10632)

independently from the UWMP and may be amended or refined and readopted over coming months and years as needed (see subsection 6.12 Plan Adoption, Submittal, and Availability, below).

6.1 Water Supply Reliability Analysis

Yuba City is located in eastern Sutter County on the western bank of the Feather River. Located adjacent to the east of the Feather River is the City of Marysville, and to the north, west, and south is generally undeveloped agricultural land. The City delivers quality, reliable water to a population of approximately 70,000 located in a 15 square mile service area within and just outside of its City limits (see Chapter 2). The City’s water source is surface water from the Feather River, with a small supplemental groundwater supply available at the water treatment plant, and independent non-potable groundwater wells used to irrigate City parks (Blackburn-Talley, Regency, Gauche Aquatic Park, Sam Brannan, and Northridge).

As described in Chapter 5 of the UWMP, the City has a reliable water through 2045. The City has a diverse and robust water supply portfolio capable of meeting the water demands in its service area in normal, single dry, and five consecutive dry years from 2020 through 2045 so long as active management of its supply portfolio occurs. The City’s diverse water supply portfolio requires coordinated water management between the City and its contract partners – DWR and NYWD – in order to render the supply reliable in all year types through 2045. Although Yuba City has a secure water supply, this WSCP serves as a roadmap to help the City meet the challenges that may arise from future droughts, regulatory actions, and unforeseen man-made and natural disasters.

6.2 Annual Water Supply and Demand Assessment Procedures

The WSCP describes the City’s procedural methodology for managing shortages and conducting its required Annual Water Supply and Demand Assessment (Annual Assessment). The Annual Assessment is to be submitted to California Department of Water Resources (DWR) by July 1 each year with the first Annual Assessment due July 1, 2022. The Annual Assessment examines Yuba City’s anticipated water reliability for the current year and one additional dry year. The Annual Assessment will be prepared at the beginning of each calendar year to evaluate near-term water supply reliability and determine what, if any, water shortages stages may be triggered during the required period. The Annual Assessment will be used by Yuba City decision-makers to prepare for and initiate implementation of any needed response actions, as well as to inform customers, the general public, interested parties, and local, regional, and state governmental entities to prepare for such required actions.

6.2.1 Analytical and Decision-making Processes

Yuba City plans to conduct its Annual Assessment according to the following timeline and process:

By February 1	Initial data collection and analysis
By March 1	Preliminary Draft Annual Assessment internal review and revisions
By April 1	Draft Annual Assessment and results briefing for Yuba City decision-makers
By May 1	Public Notification and Release of Draft Annual Assessment
By June 1	Approval of Annual Assessment by Yuba City Decision-makers

By June 15

Submit Annual Assessment to DWR in advance of July 1 deadline

The City will prepare its Annual Assessment using the following key data and analytical procedures (which may be modified as needed):

- ◆ The Water Treatment Plant Supervisor and Chief Plant Operator will utilize their Standard Operating Procedure spreadsheet to prepare supply estimates for each water source on a monthly basis for the analysis period, considering desired reservations of supplies in the event the following year is also dry (e.g. maintain a pre-determined minimum as SWP Carryover supply for a future year).
- ◆ Update unconstrained customer demand and estimate anticipated actual water use on a monthly basis for the analysis period.
- ◆ Update infrastructure assessment, including estimated water supply production capability on a monthly basis for the analysis period.
- ◆ Identify and quantify any locally applicable factors that may influence or disrupt supplies during the analysis period.
- ◆ Refine the definition of “dry year” as relevant to dry conditions like water year 2015 and 2021, especially as related to recently realized constraints on water supply availability .
- ◆ Identify any shortfall between projected available supply for the upcoming year and anticipated unconstrained demand.
- ◆ Identify and incorporate any applicable constraints (infrastructure, regulatory, etc.).
- ◆ Develop, analyze, and propose water resource management strategies to address any shortfall between projected supply and anticipated demand with reference to the water shortage stages identified in this WSCP.
- ◆ Present the Annual Assessment (and resulting water shortage stage declaration, if applicable) to the City decision-makers.

If the results of the Annual Assessment indicate the need for any alternative water shortage response actions which may be addition to those specified in Subsection 6.4, below, the alternative response actions will be described and submitted in the Annual Assessment, as specified in CWC 10632.2.

6.2.2 Submittal Procedure

The City will submit its Annual Assessment to the DWR via email by June 15 each year, but in no case later than July 1 each year. Prior to DWR submittal, Yuba City will also notify Sutter County Office of Emergency Services, Cal Water, the City of Marysville, the public, and other stakeholders concerning the results of the Annual Assessment and where it is available for review.

