



URBAN WATER MANAGEMENT PLAN

Water Shortage Contingency Plan

This Water Shortage Contingency Plan (WSCP) is a detailed plan for how Soquel Creek Water District (SqCWD) will identify and respond to foreseeable and unforeseeable water shortages. A water shortage occurs when the water supply is reduced to a level that cannot support demand at any given time or reduction in demand is needed to support the environmental needs of the groundwater basin.

The WSCP is used to provide guidance to SqCWD’s Board of Directors (Board), staff, and the public by identifying anticipated water shortages and response actions to allow for efficient management of any water shortage with predictability and accountability. The purpose of the WSCP is to conserve and protect the available water supply, with particular regard for domestic water use, sanitation, and fire protection; and to protect and preserve public health, welfare, and safety. Proper preparation and planning are critical to maintain reliable supplies and reduce the impacts of supply interruptions due to a range of conditions including extended drought, production capacity limitations, catastrophic supply interruptions, groundwater overdraft, or other unforeseen shortages.

IN THIS SECTION

- Water Supply Reliability
- Annual Assessment Procedures
- Shortage Response Stages and Actions

The WSCP describes the following:**Water Supply Reliability Analysis**

Summarizes SqCWD's water supply and reliability and identifies any key issues that may trigger a shortage condition.

Annual Water Supply and Demand Assessment Procedures

Describes the key data inputs, evaluation criteria, and methodology for assessing the system's reliability for the coming year and the steps to formally declare any water shortage levels and response actions.

Six Shortage Stages

Establishes water shortage levels to clearly identify and prepare for shortages.

Shortage Response Actions

Describes the response actions that may be implemented or considered for each stage to reduce gaps between supply and demand.

Communication Protocols

Describes communication protocols under each stage to ensure customers, the public, and local government agencies are informed of shortage conditions and requirements.

Compliance and Enforcement

Defines compliance and enforcement actions available to administer demand reductions.

Legal Authority

Lists the legal documents that grant SqCWD the authority to declare a water shortage and implement and enforce response actions.

Financial Consequences of WSCP Implementation

Describes the anticipated financial impact of water shortage stages and identifies mitigation strategies to offset financial burdens.

Monitoring and Reporting

Summarizes the monitoring and reporting techniques to evaluate the effectiveness of shortage response actions and overall WSCP implementation. Results are used to determine if additional shortage response actions should be activated, if efforts are successful, and if response actions should be adjusted.

WSCP Refinement Procedures

Describes factors that may trigger updates to the WSCP and outlines how to complete an update.

Special Water Features Distinctions

Defines considerations and definitions for water use for decorative features versus pools and spas. Decorative features include ornamental fountains, ponds, and other aesthetic features. Water for these features is allowed to sustain aquatic life.

Plan Adoption, Submittal, and Availability

Describes the process for the WSCP adoption, submittal, and availability after each revision.

This WSCP was prepared in conjunction with SqCWD's 2020 Urban Water Management Plan (UWMP) and is a standalone document that can be modified as needed. This document is compliant with the California Water Code (CWC) Section 10632 and incorporated guidance from the State of California Department of Water Resources (DWR) UWMP Guidebook (California Department of Water Resources, 2021).

The WSCP addresses several types of water supply shortages that could potentially impact SqCWD and its customers:

- Long-term supply shortages due to prolonged drought, contamination, destruction of critical water supply facilities, etc.
- Short-term water supply shortages due to natural or human-made catastrophic emergencies or production capacity limitations.
- Supply shortages due to undesirable results for seawater intrusion based on minimum threshold exceedances of groundwater elevation proxies and chloride concentrations, and exceedances of early management action triggers as defined in the Santa Cruz Mid-County Groundwater Sustainability Plan (GSP) and summarized in this WSCP.

Trigger conditions used to declare and determine the severity of long-term supply shortages include annual rainfall over a five-year period (for drought), groundwater conditions (for water quality or contamination), or limited production capacity (for destruction of critical supply facilities). The restrictive stages, consumption reduction measures and prohibitions for drought and other long-term supply shortage scenarios are similar and are grouped together for discussion purposes.

Short-term supply shortages may be caused by constrained production capacity or natural or man-made catastrophic emergencies and include, but are not limited to, the following events: power outages, winter storms, wildfires, earthquakes, structural failures, contamination, and bomb threats. These types of emergencies may limit SqCWD's immediate ability to provide adequate water service to meet the requirements for human consumption, sanitation, and fire protection. Such emergencies are usually limited in duration and, at the time of declaration, are not expected to last more than a few weeks; thus, consumption reduction measures and prohibitions may differ from those needed for long-term shortages.

Groundwater supply shortages due to overdraft affect many or all users of the Santa Cruz Mid County (SCMC) Basin (Basin), not just SqCWD customers. Overdraft is the result of excess pumping that results in a combination of chronically depressed coastal groundwater levels, seawater intrusion, and degraded groundwater quality. A groundwater emergency may be declared when it is demonstrated that groundwater overdraft exceeding the sustainable yield threatens the public health, safety, and welfare of the community.

8.1 Water Supply Reliability Analysis

As part of the 2020 UWMP requirements, **Section 7** includes a supply reliability analysis for the following scenarios: normal year, single-dry year, and five-year consecutive dry years. SqCWD expects to meet demands under all water year scenarios with groundwater (supplemented by groundwater recharge from Pure Water Soquel starting in 2023) while continuing to promote conservation and where feasible, developing other supplemental supplies to protect the SCMC Basin. SqCWD anticipates utilizing between approximately 3,000 to 3,900 AFY from the SCMC Basin depending on the year type. It is anticipated that this range of supply volume will be available to meet SqCWD's demands.

Section 7 also includes a required Drought Risk Assessment (DRA) to analyze supply reliability for 2021-2025. The DRA analyzes historical data to allow SqCWD to view patterns and more reliably determine if there could be any water shortages within a given time frame. The DRA looks at historical consumption data by customer class, populated from billing records, and historical supply data by source from production reports. Next, future demand and supply estimates for the planning period are analyzed to determine if there are any gaps between supply and demand. As mentioned above, SqCWD does not anticipate a supply shortage.

Since SqCWD's only current source of water is the overdrafted SCMC Basin, SqCWD is committed to promoting conservation and pursuing other supply sources to increase its supply portfolio and subsequent reliability as described in **Section 7**.

8.2 Annual Water Supply and Demand Assessment

SqCWD performs an Annual Water Supply and Demand Assessment (Annual Assessment) at the end of each weather year (October-March) to determine if there is a need to implement the WSCP, and if so, the level of a water shortage. Key data inputs, evaluation criteria, and procedures for performing the Annual Assessment are described in this section. Starting in 2022, the Annual Assessment must be sent to DWR by July 1st of each year.

8.2.1 Key Data Inputs

Key data inputs and their sources for the Annual Assessment are summarized in **Table 8-1**.

