
Sacramento County Water Agency Water Shortage Contingency Plan (ver 4-19-21)

Water Shortage Contingency Plan Overview

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 used by Sacramento County Water Agency (SCWA) to respond to water shortage contingencies as they may arise. 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, including Triggers and Actions aligned with defined shortage levels.
4. Supply Augmentation Actions
5. Water Supply Operational Changes, Water Use Evaluation, Catastrophic Events, Local Hazard Mitigation Plan, and Other Shortage Response Actions
6. Communication protocols and procedures
7. Compliance and Enforcement Procedures
8. Legal Authorities
9. Financial consequences of the WSCP
10. Monitoring and reporting requirements
11. Reevaluation and improvement procedures
12. Special Water Feature Distinction
13. Plan Adoption, Submittal, and Availability

This WSCP is included as an Appendix in the UWMP as a stand alone plan, that may be amended or refined and readopted as needed over coming months and years independently from the UWMP..

1. Water Supply Reliability Analysis

See Section 5 of the UWMP.

2. Annual Water Supply and Demand Assessment Procedures

SCWA's procedural methodology for managing shortages is developing its Annual Water Supply and Demand Assessment (WSDA). The WSDA will include an [annual analysis of anticipated water reliability for the current year and one additional dry year](#). The WSDA is to be submitted to DWR by July 1 each year with the first WSDA due July 1, 2022.

The WSDA 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 WSDA will be used by SCWA 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 governments entities to prepare for such required actions, if necessary.

Analytical and Decision-making Processes

SCWA plans to conduct its WSDA according to the following timeline and process:

By February 1	Initial data collection and analysis
By March 1	Preliminary Draft WSDA subject to internal review and revisions
By April 1	Draft WSDA and results briefing for SCWA decision-makers
By May 1	Approval of WSDA SCWA Decision-makers
By June 1	Public Release of WSDA, and Public Notifications
By June 15	Submit WSDA to DWR in advance of July 1 deadline

SCWA will submit its WSDA to DWR no later than July 1 each year.

3. Six Standard Water Shortage Stages, Triggers, Actions and Watering Schedule

Stage	Recommended Conservation (Water Use Reduction)	Suggested Actions	Water Savings Estimate Range
1	Up to 10%	Fix leaks or faulty sprinklers in a timely manner.	0-1%
		Decorative water features (water fountains, etc.) must recirculate water and shall be leak proof.	0-1%
		Landscape watering shall be confined to a user's property and shall not runoff onto adjacent properties, roadsides or gutters.	0-5%
		No landscape watering shall occur while it is raining or snowing.	0-5%
		Use a shutoff nozzle on hoses.	0-1%
		Washing down impervious surfaces such as driveways and sidewalks is prohibited unless for public health and safety purposes.	0-1%
		Unauthorized use of hydrants is prohibited. Authorization for use must be obtained from water supplier.	0-1%
		Encourage customers to wash only full loads when washing dishes or clothes.	0-1%
		Encourage customers to use pool covers to minimize evaporation.	0-1%
		Encourage restaurants to only serve water to customers on request.	0-1%
		Irrigation is allowed based on the Stage 1 watering schedule. Plant containers, trees, shrubs, and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	5-10%
2	Up to 20%	Fix leaks or faulty sprinklers in a timely manner.	0-1%
		Require Request restaurants to only serve water to customers on request.	0-1%
		No restrictions on landscape watering with non-potable water.	Not applicable
		Irrigation is allowed based on the Stage 2 watering schedule using potable water. Plant containers, trees, shrubs, and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	5-10%
3	Up to 30%	Fix leaks or faulty sprinklers in a timely manner.	0-1%
		Decorative water features that use potable water must be drained and kept dry.	0-1%
		Car washing is only permitted using a commercial carwash that recirculates water or by high pressure/low volume wash systems.	0-1%
		Warm/Dry Season	
		Irrigation is allowed on the Stage 3 watering schedule using potable water.	5-20%
		Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Not applicable
		Cool/Wet Season	
		Turf shall not be watered unless utilizing non-potable water during extended dry spells.	1-5%
Plant containers, trees, shrubs and vegetable gardens shall be watered only by drip irrigation or hand watering.	0-1%		
4	Up to 40%	Fix leaks or faulty sprinklers in a timely manner.	0-1%
		Existing pools shall not be emptied and refilled using potable water unless required for public health and safety purposes.	0-1%
		Warm/Dry Season	
		Irrigation is allowed on the Stage 4 watering schedule using potable water.	10-30%
		Plant containers, trees, shrubs and vegetable gardens may be watered additional days using only drip irrigation or hand watering.	Not applicable
		Cool/Wet Season	
Turf shall not be watered unless utilizing non-potable water during extended dry spells.	1-5%		
Plant containers, trees, shrubs and vegetable gardens shall be watered only by drip irrigation or hand watering.	0-1%		
5	Up to 50%	Water use for public health and safety purposes only.	
6	Greater than 50%	Water use for public health and safety purposes only. Customer rationing may be implemented.	