6.3 Six Standard Water Shortage Stages and Triggers

New state requirements for the WSCP require water suppliers to adopt six water shortage stages, which correspond to progressively severe water shortage conditions (up to 10%, 20%, 30%, 40%, 50%, and greater than 50% percent shortage), as compared to the normal service reliability condition. The City has adopted the six standard water shortage stages. Each stage corresponds to a range of reduction in anticipated water supply availability (or reduction in treated water production capacity) in relationship

to “normal” demand. Because average water use varies on a monthly, seasonal, and sometimes annual basis, the City will determine the actual water shortage stage based on the expected water production “gap” between actual available water supply and anticipated water use (water demand) at any given time. Reduction of available water supply by the indicated percentages will trigger an appropriate water shortage stage and the City will implement some or all of the response actions identified in Tables 6-1 through 6-6.

6.4 Shortage Response Actions

The WSCP is required to identify locally appropriate shortage response actions that align with the defined shortage stages and include demand reduction actions, supply augmentation actions, system operational changes, and mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions. For each response action the WSCP is to provide an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

6.4.1 Stages of Shortage Response Actions

The City has identified shortage response actions to be implemented during each of the six sequential stages and corresponding water shortage conditions. These actions are based on specific hydrological and regulatory conditions and the fundamental need to meet water service requirements within the City’s service area. Moreover, the shortage response actions provide the City with some flexibility to address dynamic water shortage conditions while protecting the City against extreme conditions where supplies are drastically reduced beyond 50%. The following is an overview of the staged response actions the City could follow during a given water shortage condition based on shortage severity, relative supply conditions for each stage, and percent shortage reduction levels.

A water shortage declaration would be made by resolution of the City Council, with administrative discretion delegated to the Public Works Director under the direction of the City Manager (Mun. Code Sec. 6-6.19 (a) Emergency water restrictions and Sec. 6-6.04. Administration).

In general, shortage response actions are intended to address water shortages in City water production from the Water Treatment Plant, which is primarily treated surface water from the Feather River. . Because many of the City’s parks are irrigated with groundwater and some property owners have wells for irrigation, these properties may not be subject to the mandatory watering restrictions, with administrative discretion delegated to the Public Works Director restrict City groundwater use at Stage 3 and above or in response to catastrophic events.

The shortage response actions that may be implemented in each stage include, but are not limited to, the following:

Stage 1 (up to 10 percent shortage) “Water Alert” – If water supplies are threatened with constraint, the Plan calls for an introductory Stage 1 drought response, during which customers are informed of possible shortages and asked to voluntarily conserve 10 percent. In addition, customers are prohibited from wasting water or unreasonably using water for beneficial purposes. For example, prohibited water

uses under this stage include: allowing water to run off unused into a gutter, ditch, or drain; failing to repair a controllable leak; washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas; utilizing a hand-held hose without an automatic shut-off nozzle; and irrigating during a precipitation event. Additional prohibitions will apply to new developments such as prohibiting single pass-through cooling water systems; commercial car washes and laundries without recirculating water systems; and decorative fountains without recirculating water systems.

This stage includes performing public outreach and education about the shortage and methods individuals can implement to reduce their water use. The City will inform the public and neighboring governmental bodies of the potential shortage condition and will coordinate with customers to implement the actions consistent with this Stage.

Stage 2 (up to 20 percent shortage) “Water Warning” – In the event Stage 2 is implemented the City will continue to encourage community-oriented voluntary conservation measures, enforce conservation measures, and implement mandatory water use reduction measures to decrease demand by up to 20 percent. Stage 2 activities include a continuation of activities described under Stage 1, as well as greater conservation and water use restrictions. These additional restrictions include beyond those identified in Stage 1, Encourage customers to voluntarily water one day less per week and to water during the coolest part of the day and vehicle washing must be done using a bucket or hand-held hose with an automatic shut-off nozzle, or take place at a commercial car wash. The City may consider limiting hours or closing spray pads or water slide at City parks. Customer baseline water use may be monitored and addressed with excess use above the shortage percentage potentially subject to financial penalties as described in Subsection 6.8, below.

The City will also continue to engage in public outreach and education as it applies to the water shortage conditions and the actions necessary to achieve up to 20% reduction in use.

Stage 3 (up to 30 percent shortage) “Severe Shortage” – Stage 3 includes all response actions taken in Stages 1 and 2 and is focused on continuing to encourage customers to voluntarily reduce water use regarding turf watering, fillings pools, etc., and may include additional mandatory-watering restrictions as appropriate, such as allowing outdoor irrigation only between the hours of 6:00 PM and 9:00 AM on certain days. Increased monitoring related to prescribed water conservation actions will occur under this stage. The City would close spray pads and water slide at City parks. Customer baseline water use may be monitored and addressed with excess use above the shortage percentage potentially subject to financial penalties as described in Subsection 6.8, below.