Table 8-1. Key Data Inputs for the Annual Assessment

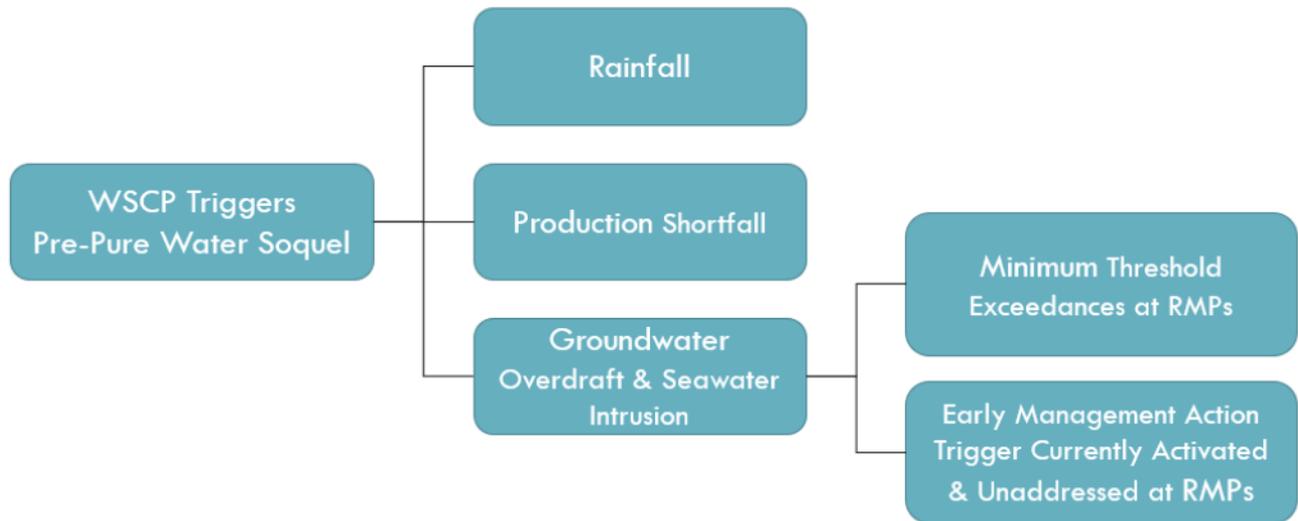
KEY DATA INPUT	SOURCE
Rainfall (Correlated to Groundwater Recharge)	Weather year rainfall available in early April. Rainfall sources include the California Irrigation Management Information System (CIMIS) Station 104 and/or the National Oceanic and Atmospheric Association (NOAA) Western Regional Climate Center. The rainfall source depends on which data set is most complete. Rainfall totals over a 5-year period are used to estimate the amount of groundwater recharge.
Production Shortfall	Production data and input from Operations Manager.
Undesirable Results Defined by Minimum Threshold Exceedances at RMPs ¹ per the Basin's Groundwater Sustainability Plan (GSP)	Well monitoring data from the Santa Cruz Mid-County Water Year Annual Report for five-year average groundwater elevations and chloride concentrations inland in excess of the 250 mg/L chloride isocontour
Early Management Action Trigger Currently Activated and Unaddressed by Pumping Redistribution at RMPs ¹ per the Basin's GSP	Well monitoring data from the Santa Cruz Mid-County Water Year Annual Report for groundwater elevations and chloride concentrations
Anticipated Demands	Conservation staff annually review usage trends, estimated savings based on current curtailment stage (if any), and historical demand, and solicit input from the Operations and Finance Managers.

¹RMP = Representative Monitoring Point for seawater intrusion.

8.2.2 Evaluation Criteria

Staff will use the key data inputs and Annual Assessment procedures to evaluate supply reliability. **Figure 8-1** summarizes the various trigger conditions for a water shortage emergency. Triggers are based on current conditions. As Pure Water Soquel nears operation, SqCWD will evaluate these triggers and may modify as needed.

Figure 8-1. Water Shortage Trigger Conditions



RMP = Representative Monitoring Point for Seawater Intrusion; Minimum Threshold Exceedances & Early Management Action Triggers for seawater intrusion are defined by chloride concentrations and groundwater elevation proxies in the GSP.

Rainfall totals for the 5-year period, including four prior full water years (October 1 – September 30) plus the current weather year (October 1 – March 31), are compared to the rainfall trigger levels identified in this WSCP. **Table 8-2** summarizes the rainfall thresholds for each shortage stage. For no curtailment, annual rainfall needs to be at or above average October 1 – March 31 rainfall (currently 26.2 inches).

Table 8-2. Rainfall Trigger Levels

STAGE	CURRENT YEAR	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Stage 1	<26.2				
Stage 2		≤50	≤80	≤109	≤137
Stage 3			≤68	≤97	≤129
Stage 4				≤80	≤107

Rainfall calculated through March 31 for comparison with above thresholds. All values shown are inches and Years 2-5 represent cumulative rainfall including the previous year(s).

There are no rainfall triggers developed and applicable for Stages 5 and 6. Stage 5 and 6 triggers only result from undesirable groundwater conditions, activation of early management actions, or extremely reduced production capacity (65% less capacity than normal).

At SqCWD’s March 16, 2021 Board meeting, the Board directed staff to incorporate shortage stage trigger conditions based on more specific groundwater conditions. This allows SqCWD to better align with the sustainable management criteria and the critical sustainability indicators of seawater intrusion established in the GSP.

The groundwater trigger conditions include undesirable results based on minimum threshold exceedances and early management action triggers, established in the GSP, and summarized in **Table 8-3** and **Table 8-4**. These triggers will be used to determine if there is groundwater overdraft and seawater intrusion and the degree of severity. **Figure 8-2** illustrates the representative monitoring network established in the GSP.

Table 8-3. Groundwater Basin Trigger Conditions

SHORTAGE STAGE	UNDESIRABLE RESULTS BASED ON MINIMUM THRESHOLD EXCEEDANCES	EARLY MANAGEMENT ACTION TRIGGER CURRENTLY ACTIVATED AND UNADDRESSED
1: Alert	N/A	At any SqCWD RMP
2: Warning	N/A	At 3 SqCWD RMPs
3: Emergency	At any SqCWD RMP	At 7 SqCWD RMPs
4: Severe	At 10 SqCWD RMPs	At 10 SqCWD RMPs
5: Critical	At 15 SqCWD RMPs	At 15 SqCWD RMPs
6: Super Critical	At 20 SqCWD RMPs	At 20 SqCWD RMPs

RMP = Representative Monitoring Point for seawater intrusion.

Undesirable results based on minimum threshold exceedances and early management action triggers for seawater intrusion are defined by chloride concentrations and groundwater elevation proxies in the GSP.

Lastly, infrastructure capabilities and overall production will be analyzed to determine if a possible outage may occur in the coming year. This may include well replacement, evaluation of wells for possible contamination, and others. If SqCWD determines there are limitations to production capacity, a shortage stage declaration and subsequent demand reductions may be required. Any limitations to production will be assessed as they occur as well as on an annual basis.