Stage 1 and Stage 2 Watering Schedule:

The following watering schedule is in effect within areas served by the Water Agency. Failure thereto constitutes 'water waste', and is an unauthorized use of Agency water pursuant to Water Agency Code Sections 3.40.120 and 3.40.130.

- **Residential and Commercial Irrigation Schedule** - Irrigation is permitted based on the last digit of customer addresses, in accordance with the schedule below:

Stage 1 and Stage 2 - Irrigation Schedule

Addresses Ending In	Watering Days	Time of Day
Even Number (0, 2, 4, 6, 8)	Wednesday Friday, Sunday	Between 8 p.m. and 8 a.m.
Odd Number (1, 3, 5, 7, 9)	Tuesday Thursday Saturday	

Stage 3 Water Schedule:

The following regulations are in effect during Stage 2, and are in addition to, or supersede where conflicting, t-Irrigation is permitted **2 days per week** based on the last digit of customer addresses, in accordance with the below schedule:

STAGE 3 - Irrigation Schedule hose in effect during the Stages 1-2:

Irrigation Restrictions

Addresses Ending In	Watering Days	Time of Day
Even Number (0, 2, 4, 6, 8)	Wednesday Sunday	Between 8 p.m. and 8 a.m.
Odd Number (1, 3, 5, 7, 9)	Tuesday, Saturday	

Stage 4 Irrigation Schedule:

During Stage 4 conditions the following regulations go into effect during Stage 4, which are either in addition to, or supersede, those in effect during Stages 1-3.

- **Irrigation Restrictions** - Irrigation is permitted **1 day per week** based on the last digit of customer addresses, in accordance with the below schedule:

Addresses Ending In	Watering Days	Time of Day
Even Number (0, 2, 4, 6, 8)	Sunday	Between 8 p.m. and 6 a.m.
Odd Number (1, 3, 5, 7, 9)	Saturday	

Stage 5 and Stage 6 Irrigation Schedule:

During Stages 5 and Stage 6 conditions a Water Emergency will be issued by the Agency to its customers. The following regulations go into effect during Stage 4 and Stage 6, which are either in addition to, or supersede where conflicting, those in effect during the Stages 1-4:

- **Irrigation Restrictions** -All residential and commercial outdoor irrigation is **prohibited**.

4. Supply Augmentation Actions

The following water supply augmentation actions may be used as response actions for the appropriate Water Shortage Stage. SCWA has access to 6,000 acre-ft per year from a remediated water sources that is not subject to Term 91. This water source is available when other water supply contracts are subject to cutbacks.

5. Operational Changes

As a response to water system operational changes may be used for appropriate Water Shortage Stages, SCWA may reduce system pressures.

Landscape Irrigation

Landscape irrigation reductions focus on less watering and reducing or avoiding water waste during irrigation. Landscape irrigation reductions may vary by user class or customer type depending on water shortage conditions and ability to meet overall water use reduction targets. Water allocation or budget concepts may be applied by SCWA to equitably reduce landscape water use while minimizing customer impact.

Commercial, Industrial, and Institutional (CII)

The CII category of customers is diversified and may require a tailored approach for meeting specified water use reduction targets. This could include focusing on large landscape irrigation, or other means to meet CII water use reduction targets. The ability of CII customers to conserve water during a water shortage condition would be considered depending on which stage has been triggered and how much water use has already been reduced during previous stages. SCWA would work collaboratively with CII customers so water use cutbacks will not impact business operations and solvency.

Emergency Response Plan for Catastrophic Water Shortages

This section identifies actions to be undertaken by SCWA to prepare for, and implement during, a catastrophic interruption of water supplies. A catastrophic interruption could result from any event (either natural or man-made) that causes a water shortage severe enough to trigger a Stage 4-6 water supply shortage condition.

In order to prepare for catastrophic events, SCWA has prepared an Emergency Response Plan (ERP) in accordance with other state and federal regulations. The purpose of the ERP is to design actions necessary to minimize the impacts of supply interruptions due to catastrophic events.

The ERP coordinates overall company response to a disaster in any and all of its districts. In addition, the ERP requires each district to have a local disaster plan that coordinates emergency responses with other agencies in the area. The ERP also provides details on actions to be undertaken during specific catastrophic 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.