The City will also continue to engage in public outreach and education as it applies to the water shortage conditions and the actions necessary to achieve up to 30% reduction in use.

Stage 4 (up to 40 percent shortage) “Critical Shortage” – Stage 4 includes all response actions taken in prior stages regarding mandatory conservation and intensifies their implementation and enforcement. Stage 4 restrictions will be implemented if the Stage 3 demand reduction and other response actions are deemed insufficient to achieve reductions due to water supply shortages. All Stage 3 response actions will be intensified, and water production will be monitored daily by Yuba City for compliance with necessary reductions. Customer baseline water use may be monitored and addressed with excess use

above the shortage percentage potentially subject to financial penalties as described in Subsection 6.8, below.

The City will also continue to engage in public outreach and education as it applies to the water shortage conditions and the actions necessary to achieve up to 40% reduction in use.

Stage 5 (up to 50 percent shortage) “Water Crisis” – Stage 5 includes all response actions taken in prior stages regarding mandatory conservation. The primary focus of Stage 5 is to ensure the protection of the water supply for all public health and safety purposes. This Stage will require reductions in water demand by up to 50 percent and will follow all voluntary and mandatory actions described in Stages 1-4. Customer baseline water use may be monitored and addressed with excess use above the shortage percentage potentially subject to financial penalties as described in Subsection 6.8, below. The City will also continue to engage in public outreach and education as it applies to the water shortage conditions and the actions necessary to achieve up to 50% reduction in use.

Stage 6 (greater than 50 percent shortage) “Water Emergency” – Stage 6 includes all response actions taken in prior stages focused on reducing water demands by more than a fifty percent in response to greater than 50 percent water shortages. This stage requires only use of water for human health and safety purposes. No additional water uses are permitted, including any outdoor irrigation for anything other than maintenance of mature trees (particularly heritage oaks and cottonwoods). Customer baseline water use may be monitored and addressed with excess use above the shortage percentage potentially subject to financial penalties as described in Subsection 6.8, below. The City will also continue to engage in public outreach and education as it applies to the water shortage conditions and the actions necessary to achieve greater than 50% reduction in use.

Shortage Response Actions

Tables 6-1 through 6-6 summarize staged response actions to reduce customer use and identify their estimated effectiveness (in parenthesis).

Table 6-1: WSCP Actions to Reduce Customer Use - Stage 1

Water Alert: Shortage up to 10%	
<ol style="list-style-type: none"> 1. Waste and Unreasonable Use of Water Prohibited and Voluntary conservation encouraged (up to 10%) 2. Situation and possible subsequent water shortage stages explained to the public and governmental bodies (up to 10%) 3. Focus on customers with high per capita water usage to achieve proportionally greater reduction than those with low use 4. Actions include, but not limited to: <ul style="list-style-type: none"> • Public information campaign consisting of distribution of literature, speaking engagements, website updates, bill inserts, and conversation messages printed in local newspapers • Educational programs in area schools • Conservation Hotline (combined up to 10%) 5. Consumption Reduction Methods, including: <ul style="list-style-type: none"> • Demand reduction program • Plumbing and irrigation fixture replacement • Water conservation kits • Education programs • Voluntary rationing (combined up to 10%) 6. Conservation Rules and Restrictions and Prohibitions on End Uses, to include: <ul style="list-style-type: none"> • Allowing water to run off unused into a gutter, ditch, or drain; • Failing to repair a controllable leak; • Washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas; • Utilizing a hand-held hose without an automatic shut-off nozzle; and • Irrigating during a precipitation event • For new development additional prohibitions include single pass-through cooling water systems; commercial car washes and laundries without recirculating water systems; and decorative fountains without recirculating water systems. 	

Table 6-2: WSCP Actions to Reduce Customer Use - Stage 2

Moderate Shortage (up to 20%)	
<ul style="list-style-type: none"> • All measures implemented in Stage 1 • Request voluntary conservation water usage reductions (up to 20%) • Enforce Conservation Rules and Restrictions and Prohibitions on End Uses listed in Table 6-1 (10-20%) • Usage in excess of customer baseline may be subject to drought penalty • All Consumption Reduction Methods from Stage I and intensified as needed; additionally: • Use prohibitions • Encourage customers to voluntarily water one day less per week and to water during the coolest part of the day • Vehicle washing must be done using a bucket or hand-held hose with an automatic shut-off nozzle, or take place at a commercial car wash. • Limit hours or close spray pads and water slide at City parks. 	