Figure 8-2. Seawater Intrusion Representative Monitoring Network Established in the GSP (Santa Cruz Mid-County Groundwater Agency, 2019)

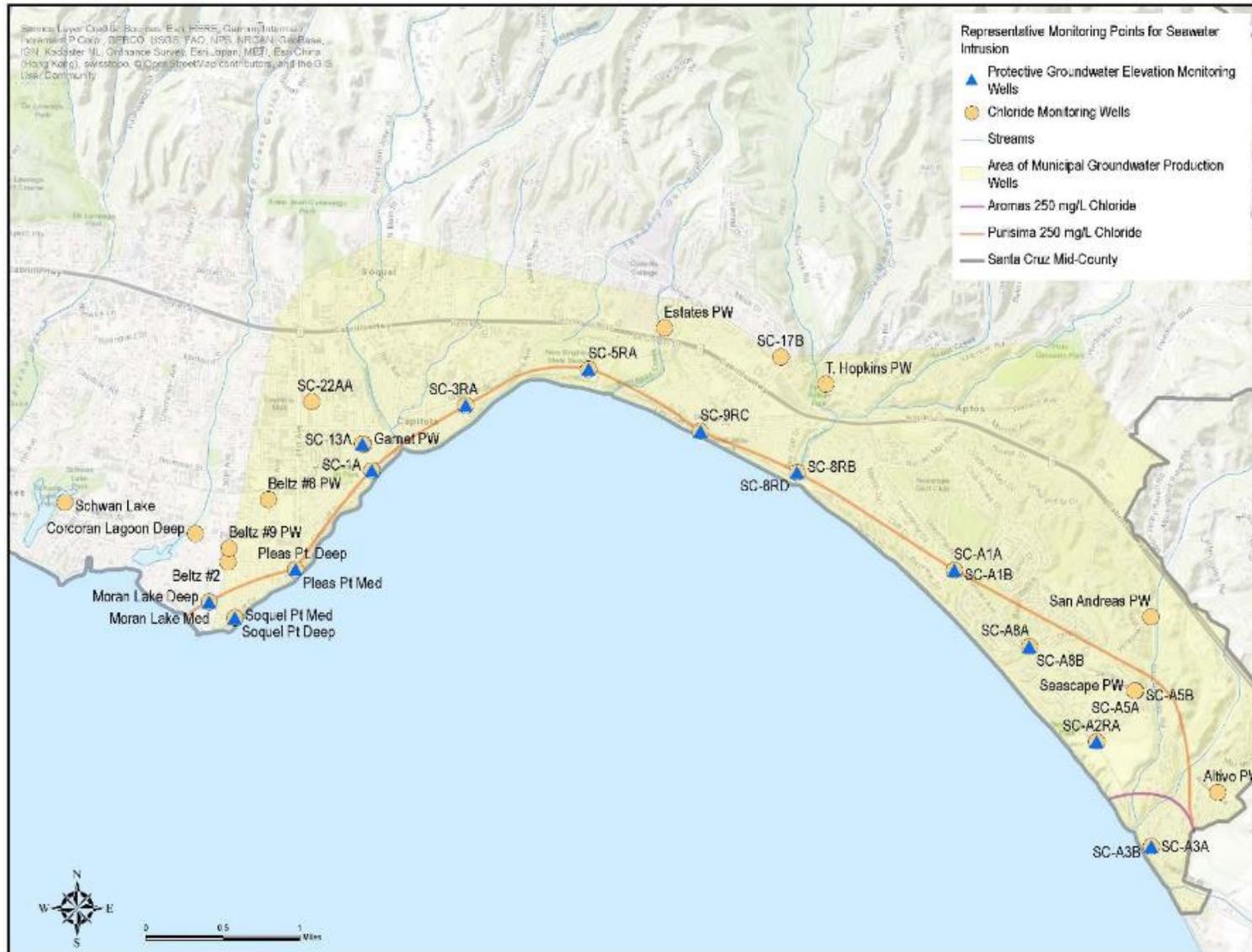


Table 8-4. Minimum Thresholds and Early Management Action Triggers for Seawater Intrusion Established in the GSP (Tana, 2021)

REPRESENTATIVE MONITORING POINT	AQUIFER	MINIMUM THRESHOLD		EARLY MANAGEMENT ACTION TRIGGER	
		CHLORIDE CONCENTRATION, MG/L	GROUNDWATER ELEVATION, FEET ABOVE SEA LEVEL	CHLORIDE CONCENTRATION, MG/L	GROUNDWATER ELEVATION PROXY, FEET ABOVE SEA LEVEL
COASTAL MONITORING WELLS - INTRUDED					
SC-A3A	Aromas	22,000	3	17,955	1
SC-A3B	Aromas	4,330	N/A	676	N/A
SC-A8A	Purisima F	8,000	6	7,258	2
SC-A2RA	Purisima F	18,480	3	14,259	1
SC-A2RB	Purisima F	470	N/A	355	N/A
COASTAL MONITORING WELLS – UNINTRUDED					
SC-A8B	Aromas	250	N/A	100	N/A
SC-A1B	Purisima F	250	3	100	1
SC-A1A	Purisima DEF	250	N/A	100	N/A
SC-8RD	Purisima DEF	250	10	100	2
SC-9RC	Purisima BC	250	10	100	2
SC-8RB	Purisima BC	250	19	100	2
SC-1A	Purisima A	250	4	100	2
SC-5RA	Purisima A	250	13	100	2
SC-3RA	Purisima A	250	10	100	2
SC-13A	Tu	N/A	17.2	100	2
INLAND MONITORING WELL – INTRUDED					
SC-A5A	Purisima F	9,800	N/A	8,575	N/A
INLAND PRODUCTION AND MONITORING WELLS – UNINTRUDED					
SC-A5B	Purisima F	150	N/A	100	N/A
San Andreas PW	Purisima F	150	N/A	100	N/A
Seascape PW	Purisima F	150	N/A	100	N/A
T. Hopkins PW	Purisima DEF	150	N/A	100	N/A
Estates PW	Purisima BC & A	150	N/A	100	N/A
Ledyard PW	Purisima BC	150	N/A	100	N/A
Garnet PW	Purisima A	150	N/A	100	N/A
SC-22AA	Purisima AA	150	N/A	100	N/A

8.2.3 Annual Assessment Procedures

SqCWD staff perform the Annual Assessment in April or May.

Steps to conduct the Annual Assessment are as follows:

1. The Annual Assessment Team consists of staff in the following roles:
 - The Conservation Department gathers the key inputs, compiles historical data, and analyzes potential supply and demand gaps. Staff from the Conservation Department may include:
 - Conservation and Customer Service Field Manager
 - Water Conservation Specialist
 - Staff Analyst
 - The Finance Manager and the Operations and Maintenance Manager will provide insight on demand trends and future production capacity, respectively.
 - SqCWD’s hydrogeology consultant will provide groundwater condition information.
 - The General Manager and Special Projects Manager will provide updates on Pure Water Soquel and other supplemental supply sources, as applicable.
2. At the end of each weather year (October 1 – March 31), SqCWD staff will evaluate rainfall for the weather year plus the four prior water years. Sources for rainfall include the California Irrigation Management Information System (CIMIS) website (<https://cimis.water.ca.gov/>) published by DWR, NOAA (<https://w2.weather.gov/climate/xmacis.php?wfo=mtr>), or others as available.
 - For CIMIS, navigate to the Data tab and download data for Station 104 DeLaveaga.
 - For NOAA, download data for Santa Cruz, CA.
3. Obtain the Annual Assessment of Groundwater Conditions for the SCMC Basin and consult with District hydrogeologist to determine if conditions trigger water shortage conditions. The evaluation criteria for these trigger conditions are summarized in the previous section.
 - Undesirable results for seawater intrusion are based on groundwater elevation proxies and chloride concentrations as defined in the Santa Cruz Mid-County GSP. The GSP establishes minimum thresholds for groundwater elevation proxies and chloride concentrations at Representative Monitoring Points (RMPs). Undesirable results are based on minimum threshold exceedances: five-year average groundwater elevations lower than minimum thresholds or chloride concentrations higher than minimum thresholds in 2 or more of the last 4 consecutive quarterly samples.
 - Early management action triggers at RMPs are based on short-term conditions indicating an increasing trend of seawater intrusion or risk of seawater intrusion. The GSP defines triggers for early management action as exceeding the measurable objectives for chloride concentrations in 2 out of 4 quarterly samples at RMPs, and when 30-day average groundwater levels drop below trigger elevations of 1-2 feet at coastal RMPs. The GSP describes early management actions to address these conditions as reduced pumping at nearby municipal wells. If this action does not address these conditions or it is not possible to redistribute pumping to reduce nearby pumping, declaring water shortage stages is merited.