Summary of Actions for Catastrophic Events	
Possible Catastrophe	Summary of 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, wells and boosters, system transmission and distribution. • Coordinate with Cal EMA utilities group or fire district 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 the 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.

In addition to specific actions to be undertaken during a catastrophic event, SCWA performs maintenance activities, such as annual inspections for earthquake safety,

and budgets for emergency items, such as auxiliary generators, to prepare for potential events.

Seismic Risk Assessment and Mitigation Plan

SCWA intends to submit a copy of the Sacramento County Local Hazardous Mitigation Plan.

Other Shortage Response Actions

Other shortage response actions may be considered by SCWA as required to meet specific water shortage conditions. Before these actions can be implemented, an amendment to this WSCP may be required.

6. Communication Protocols

SCWA will communicate when the WSCP is implemented and inform SCWA's customers. The intent of the communication is to inform SCWA's customers and wholesale customers of the voluntary and mandatory water conservation activities.

SCWA will seek to engage customers and provide notice on the voluntary or mandatory water conservation actions. These locally-relevant actions may include:

- Publishing information on SCWA's website.
- Providing bill inserts and direct mailings above and beyond those legally required.
- Developing materials for non-English speaking customers.
- Preparing social media posts to communicate SCWA actions.
- Advertising actions on other media.

Taken together, all of these communication actions will result in an effectively implemented SCWA's WSCP.

7. Compliance and Enforcement Procedures

See attached Sacramento County Water Agency Code, Title 1, Chapter 1.25, and Enforcement. The SCWA Code, as it may be amended from time to time, is located at the following web page:
<https://countycounsel.saccounty.net/Pages/WaterAgencyCode.aspx>.

8. Legal Authorities

SCWA is empowered to implement and enforce its shortage response actions specified in this section through its enabling legislation, see attached Sacramento County Water Agency Code, Title 1, Chapter 1.30.020, Agency Act.

9. Financial Consequences of WSCP

Implementation of this WSCP will likely have financial impacts to SCWA. Specifically, SCWA has established water rates that support its capital projects as well as its operation and maintenance activities. The rates are tied to SCWA's customers' normal water consumption activities that may be reduced through voluntary or mandatory water conservation activities. In this way, there may be revenue reductions to SCWA. In addition to the revenue reductions, SCWA may also see an increase in expenses resulting from augmented communication actions, increased enforcement activities, and overall water shortage management actions. This section addresses aspects of revenue reduction, expense increases, and additional costs that may arise during implementation of this WSCP.

Revenue and Expenditure Impacts

There may be a revenue impact during a shortage condition as customers are required to utilize less water. Under this case, SCWA may need to reprioritize spending priorities, develop reserves to compensate for decreased revenue, consider rate increases, or a drought surcharge during the water shortage.

10. Monitoring and Reporting

SCWA is committed to monitoring and reporting updates in implementing the WSCP. In order to determine the effectiveness of water management actions, SCWA will aggregate metered data and assess SCWA monitoring actions. Moreover, SCWA will update its customers in its communication protocols.

SCWA's monitoring and reporting actions may include the following, as locally necessary:

- Gathering customer water use data
- Assessments of customer water use
- Review trends in water supply availability
- Assess water conservation activities and enforcement actions, as applicable to achieving conservation objectives.
- Preparing written reports and presentations, as necessary, for SCWA management

11. Re-evaluation and Improvement Procedures

SCWA will review and assess its procedures for implementing the WSCP. Improvement procedures will include developing reports, memoranda, and presentations that assess the effectiveness of water conservation actions and the WSCP.

12. Special Water Feature Distinction

For purposes of water shortage contingency planning and implementation within the Laguna-Vineyard, Sunrise-Mather, and County Creek Estates, SCWA 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).

Water shortage response actions would focus on health and safety issues and tempering these uses based on the severity of the water shortage condition. The relative total water use from these sources would be a consideration for how special water features and swimming pool uses could be curtailed during specific water shortage conditions. Generally swimming pool filling and refilling would be impacted in the later stages of a water shortage condition. SCWA has determined that special water features are a relatively small discretionary use but would be restricted during a Stage 3 or higher water shortage condition.

13. 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. SCWA may refine each service area’s WSCP through SCWA’s governing procedures in altering each service area’s WSCP. SCWA has followed all applicable law in adopting the WSCPs. The current adopted WSCP for the Zone 40 System shall be available to its customers at www.SCWA.net. Alternately, a copy of the WSCP can be obtained by calling (916) 874-4517.