Table 6-3: WSCP Actions to Reduce Customer Use - Stage 3

Severe Shortage (up to 30%)
<ol style="list-style-type: none"> 1. All measures implemented in Stages 1 and 2 2. Enforce outdoor irrigation restrictions including limiting number of watering days per week, and time when irrigation can occur (e.g., between 6:00 pm and 9:00 am) 3. Some or all of the following: <ul style="list-style-type: none"> • Adherence to customer baselines and actual water use reductions water allocations and mandatory conservation rules • Water usage goals established by an authorized government agency or official • Customer water usage in excess of baseline to be monitored and recorded • Intensify enforcement of water use prohibitions; including restrictions of days and daytime hours for watering, excessive watering resulting in gutter flooding, using a hose without a positive shutoff device, use of decorative fountains with non-recirculating pumps, washing down sidewalks or patios, not repairing leaks in a timely manner, etc. (up to 30%) 4. Monitor water production weekly for compliance with necessary reductions; 5. All activities are intensified and production is monitored daily for compliance with necessary reductions. (up to 30%) 6. All Consumption Reduction Methods from Stage 2 and intensified as needed; additionally: <ul style="list-style-type: none"> • Reduce pressure in water lines; Flow restriction • Mandatory rationing • Close spray pads and water slide at City parks • Incentives to reduce water consumption; Excess use penalty • Percentage reduction by customer type (combined up to 30%) 7. Penalties and Charges for Excessive Use, including penalties for not reducing consumption, charges for excess use

Table 6-4: WSCP Actions to Reduce Customer Use - Stage 4

Critical Shortage (up to 40%)
<ol style="list-style-type: none"> 1. All measures implemented in Stages 1-3 2. All activities are intensified and production is monitored daily for compliance with necessary reductions. (up to 40%) 3. All Consumption Reduction Methods from Stage 3 and intensified as needed; additionally: <ul style="list-style-type: none"> • Restrict building permits; Restrict for only priority uses 4. Penalties and Charges for Excessive Use, including penalties for not reducing consumption, charges for excess use (up to 40%) <ul style="list-style-type: none"> • Continue monitoring and addressing water use above baseline with penalties 5. Catastrophic Event (Supply reduction up to 40%): Implement Applicable Actions for Catastrophic Events

Table 6-5: WSCP Actions to Reduce Customer Use - Stage 5

Shortage Crisis (up to 50%)
<ol style="list-style-type: none"> 1. All measures implemented in Stages 1-4 2. Source of supply for the System is severely curtailed to the level that requires each customer to restrict their water use for only human health and safety purposes (up to 50%) 3. All activities are intensified and production is monitored daily for compliance with necessary reductions (up to 50%) 4. All Consumption Reduction Methods from previous stages and intensified as needed 5. Possible reductions in customer baselines and actual water use reductions (up to 50%) 6. Usage in excess of customer baseline to be charged at regular rate plus an additional drought emergency surcharge amount (up to 50%) Update current water shortage condition response measures based on Council approvals and direction, state policy directives, emergency conditions, or to improve customer response 7. Catastrophic Event (Supply reduction up to 50%): Implement Applicable Actions for Catastrophic Events (such as boil water order) - Continue water monitoring for reduction from baseline with potential penalties

Table 6-6: WSCP Actions to Reduce Customer Use - Stage 6

Emergency Shortage (greater than 50%)
<ol style="list-style-type: none"> 1. All measures implemented in Stages 1-5 2. Source of supply for the System is severely curtailed to the level that requires each customer to restrict their water use for only human health and safety purposes (>50%) 3. All activities are intensified and production is monitored continually for compliance with necessary reductions (up to >50%) 4. All Consumption Reduction Methods from previous stages and intensified as needed 5. Possible reductions in customer baselines and actual water use reductions (up to >50%) 6. Usage in excess of customer baseline to be charged at regular rate plus an additional drought emergency surcharge amount 7. Update current water shortage condition response measures based on Council approvals and direction, state policy directives, emergency conditions, or to improve customer response 8. Catastrophic Event (Supply reduction greater than 50%): Implement Applicable Actions for Catastrophic Events. Continue water monitoring for reduction from baseline with potential penalties

6.4.2 Demand Reduction Actions

The City has identified a range of available and feasible customer demand reduction actions that can be used adaptively and implemented with progressively greater intensity to meet the supply shortage challenges faced under each water shortage condition. These demand reduction actions are identified by the associated water shortage stage in which they may be implemented. Tables 6-1 through 6-6 summarize Yuba City demand reduction actions associated with each water shortage stage and shortage level. An estimate of the action's effectiveness as related to that stage is indicated parenthetically. Other response actions not specified in this Plan may also be identified by the City to implement the essential purposes of this Plan or the UWMP (see CWC 10632.2).