4. Determine the type of potential shortage:
 - Long-term: rainfall amounts (due to prolonged drought), groundwater conditions, and/or reduction in total production capacity due to water quality/contamination or destruction of critical facilities
 - Short-term: reduction in total production and/or distribution capacity due to short-term emergency, which can be evaluated on annual or as-needed emergency basis
5. Once the type and level of shortage has been determined, Staff will develop a recommendation on which shortage stage the Board should declare, if any.
6. Staff will prepare a memo and presentation for the Board.
7. At a Board meeting, Staff will present this analysis. The Board will determine which shortage stage to declare and whether to enact emergency rates by motion and resolution, if any, and implement this WSCP.
8. Staff will follow proper communication protocols and implement applicable shortage stage response actions.
9. The Annual Assessment starts in 2022 with the first Annual Assessment Report due to DWR by July 1, 2022.

8.3 Six Standard Water Shortage Levels

SqCWD utilizes six (6) shortage stages to identify and respond to water shortage emergencies. SqCWD, at a minimum, encourages baseline conservation efforts year-round, regardless of a shortage emergency. Details on SqCWD’s shortage stages are provided in **Table 8-5**.

Table 8-5. DWR 8-1 Water Shortage Contingency Plan Levels

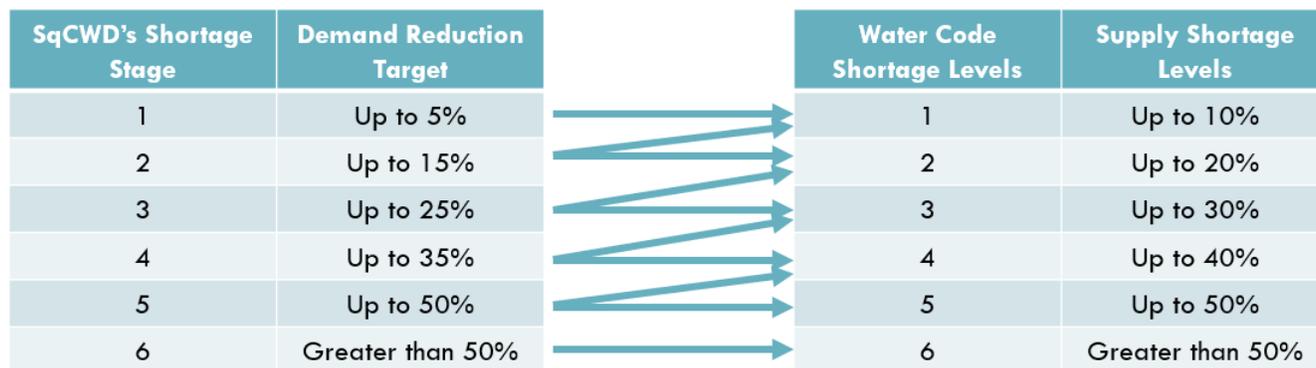
SHORTAGE LEVEL	PERCENT SHORTAGE RANGE ¹ (NUMERICAL VALUE AS A PERCENT)	WATER SHORTAGE CONDITION
1	Up to 5%	Alert
2	Up to 15%	Warning
3	Up to 25%	Emergency
4	Up to 35%	Severe
5	Up to 50%	Critical
6	Greater than 50%	Super-Critical

¹ One stage in the Water Shortage Contingency Plan must address a water shortage of 50%.

The Water Code outlines six standard water shortage levels that correspond to a gap in supply compared to normal year availability. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50-percent, and greater than 50-percent shortage compared to the normal reliability condition) and align with the response actions that a water supplier would implement to meet the severity of the impending shortages.

The Water Code allows suppliers with an existing water shortage contingency plan that uses different water shortage levels to comply with the six standard levels by developing and including a cross-reference relating its existing shortage categories to the six standard water shortage levels. SqCWD is maintaining the current five shortage stages for this WSCP and adding a sixth stage to represent a water shortage in excess of 50 percent. A cross reference to the six standard stages is shown in **Figure 8-3**.

Figure 8-3. SqCWD's Shortage Stages and their Relationship to DWR's Six Standard Shortage Stages



8.4 Shortage Response Actions

As mentioned above, there are long-term and short-term water supply shortages with significant overlap in regard to stages, target curtailment levels, mandatory prohibitions, and consumption reduction methods as described in the following sections. **Table 8-6** summarizes the possible actions identified by SqCWD staff to implement during a water shortage, by stage. This table of actions is designed as a menu of options; SqCWD is not required to implement each action for each stage. Actions identified in earlier stages may also be used in later stages (e.g., actions identified in Stages 1-3 may be implemented in Stage 4 as well as other Stage 4 actions, etc.).

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Table 8-6. Shortage Response Actions

SHORTAGE STAGE AND CURTAILMENT TARGET	TRIGGER CONDITIONS	KEY DISTRICT COMMUNICATION AND OPERATING ACTIONS	CUSTOMER DEMAND REDUCTION ACTIONS
<p>Stage 0: Baseline</p> <p>Conservation Efforts Always in Effect</p>	<p>Not Applicable</p>	<ul style="list-style-type: none"> Communicate and enforce water waste ordinance and any state mandates Communicate SqCWD conservation programs Ensure internal SqCWD activities adhere to all ordinances and mandates Notify customers of possible leaks, high water use based on smart metering data Make smart metering data available to customers via electronic portal Provide irrigation accounts with water use budgets that allow for efficient water use and request voluntary compliance with the established budget 	<ul style="list-style-type: none"> Adhere to SqCWD and State water waste ordinances and mandates Utilize relevant SqCWD conservation programs Check for and fix leaks
<p>Stage 1: Water Shortage Alert</p> <p>Curtailment Target 5%</p>	<p>Rainfall total as of March 31: < than median (26.2 inches) for current year</p> <p>OR</p> <p>Total production capacity is 95-100% of “normal”.</p> <p>OR</p> <p>Early Management Action Trigger Activated and Unaddressed at any SqCWD RMP</p>	<p>Stage 0 Measures and:</p> <ul style="list-style-type: none"> Establish and communicate Stage 1 Emergency Rates (if implemented by Board) Notify City of Capitola and County of Santa Cruz of curtailment goals and associated actions Outreach to all customers: clear overall reduction goal and individual use guidelines (e.g., efficient per capita use, best management practices, etc.), how to report water waste, progress towards goal 	<p>Stage 0 Measures and:</p> <ul style="list-style-type: none"> Help meet overall reduction goals by following individual use guidelines
<p>Stage 2: Water Shortage Warning</p> <p>Curtailment Target 15%</p>	<p>Rainfall total as of March 31: <= 50 in. over two years; <= 80 in. over three years; or <= 109 in. over four years; or <= 137 in. over five years</p> <p>OR</p> <p>Total production capacity is 85-95% of “normal”</p> <p>OR</p> <p>Early Management Action Trigger Activated and Unaddressed at any 3 SqCWD RMPs</p>	<p>Stage 0-1 Measures and:</p> <ul style="list-style-type: none"> Establish and communicate up to Stage 2 Emergency Rates (if implemented by the Board) Targeted outreach to inefficient customers to bring use and water waste down Reduce irrigation for all customer classes using guidelines such as number of days and length of time irrigation occurs 	<p>Stage 0-1 Measures and:</p> <ul style="list-style-type: none"> Help meet overall reduction goals by following individual use guidelines communicated by SqCWD
<p>Stage 3: Emergency Water Shortage</p> <p>Curtailment Target 25%</p>	<p>Rainfall total as of March 31: <= 68 in. over three years; or <= 97 in. over four years; or <= 129 in. over five years</p> <p>OR</p> <p>Total production capacity is 75-85% of “normal”</p> <p>OR</p> <p>Undesirable Result Based on Minimum Threshold Exceedances at any SqCWD RMP</p> <p>OR</p> <p>Early Management Action Trigger Activated and Unaddressed at any 7 SqCWD RMPs</p>	<p>Stage 0-2 Measures and:</p> <ul style="list-style-type: none"> Establish and communicate up to Stage 3 Emergency Rates (if implemented by the Board) Option to install flow restrictors on irrigation accounts exceeding voluntary water budget Utilize field staff for enhanced water waste enforcement Intensify leak alerting and notification, dedicated follow-up with customers on leaks still running after 48 hours Postponing water main flushing activities in cases where it is not possible to utilize the No-DES hydrant flushing machine 	<p>Stage 0-2 Measures and:</p> <ul style="list-style-type: none"> Display "save water" signage in businesses and institutions Help meet overall reduction goals by following individual use guidelines communicated by SqCWD Use of a recycled car wash preferred. Home vehicle washing must be efficient (i.e., waterless spray, hose with automatic shut-off nozzle and bucket, or pressure washer) and not result in excessive runoff

SHORTAGE STAGE AND CURTAILMENT TARGET	TRIGGER CONDITIONS	KEY DISTRICT COMMUNICATION AND OPERATING ACTIONS	CUSTOMER DEMAND REDUCTION ACTIONS
<p>Stage 4: Severe Water Shortage Emergency</p> <p>Curtailment Target 35%</p>	<p>Rainfall total as of March 31: ≤ 80 in. over four years; or ≤ 107 in. over five years; or Stage 2/3</p> <p>OR</p> <p>Total production capacity is 65-75% or less of “normal”</p> <p>OR</p> <p>Undesirable Result Based on Minimum Threshold Exceedances at any 10 SqCWD RMPs</p> <p>OR</p> <p>Early Management Action Trigger Activated and Unaddressed at any 10 SqCWD RMPs</p>	<p>Stage 0-3 Measures and:</p> <ul style="list-style-type: none"> • Establish and communicate up to Stage 4 Emergency Rates (if implemented by the Board) • Implement water rationing with penalties for use over limit/budget • Stop irrigation on SqCWD owned property except as required to keep trees alive • Hire temporary staff or consultants to assist with rationing, water waste patrol, enforcement and outreach as directed by the Board • Option to install flow restrictors on any account to enforce adherence to any rationing and water budget programs 	<p>Stage 0-3 Measures and:</p> <ul style="list-style-type: none"> • Stay within water rationing limits • No irrigation of ornamental and private landscapes with potable water, except as required to keep trees alive and maintain sports fields and recreation areas • No exterior washing of structures, except for the purposes of health and safety • No water for aesthetic purposes (e.g., fountains, ponds, etc.) except where necessary to support aquatic life • Cover private pools when not in use. No draining and refilling of private pools or filling of new pools and hot tubs
<p>Stage 5: Critical Water Shortage Emergency</p> <p>Curtailment Target 50%</p>	<p>Total production capacity is 65% or less of “normal”</p> <p>OR</p> <p>Undesirable Result Based on Minimum Threshold Exceedances at any 15 SqCWD RMPs</p> <p>OR</p> <p>Early Management Action Trigger Activated and Unaddressed at any 15 SqCWD RMPs</p>	<p>Stage 0-4 Measures and:</p> <ul style="list-style-type: none"> • Establish and communicate up to Stage 5 Emergency Rates (if implemented by Board) • Implement crisis communications plan and campaign • Coordinate with CA Department of Public Health regarding water quality and public health issues with law enforcement agencies to address enforcement challenges • Conduct water waste patrol and enforcement • Flow restricts accounts exceeding ration/allocation • Lock off dedicated irrigation accounts • Rescind hydrant and bulk water permits 	<p>Stage 0-4 Measures and:</p> <ul style="list-style-type: none"> • No outdoor irrigation with potable water • No water for recreation purposes, including filling public pools and hot tubs • No non-essential water use¹
<p>Stage 6: Super-Critical Water Shortage Emergency</p> <p>Curtailment Target Greater than 50%</p>	<p>Undesirable Result Based on Minimum Threshold Exceedances at any 20 SqCWD RMPs</p> <p>OR</p> <p>Early Management Action Trigger Activated and Unaddressed at any 20 SqCWD RMPs</p>	<p>Stage 0-5 Measures and:</p> <ul style="list-style-type: none"> • Intensify outreach, water waste patrol and leak follow up 	<p>Stage 0-5 Measures</p>

¹ Non-essential water use is defined as water use not required for the protection of public health, safety, and welfare, including but not limited to washing any vehicle.

8.4.1 Demand Reduction

In accordance with the new UWMP requirements for the 2020 reporting cycle, SqCWD has identified a variety of demand reduction actions (and their estimated water savings potential) that could be used (but are not required) to offset supply shortages as shown in **Table 8-6**, **Table 8-7**, and **Table 8-8**. These actions include, but are not limited to conservation and rebate programs, leak detection and repair, and the prohibitions of using potable water for certain applications such as no exterior washing of structures (except for health and safety reasons) or for turf irrigation. Although it is difficult to estimate the volume of savings for each action, SqCWD expects to meet required reductions through a combination of response actions and outreach and communication efforts. The estimated water savings potential summarized in **Table 8-7** and **Table 8-8** represent a range from published industry references. As shown in **Table 8-7**, SqCWD will implement various demand reduction actions in conjunction with outreach and communication efforts to the extent necessary to mitigate any impacts from a water shortage. **Table 8-8** summarizes the various actions and estimated maximum potential savings required to be submitted to DWR as part of the UWMP.