6.4.3 Supply Augmentation Actions

The flexible management of the City's water supplies to avoid shortages and support water system reliability have been described in Chapter 3. The following supply augmentation mechanisms may be used as response actions under a given water shortage condition, in combination or as replacement to demand reduction responses, as determined by the City.

Emergency Intertie with Marysville Treated Water System - The City completed construction of an emergency intertie with California Water Service Company (Cal Water), which serves the City of Marysville, in 2020. This intertie has a capacity of 1,500 gallons per minute (gpm). It crosses the Feather River as part of the newly completed 5th Street Bridge replacement project, connecting the water distribution systems of the two cities and providing for emergency service in either direction on demand. The emergency intertie is available as needed to mitigate the water shortages under all stages. An agreement for usage of the intertie is currently being developed by the City of Yuba City and Cal Water.

Emergency Groundwater Supply - One groundwater well is located at the WTP and connected with the water supply system by providing a raw water source into the WTP, providing immediate supplemental water supply of up to 1,500 gpm. This well is regularly maintained and managed to enhance the City's water reliability. The WTP groundwater well is available as needed to mitigate the water shortages under all stages.

The City also owns several legacy groundwater supply wells in various locations, many of which are adjacent to the water distribution pipelines (see Figure 2-7). Several of these wells (5,8,9 arsenic treatment plant) are being rehabilitated as emergency supply wells and are currently scheduled to be in production and available to provide emergency groundwater supplies. Within a few days the cumulative potential production capacity of these wells would be 2,300 gpm. The City will assure any direct use of groundwater conforms with drinking water standards, which may require well-head treatment. In addition, future groundwater use may be restricted by groundwater management provisions associated with implementing the Sutter Subbasin Groundwater Sustainability Plan. The City is one of nine Groundwater Sustainability Agencies which work collaboratively as the Sutter Subbasin Groundwater Management Coordination Committee (SSGMCC) to ensure the long-term supply and quality of groundwater resources in the basin.

Aquifer Storage Recovery (ASR) – The City has evaluated the feasibility of an aquifer storage recovery (ASR) project to enhance water supply reliability. The ASR system would allow the City to divert and treat seasonally available surface water for long-term underground storage, thereby creating a significant emergency storage capability.

6.4.4 Operational Changes

The following water system operational change may be used as response actions under a given water shortage condition, as determined by the City.

Reduce Water System Pressure – The City normally operates its water distribution system at 50 to 60 pounds per square inch (psi). In the event of significant water shortages, the system pressure could be reduced to a minimum pressure of 50 psi to maintain sufficient fire flow. System pressure is maintained using variable speed pumps. No elevated water storage tanks are in use. The pressure reduction would reduce demand and reduce the amount of distribution system leakage. Reducing water system pressure is included as a response action under Stage 3 no lower than 50 psi to ensure adequate pressure to meet fire flow requirements.

6.4.5 Mandatory Prohibitions

This section is required to identify any mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions. The Yuba City Water Regulations prohibit water waste. Certain prohibited water use practices, including intentional or unintentional water waste and unreasonable uses of water, are also listed among the demand reduction actions on Tables 6-1 through 6-6.

6.4.6 Emergency Operations Plan for Catastrophic Water Shortages

This section identifies actions to be undertaken by Yuba City to prepare for, and implement during, a catastrophic interruption of water supplies. In addition to climate, other events that can cause water supply shortages are earthquakes, chemical spills, flooding, dam failures, waterline ruptures, and energy outages at treatment and pumping facilities, which could cause a water shortage severe enough to trigger a Stage 1-6 water supply shortage condition.

The City Manager's Office and the Fire Department are planning to begin development of an Emergency Operations Plan soon, which will provide procedures and guidance to City personnel in responding to emergency situations including catastrophic events, both natural and manmade. The plan will provide procedures for preparing, mobilizing, and employing City resources and coordinating outside resources during an emergency. The City provides periodic training, including simulated events and responses to keep City personnel fully trained on implementation of emergency procedures. Mobilization is consistent with Standardized Emergency Management and the Incident Command System.

In addition to specific actions to be undertaken during a catastrophic event, the City performs maintenance activities, such as annual inspections for earthquake safety, and budgets for emergency items, such as auxiliary generators, to prepare for potential events.

The following is a summary of actions cross-referenced against specific catastrophes for three of the most common possible catastrophic events: regional power outage (such as Public Safety Power Shutoff or “PSPS” events), natural disasters (such as earthquake, flood or storm damage, or fire), and malevolent acts.