Estimated savings from quantifiable demand reduction actions are based on reductions applied to a baseline demand of 3,900 AFY, which represents the maximum demand expected in the next five years of 3,866 AFY in 2025 rounded up for simplification. Per DWR's recommendations for the DRA and the WSCP, the normal year demand projections in **Section 4** and **Section 7** reflect potential future demands that are not impacted by disruptive factors (e.g., groundwater emergencies, economic recessions, drought, etc.) that can be met with normal year supplies. While variable projected demands will be considered in the Annual Assessment, **Table 8-8** conservatively assess SqCWD's ability to reduce from approximately the highest projected demand in the next five years.

Table 8-7. Estimated Savings by Shortage Stage

STAGE	NORMAL SUPPLY, AF	REQUIRED SAVINGS ¹ , AF	ESTIMATED SAVINGS FROM QUANTIFIABLE ACTIONS ² , AF	ESTIMATED SAVINGS FROM UNQUANTIFIABLE ACTIONS ³ , AF
1	3,900	195	195	-
2	3,900	585	293	292
3	3,900	975	488	487
4	3,900	1,365	683	682
5	3,900	1,950	975	975
6	3,900	2,535	1,268	1,267

¹ Required savings may be met through a combination of quantifiable and unquantifiable actions. SqCWD will only implement measures to the extent necessary to mitigate a water shortage, although estimates may indicate a greater savings is obtainable. It is anticipated that half of the required savings will be met through quantifiable shortage response actions and the other half through other actions, including outreach efforts.

² Quantifiable savings are estimated based on various published sources and are provided as a guide. The degree of implementation of actions can vary in each stage and can result in a wide range of savings. For a list of all SqCWD specific shortage response actions and their maximum potential savings, refer to Table 8-6 and Table 8-8.

³ The remaining savings not achieved by quantifiable actions are anticipated to be achieved through unquantifiable communication and outreach efforts.

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Table 8-8. DWR 8-2 Demand Reduction Actions

SHORTAGE LEVEL	DWR DEMAND REDUCTION ACTION CATEGORY ¹	RESPONSE ACTION	ESTIMATED SHORTAGE GAP REDUCTION BASED ON ACTION, AFY	ADDITIONAL EXPLANATION OR REFERENCE	PENALTY, CHARGE, OR OTHER ENFORCEMENT
All	Expand public information campaign	Communicate and enforce water waste ordinance and any state mandates			
All	Expand public information campaign	Communicate SqCWD conservation programs			
All	Other	Ensure internal SqCWD activities adhere to all ordinance and mandates			Yes
All	Other	Notify customers of possible leaks, high water use based on smart metering data			
All	Improve customer billing	Make smart metering data available to customers via electronic portal			
All	Other	Adhere to SqCWD and state water waste ordinances and mandates			Yes
All	Other	Utilize relevant SqCWD conservation programs			Yes
All	Other – customers must repair leaks, breaks, and malfunctions in a timely manner	Check for and fix leaks			Yes
All	Implement or modify drought rate structure or surcharge	Establish and communicate stage emergency rates (if implemented by Board)			Yes
Stage 1 and Up	Expand public information campaign	Notify City of Capitola and County of Santa Cruz of curtailment goals and associated actions			
Stage 1 and Up	Expand public information campaign	Outreach to all customers: clear overall reduction goal and individual use guidelines (e.g., efficient per capita use, best management practices, etc.), how to report water waste, progress towards goal	397 (10% of baseline unconstrained demand)	EPA Cases in Water Conservation: How Efficiency Programs Help Water Utilities Save Water and Avoid Costs (Environmental Protection Agency, Office of Water, 2002)	
Stage 1 and Up	Expand public information campaign	Help meet overall reduction goals by following individual use guidelines			
Stage 2 and Up	Expand public information campaign	Targeted outreach to inefficient customers to bring use water waste down.	595 (15% of baseline unconstrained demand)	Maryland Department of the Environment; Water Conservation and Washing Vehicles (Maryland Department of the Environment, n.d.)	
Stage 2 and Up	Landscape – limit irrigation to specific days	Reduce irrigation for all customer classes using guidelines such as number of days and length of time irrigation occurs	794 (20% of baseline unconstrained demand)	CalWep WSCP Toolkit 2021; City of Sacramento and City of Clovis (California Water Efficiency Partnership, 2021)	Yes
Stage 3 and Up	Landscape – other landscape restriction or prohibition	Option to install flow restrictors on irrigation accounts exceeding voluntary water budget			Yes
Stage 3 and Up	Increase water waste patrols	Utilize field staff for enhanced water waste enforcement			Yes
Stage 3 and Up	Other	Intensify leak alerting and notification, dedicated follow-up with customers on leaks still running after 48 hours	714 (18% of baseline unconstrained demand)	EPA Cases in Water Conservation: How Efficiency Programs Help Water Utilities Save Water and Avoid Costs (Environmental Protection Agency, Office of Water, 2002)	Yes
Stage 3 and Up	Decrease line flushing	Postponing water main flushing activities in cases where it is not possible to utilize the No-DES hydrant flushing machine.			

SHORTAGE LEVEL	DWR DEMAND REDUCTION ACTION CATEGORY ¹	RESPONSE ACTION	ESTIMATED SHORTAGE GAP REDUCTION BASED ON ACTION, AFY	ADDITIONAL EXPLANATION OR REFERENCE	PENALTY, CHARGE, OR OTHER ENFORCEMENT
Stage 3 and Up	Expand public information campaign	Display "save water" signage in businesses and institutions			
Stage 4 and Up	Implement or modify drought rate structure or surcharge	Implement water rationing with penalties for use over limit/budget			Yes
Stage 4 and Up	Pools and spas – require covers for pools and spas	Cover private pools when not in use. No draining and refilling of private pools or filling of new pools and hot tubs.			Yes
Stage 4 and Up	Landscape – prohibit certain types of landscape irrigation	Stop irrigation on SqCWD owned property except as required to keep trees alive			Yes
Stage 4 and Up	Increase water waste patrols	Hire temporary staff or consultants to assist with rationing, water waste patrol, enforcement and outreach as directed by the Board			Yes
Stage 4 and Up	Landscape – other landscape prohibition or restriction	Option to install flow restrictors on any account to enforce adherence to any rationing and water budget programs			Yes
Stage 4 and Up	Other	Stay within water rationing limits			Yes
Stage 4 and Up	Water features – restrict water use for decorative features, such as fountains	No irrigation of ornamental and private landscapes with potable water, except as required to keep trees alive and maintain sports fields and recreation areas	24 (10% of 2020 irrigation demand)	Texas Living Waters: Water Conservation by the Yard: A Statewide Analysis of Outdoor Water Savings Potential (Texas Living Waters Project, 2018)	Yes
Stage 4 and Up	Other – prohibit use of potable water for washing hard surfaces	No exterior washing of structures, except for the purposes of health and safety			Yes
Stage 4 and Up	Other water feature or swimming pool restriction	No water for aesthetic purposes (fountains, ponds) except where necessary to support aquatic life			Yes
Stage 4 and Up	Other	No vehicle washing, except at commercial car wash facility	595 (15% of baseline unconstrained demand)	Maryland Department of the Environment; Water Conservation and Washing Vehicles (Maryland Department of the Environment, n.d.)	Yes
Stage 5 and Up	Expand public information campaign	Implement crisis communications plan and campaign			Yes
Stage 5 and Up	Expand public information campaign	Coordinate with CA Department of Public Health regarding water quality and public health issues with law enforcement agencies to address enforcement challenges			
Stage 5 and Up	Increase water waste patrols	Conduct water waste patrol and enforcement			Yes
Stage 5 and Up	Other	Flow restrict accounts exceeding ration/allocation			Yes
Stage 5 and Up	Landscape – prohibit all landscape irrigation	Lock off dedicated irrigation accounts	238 (100% of 2020 irrigation demand)	2020 irrigation demand	Yes
Stage 5 and Up	Other	Rescind hydrant and bulk water permits			
Stage 5 and Up	Landscape – prohibit all landscape irrigation	No outdoor irrigation with potable water			Yes
Stage 5 and Up	Other water feature or swimming pool restriction	No water for recreation purposes, including filling public pools and hot tubs			Yes
Stage 6 and Up	Other	Intensify outreach, water waste patrol and leak follow up			

¹ The actions identified in this table represent allowable entries by DWR in submittal table 8-2 for the UWMP.

8.4.2 Supply Augmentation

SqCWD currently relies on groundwater as their only permanent, long-term, reliable, drought-proof source of supply and is pursuing Pure Water Soquel as well as exploring other supplemental supply options, as discussed in **Sections 6 and 7** of the 2020 UWMP. SqCWD expects to mitigate water shortages through extensive communication and outreach efforts, demand reduction actions, and operational changes.

8.4.3 Operational Changes

SqCWD continues to implement its Well Management Plan to relocate wells further away from the coast and redistribute their pumping pattern by using wells further inland. Other possible operational changes to implement in a water shortage emergency will first be evaluated based on the type of shortage condition and the supply and demand gap to be met.

Potential changes to operations include, but are not limited to:

- Increased notification and follow-up on customer leaks. Leak thresholds for notification may be reduced.
- Establishing and communicating emergency rates, if needed.
- Considering hiring temporary staff or consultants to assist with water rationing, water waste patrol, response to water waste reports, enforcement, and outreach.
- Stopping irrigation on all SqCWD-owned property.
- Rescinding hydrant and bulk water permits.
- Postponing water main flushing activities in cases where it is not possible to utilize the No-DES hydrant flushing machine.
- In the event of critical and catastrophic shortages, SqCWD will activate emergency notification lists, coordinate with the California Department of Public Health regarding water quality and public health issues and with law enforcement agencies to address enforcement challenges.
- Restricting accounts exceeding allocation or ration.
- Locking all dedicated irrigation accounts except as needed to sustain trees.

8.4.4 Additional Mandatory Restrictions

SqCWD has identified potential additional mandatory restrictions that may be implemented in more extreme shortage stages as shown in **Table 8-6**. Such restrictions will first be evaluated based on the type of shortage condition and the supply and demand gap to be met.

Potential restrictions include, but are not limited to:

- No water uses for aesthetic purposes (e.g., for ornamental fountains, ponds, etc.) except where necessary to support aquatic life.
- No non-essential water use, defined as water use not required for the protection of public health, safety, and welfare, including but not limited to washing any vehicle.
- No exterior washing of structures.
- No water for recreational purposes, including filling public pools and hot tubs.
- No outdoor irrigation with potable water.

8.4.5 Shortage Response Action Effectiveness

SqCWD has estimated the effectiveness of shortage response actions when data pertaining to such actions is available. Estimates of the effectiveness for demand reduction shortage response actions is quantified in the DWR Submittal 8-2 (**Table 8-8** above). It is expected that response actions effectiveness is also a result of successful communication and outreach efforts. Although not all shortage response actions for supply augmentations and operational changes are quantifiable, SqCWD expects to mitigate water shortages through demand reduction measures and operational changes, as well as continued public education and outreach efforts.

8.4.6 Emergency Response Plan

SqCWD is in the process of completing their Risk and Resiliency Assessment (RRA) and Emergency Response Plan (ERP) in accordance with America's Water Infrastructure Act (AWIA) and J-100 standards. The RRA and ERP will analyze all SqCWD critical facilities for a seismic event and address mitigation strategies.

8.4.7 Seismic Risk Assessment and Mitigation Plan

Seismic risks and mitigation plans are published in Local Hazard Mitigation Plans (LHMP). SqCWD's infrastructure located within the City of Capitola's boundaries has been identified in the City's LHMP (Capitola LHMP). The Capitola LHMP identifies the probability of a seismic activity and the impact on reliability of facilities. The Capitola LHMP identifies mitigation actions to help prepare for a seismic event, or other disaster, including conducting seismic evaluations, tsunami ready program, and continued coordination with other agencies to evaluate structures (City of Capitola, 2020).

The County of Santa Cruz LHMP (County LHMP) also identifies seismic risks and mitigation actions that SqCWD could implement to alleviate seismic risks and increase reliability. Actions include upgrades of water infrastructure, emergency and critical structures and continued preparedness coordination with other local agencies (County of Santa Cruz, 2015).

8.5 Communication Protocols

SqCWD prioritizes effective communication, especially in times of a water shortage emergency. SqCWD routinely communicates to customers each spring about whether a shortage stage is declared, the level of shortage and the required actions to curb demand. Communication actions include bill inserts, electronic blasts, newsletters, website and social media postings, customer portal notifications, and other additional methods. SqCWD continues to provide reminders about shortage levels and encourages conservation at all times.

Furthermore, SqCWD actively engages with the community through presentations. In the past, SqCWD has presented supply shortage declaration and conservation details to homeowner associations and community organizations for additional in-person outreach.

8.6 Compliance and Enforcement

SqCWD enforces Water Waste Ordinance No. 14-01 (Water Waste Ordinance) at all times. The Water Waste Ordinance is available on SqCWD's website (<https://www.soquelcreekwater.org/187/Rules-of-Water-Waste>) and provides SqCWD with the power to perform all acts necessary to ensure water resources are put to beneficial use and that waste or unreasonable use of water is prevented.

The Water Waste Ordinance outlines consequences of violations:

First Violation

SqCWD may issue a written notice of the violation and a time frame in which the violation must be corrected.

Second Violation

If the first violation is not corrected within the time frame specified by SqCWD, a second notice will be issued. If the second violation is not corrected within 48 hours, SqCWD may impose any or all of the following:

- Water service may be disconnected or restricted and shall be reconnected or unrestricted upon correction of the violation and receipt of payment of the reestablishment of service charge per SqCWD's Schedule of Rates and Charges in effect.
- A fine of not more than \$600 or imprisonment in the county jail for not more than 30 days, or both the fine and imprisonment, may be imposed upon conviction under Section 31029 of the California Water Code, or fines and penalties are defined and allowable under Section 53069.4 of the Government Code may be imposed. Nonpayment of fines will be subject to the same remedies as nonpayment of basic water rates.

Repeat Violations

Violations of the same type and location within a year (12 months) of the first or second violation will be considered cumulative violations.