Table 6-7: Response Actions during Catastrophic Events

Possible Catastrophe	Summary of Potential Actions
Regional Power Outage	<ul style="list-style-type: none"> • Isolate areas that will take the longest to repair and/or present a public health threat. Arrange to provide emergency water. • Establish water distribution points and ration water if necessary. • If water service is restricted, attempt to provide potable water tankers or bottled water to the area. • Make arrangements to conduct bacteriological tests, in order to determine possible contamination. • Utilize backup power supply to operate pumps in conjunction with elevated storage.
Natural Disaster	<ul style="list-style-type: none"> • Assess the condition of the water supply system. • Complete the damage assessment checklist for reservoirs, water treatment plants, system transmission and distribution. • Coordinate with Governor’s Office of Emergency Services. City to identify immediate firefighting needs. • Isolate areas that will take the longest to repair and/or present a public health threat. Arrange to provide emergency water. • Prepare report of findings, report assessed damages, advise as to materials of immediate need, and identify priorities including hospitals, schools and other emergency operation centers. • Take actions to preserve storage. • Determine any health hazard of the water supply and issue any “Boil Water Order” or “Unsafe Water Alert” notification to customers. • Cancel the order or alert information after completing comprehensive water quality testing. • Make arrangements to conduct bacteriological tests, in order to determine possible contamination.
Malevolent acts	<ul style="list-style-type: none"> • Assess threat or actual intentional contamination of the water system. • Notify local law enforcement to investigate the validity of the threat. • Get notification from public health officials if potential water contamination. • Determine any health hazard of the water supply and issue any “Boil Water Order” or “Unsafe Water Alert” notification to the customers, if necessary. • Assess any structural damage from an intentional act. • Isolate areas that will take the longest to repair and or present a public health threat. • Arrange to provide emergency water.

6.4.7 Seismic Risk Assessment and Mitigation Plan

Beginning January 2020, CWC Section 10632.5 mandates urban water suppliers include in their UWMP a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. This requirement can be met by submittal of a copy of the most recent adopted local hazard mitigation plan or multi-hazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multi-hazard mitigation plan addresses seismic risk.

Sutter County is currently partnering with the Cities of Yuba City and Live Oak and several special districts to develop a Local Hazard Mitigation Plan (LHMP) Update to the 2013 LHMP. The LHMP Update assesses current community risk and vulnerability to identified hazards (including seismic risk), identifies implementation actions to reduce future losses, and serves as a means to maintain eligibility for federal mitigation funds in accordance with the Disaster Mitigation Act of 2000.

Yuba City intends to submit a copy of the final Sutter County LHMP 2021 to DWR. The LHMP concludes that Sutter County has a low to moderate risk of earthquake occurrence and medium vulnerability. Earthquake hazard for Yuba City is characterized with regard to the likelihood of occurrence as “Unlikely”, and with regard to vulnerability as “Medium”; seismic shaking maps show Yuba City in a low to moderate shake risk zone (Annex B, Draft LHMP 2021). The LHMP includes a number of Multi-Hazard Actions for Yuba City which will serve to mitigate the risk posed by the identified hazards, including seismic risk.

6.5 Communication Protocols

The City maintains an established and effective communications program to inform its customers, neighbors, and other stakeholders of water service issues, updates, and policies. Implementation of the WSCP will utilize the existing communication program structure to inform customers and others of the declared shortage stage and respective actions and restrictions in place.

The City Council meetings addressing the Annual Assessment and any potential water shortage declaration will be noticed using normal City Council meeting public notification procedures. The meeting will also be announced through regular agenda posting protocols.

Once a shortage stage has been declared by the City Council, the City will notify its customers and others through a range of efforts. The stage and restrictions will be identified in a press release, customer billing statements, and posted on the City’s website. Specifically, the City’s website will be updated to feature the shortage declaration, restrictions, and resources available to customers from the City and other entities to help meet the restrictions. Subsequent City Council meetings will include a review of the shortage condition, customer response results, and discussion and recommendations for potential modifications. The City will also coordinate with water providers in Sutter County, Cal Water and the City of Marysville, and other public agencies such as Sutter County’s Office of Emergency Services as necessary, to declare a local emergency with respect to anticipated water supplies and demands in the event conditions necessitate.

The City's communications protocols may include, but are not limited to, some or all of the following locally relevant actions. These communications protocols will be used at the discretion of City staff based on then-current and anticipated water shortage conditions:

- ◆ Publishing information on Yuba City's website.
- ◆ Staffing a telephone hotline.
- ◆ Providing bill inserts and direct mailings above and beyond those legally required.
- ◆ Directly calling customers.
- ◆ Distributing materials for non-English speaking customers.
- ◆ Preparing social media posts to communicate Yuba City actions.
- ◆ Advertising actions on other local audio and video media.
- ◆ Coordinating voluntary and mandatory water conservation activities with other local and regional governing bodies.
- ◆ Using CodeRed, the City's emergency alert system.

6.6 Compliance and Enforcement

The Yuba City Water Regulations (Chapter 6 of Title 6 of the Yuba City Municipal Code) include the legal authority for the City Council impose emergency water restrictions and specifies significant compliance and enforcement options.² Compliance is generally improved by on-going customer outreach and education. City staff has discretion to enforce the Yuba City Water Regulations using warnings and by issuing citations to water customers in consideration of the specific circumstances, including the applicable water shortage stage. Violations may include watering on the wrong day of the week or midday, watering on the correct day of the week but wasting water into the street, using water to clean sidewalks, driveways, parking lots and other hardscapes, and failing to use shutoff nozzles on hoses. Financial penalties, flow restrictors, and disconnected water service are among the options available to the City to ensure compliance with the required water shortage actions. Appeals processes are also available for those that are subject to the enforcement.

Enforcement measures include, among others:

- ◆ Water patrol staff looking for properties in violation of the emergency water restrictions.
- ◆ Water patrol staff obtains time-stamped photos of the property as the violation is occurring.
- ◆ The photo is attached to a letter that is sent to the person to whom the water bill is sent notifying them of the violation and giving them one week to make the necessary adjustments to gain compliance.
- ◆ If a second or subsequent violation is issued, the Finance Department may add the appropriate surcharge to their next monthly bill.

The penalties associated with water use violations are assessed in the form of a surcharge added to the bill of the responsible party. Section 6-6.20 of the City Municipal Code states:

"For each violation of any of the provisions/regulations set forth in this chapter, there shall be assessed against the responsible party for the property on which the violation occurs, i.e. the

² https://library.municode.com/ca/yuba_city/codes/code_of_ordinances?nodeId=TIT6PUWO_CH6WASY

owner, lessee, person in possession of said property, or the person reflected in the Yuba City utility records as the party to whom the water bill is sent, the following penalties:

- a) First violation: A written warning of such violation
- b) Second violation: Fifty and no/100ths (\$50.00) Dollars surcharge which shall appear on the next monthly water billing.
- c) Third violation: One hundred and no/100ths (\$100.00) Dollars surcharge which shall appear on the next monthly water billing.
- d) Fourth and subsequent violations: Two hundred- fifty and no/100ths (\$250.00) Dollars surcharge which shall appear on the next monthly water billing.”

6.7 Legal Authorities

The City is authorized to implement and enforce the water shortage response actions in this WSCP by Chapter 6 of the Yuba City Municipal Code, the "Yuba City Water Regulations." This includes the legal authority for the City Council impose emergency water restrictions and specifies that “the regulations in the WSCP will apply”³, including the water shortage response actions required to meet the specific circumstances posed by the water shortage stages described in Subsection 6.3, above.

In addition, the City is able to exercise general powers granted to water distributors in CWC §§350-359. CWC §350 authorizes the governing body of a distributor of a public water supply to declare a water shortage emergency 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 there would be insufficient water for human consumption, sanitation, and fire protection. Upon a finding of such an emergency condition, the distributor can adopt such regulations and restrictions on the delivery and consumption of water as will conserve the water supply for the greatest public benefit, with particular regard to domestic use, sanitation, and fire protection (CWC §353). The regulations and restrictions remain in force and effect until the supply of water available for distribution within such area has been replenished or augmented, and restrictions may include the right to deny new service connections and discontinue service for willful violations (CWC §355 and §356). The City also coordinates with Sutter County and the City of Marysville for the possible proclamation of a “local emergency” under California Government Code, California Emergency Services Act (Article 2, Section 8558).

³ Yuba City Municipal Code, Chapter 6 – Water System

6.8 Financial Consequences

The Act requires an analysis of the impacts of implementation of this WSCP and likely financial consequences to the City. This section addresses aspects of revenue reduction, expense increases, and additional costs that may arise, and identifies financial response actions.

6.8.1 Revenue and Expenditure Impacts

The City water utility is a financially independent enterprise. The City has established water rates that support its on-going operation and maintenance activities, as well as the capital projects required to provide a safe and reliable water supply to its customers. Metered customers are billed per unit of water used under the City's rate structure, with a minimum monthly fee determined by the meter size. Because water rates are tied to customers' normal water consumption activities, if there were a significant reduction in demand due to customer conservation measures associated with a water shortage condition, the City water utility will experience a reduction of income. In addition to the revenue reductions, the City will also experience an increase in expenses resulting from augmented communication actions, increased enforcement activities, and the administration of water shortage management actions identified in the WSCP. At the same time, a decrease in expenses related to power costs, raw water costs, and chemicals to treat the water would also occur. Staff will regularly report the identified and anticipated revenue and expenditure impacts and recommend appropriate responses to the City Council.

The City water utility can absorb a reduction of income without an immediate required rate adjustment. The City maintains a minimum of three months operating reserves and at least 3.5 million dollars in reserves that can be used as an emergency fund for water in the event of water shortages. However, if the water utility experienced a significant water shortage and reduced water demand over the longer-term, the rate structure would be reevaluated and adjusted as required.

6.8.2 Drought Rate Structures and Surcharges

The City does not currently have a drought rate structure or surcharges. As water rate structures are subject to the regular rate review, the City may choose to consider adopting drought rate structures or surcharges to address the financial consequences of longer-term water shortages. Should the City decide to proceed, such rate changes would be adopted in compliance with statutory rate-setting requirements. Once in place, the drought rate structure or surcharge could be activated by resolution of the City Council and remain in effect until water shortage end and drought-related costs have been recovered.

6.9 Monitoring and Reporting

The City will conduct regular monitoring and reporting to ensure WSCP implementation is effective and responsive to conditions as they unfold. The City will then use this information to restore and maintain the water supply and demand balance. Similar to the supply and demand projections used to establish a shortage condition, the City will monitor the same data to determine effectiveness and efficacy.

Monitoring activity will include, but is not limited to:

- ◆ Gathering monthly or bi-weekly customer water use data.
- ◆ Preparing technical assessments of customer water use and identifying deficiencies.
- ◆ Analyzing trends in water supply availability, including meteorological events, regional water supply coordination actions, and statewide regulatory trends.
- ◆ Assessing water conservation activities and the effectiveness of enforcement actions as applicable to achieving conservation objectives.

Data reporting will include preparation of written reports and presentations, as necessary, for Yuba City management meetings and other public meetings summarizing key information and data, including but not limited to:

- ◆ Actual water demands compared to projected demands by customer class and in total.
- ◆ Actual supply availability and utilization compared to projected availability for each supply source.
- ◆ Projected supply availability for next 12 months for each supply source.
- ◆ Monthly reporting of water production and conservation, as required by the State Water Resources Control Board.

These and other data will be regularly evaluated by staff to assess the effectiveness of response measures and to identify the need for any changes or modifications to the declared water shortage stage or actions based on the results. City staff will report to the City Council on a bi-monthly basis as needed to report the status of the water utility. With regard to monitoring and reporting, City staff may determine the need for additional monitoring and reporting measures, or the need to develop or amend ordinances, or update the WSCP as a whole. Any WSCP update or modification will be conducted through the City Council public meeting process, unless specific conditions require otherwise.

6.10 Re-evaluation and Improvement Procedures

The City will continually review and assess its procedures for implementing the WSCP. Specifically, the City will use the monitoring and reporting protocols identified above as a quality assurance and quality control measure to understand the effectiveness of water conservation activities. These re-evaluation and improvement procedures will include developing reports, memoranda, and presentations that assess the effectiveness of water conservation actions and the WSCP. These materials will be provided to the City's customers and decision-makers for consideration. Public comments on the published materials and management considerations should be incorporated into the development and implementation of future actions. These protocols will be continually assessed and updated by the City management staff.

6.11 Special Water Feature Distinction

For purposes of water shortage contingency planning and implementation, the City defines as "special water features" those that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains. Such special water features are considered distinct from swimming pools and spas (as defined in subdivision (a) of Section 115921 of the Health and Safety Code).

The City has determined that special water features are a relatively small discretionary use but may be restricted under all identified water shortage conditions. Water shortage response actions will focus on health and safety issues and balancing continuation of these uses with the severity of the water shortage condition. The relative total water use from these sources is a consideration for how special water features and swimming pool uses could be curtailed during specific water shortage conditions. For instance, when swimming pool filling and refilling would exceed a customer's use allocation under the various drought stages, then these actions are prohibited and can be subject to City enforcement actions.

6.12 Plan Adoption, Submittal, and Availability

The WSCP has been adopted, submitted, and is available as required by the Urban Water Management Planning Act. As a stand-alone document, the WSCP is also subject to the following separate adoption, submittal, and availability processes, and whenever it is separately amended or revised in the future. Yuba City may refine or amend this WSCP as necessary and in compliance with the normal public notice and adoption. Yuba City has followed all applicable law in adopting the WSCPs. The current adopted WSCP shall be available to City customers and to Sutter County and the City of Marysville within 30 days of its adoption. A copy of the current WSCP is available for public inspection during business hours at City Hall, located at 1201 Civic Center Blvd, Yuba City (subject to current COVID-19 restrictions). The current WSCP is posted and available for download here:

https://www.yubacity.net/city_hall/departments/public_works/utilities/water/water_treatment/water_planning/urban_water_management_plan.