SqCWD is not likely to implement penalties or charges for excessive use during short-term water shortages because they are limited in duration and, at the time of declaration, are not expected to last more than a few weeks. If a short-term water supply shortage developed into a long-term shortage, then SqCWD could, depending on the level and anticipated duration of the shortage, consider a water allocation or rationing program, subject to California Proposition 218 (Prop 218). Prop 218 amended the California Constitution to impose procedural and substantive limitations on water use fees. Such drastic changes to SqCWD's water budget structure would be considered in more severe stages (Stages 4 and up).

8.7 Legal Authorities

SqCWD's Board of Directors has the legal authority to declare a water shortage stage, associated curtailment target, and set pre-adopted emergency water rates under Water Code Section 350 et seq., the County Water District Law (Water Code Section 30000 et seq.) and other applicable law. Most recently, the Board adopted Resolution No.19-08 declaring a Stage 3 water shortage emergency due to the on-going groundwater overdraft and seawater intrusion that led to the declaration of a Groundwater Emergency in 2014.

SqCWD also adopted Ordinance No. 17-01 that established the rules and regulations for water service by SqCWD. Ordinance No. 17-01 provides SqCWD with the authority to discontinue water service to customers that use water in a wasteful manner or are negligent with their water consumption. SqCWD may discontinue service if conditions are not corrected within five days after a written notice has been provided to the customer (Soquel Creek Water District, 2013). In addition, SqCWD relies on Water Waste Ordinance No. 14-01, as discussed in the previous section.

SqCWD's staff implement the WSCP to ensure the reliability and sustainability of SqCWD's water resources and work with customers to achieve reliable service.



8.8 Financial Consequences of WSCP

SqCWD currently employs a two-tiered rate billing structure. Tier 1 represents water use for the average residential household and the amount of water that can be sustainably pumped from the SCMC Basin (i.e., 2,300 AFY) until a supplemental water supply is available. Tier 2 is water use in excess of sustainable groundwater pumping levels. Tier 2 pricing is higher based on the increased costs associated with developing additional sources of water supply to restore the SCMC Basin, protect against seawater intrusion, and meet any additional water needs (Soquel Creek Water District, 2019).

As shown in **Table 8-9**, SqCWD has conducted a financial analysis of the impacts of the actions and conditions associated with each water supply shortage Stage (1-6).

The various water sales reductions associated with the six stages are:

- Stage 1 – 5%
- Stage 2 – 15%
- Stage 3 – 25%
- Stage 4 – 35%
- Stage 5 – 50%
- Stage 6 – greater than 50%.

For this analysis, Stage 6 was assumed to be a water supply shortage of 65% in order to quantify impacts. The analysis was conducted with a focus on long-term supply shortages due to prolonged drought, emergencies and groundwater overdraft. It is not expected that short-term water supply shortages would significantly impact SqCWD revenues and expenditures because they are limited in duration.

The financial analysis, which assumes no emergency rates are in effect, reveals that SqCWD has sufficient funds in the Capital Improvement Budget and Operating Contingency Reserve (OCR) Fund to mitigate the monetary shortfall for Stages 1 through 6. However, in the more critical shortage stages (i.e. 4-6), it is highly likely that emergency rates (possibly in combination with other actions) would also need to be implemented if the shortage was to last more than a few months. Emergency water rates, designed to offset the loss in revenue caused by the reduction in water consumption associated with each stage, have already been adopted by the Board of Directors in accordance with Prop 218 requirements for Stages 1-5, and can be readily enacted with Board authorization.

In addition to enacting emergency rates, postponing Capital Improvement Budget projects, and drawing from OCR, additional actions that SqCWD may consider to mitigate the financial impacts of water shortages include assigning penalty fees for overuse or raising rates if it appears that a shortage may be of significant duration. However, future water rate increases are subject to the requirements of Prop 218.

The financial analysis accounts for decreased water sales, associated reductions in costs due to pumping and treating less water (e.g., less chemicals, energy, etc.) and increases in staffing and program costs associated with implementing higher stages of curtailment. For example, in Stage 4 the Board has the option of hiring temporary staff to perform dedicated water waste patrol. In Stages 4, 5 and 6, the costs increase significantly due to the need to hire at least 3-4 staff to implement various actions including performing dedicated water waste patrol and enforcement, developing, and managing rationing programs, carrying out extensive customer outreach activities, etc.

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Table 8-9. Financial Impacts of Water Supply Shortages

DESCRIPTION	NORMAL YEAR: 2019/20	STAGE 1: 5%	STAGE 2: 15%	STAGE 3: 25%	STAGE 4: 35%	STAGE 5: 50%	STAGE 6: >50%
REVENUES							
Water Sales ¹	\$14,565,900	\$13,837,600	\$12,381,000	\$10,924,400	\$9,467,800	\$7,283,000	\$5,826,400
Service Charges	\$8,530,100	\$8,530,100	\$8,530,100	\$8,530,100	\$8,530,100	\$8,530,100	\$8,530,100
Water Capacity Charges	\$293,900	\$293,900	\$293,900	\$0	\$0	\$0	\$0
Other Operating	\$507,300	\$507,300	\$507,300	\$507,300	\$507,300	\$507,300	\$507,300
Installation Fees	\$19,100	\$19,100	\$0	\$0	\$0	\$0	\$0
Interest Income	\$541,500	\$541,500	\$541,500	\$541,500	\$541,500	\$541,500	\$541,500
Other Non-Operating	\$3,400	\$3,400	\$3,400	\$3,400	\$3,400	\$3,400	\$3,400
TOTAL REVENUES	\$24,461,200	\$23,732,900	\$22,257,200	\$20,506,700	\$19,050,100	\$16,865,300	\$15,408,700
EXPENDITURES							
Personnel service (wages)	\$3,795,700	\$3,795,700	\$3,795,700	\$3,875,700	\$4,035,700	\$4,115,700	\$4,245,700
Personnel expense (benefits)	\$2,288,300	\$2,288,300	\$2,288,300	\$2,318,300	\$2,378,300	\$2,408,300	\$2,488,300
Non-Operating expense (debt service)	\$2,490,000	\$2,490,000	\$2,490,000	\$2,490,000	\$2,490,000	\$2,490,000	\$2,490,000
Supplies	\$512,700	\$512,700	\$512,700	\$512,700	\$512,700	\$512,700	\$512,700
Services	\$1,547,700	\$1,547,700	\$1,547,700	\$1,547,700	\$1,547,700	\$1,547,700	\$1,547,700
Power ¹	\$529,300	\$502,835	\$449,905	\$396,975	\$344,045	\$264,650	\$211,720
Post Retiree Benefits	\$1,907,400	\$1,907,400	\$1,907,400	\$1,907,400	\$1,907,400	\$1,907,400	\$1,907,400
Community Info & Conservation	\$107,300	\$107,300	\$118,030	\$129,833	\$142,816	\$157,098	\$172,808
Insurance	\$242,500	\$242,500	\$242,500	\$242,500	\$242,500	\$242,500	\$242,500
Outside Services (Misc & Engineering)	\$30,700	\$30,700	\$30,700	\$30,700	\$30,700	\$30,700	\$30,700
Network Systems Administrator	\$104,300	\$104,300	\$104,300	\$104,300	\$104,300	\$104,300	\$104,300
Water Treatment (Labs)	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800	\$45,800
Litigation	\$497,400	\$497,400	\$497,400	\$497,400	\$497,400	\$497,400	\$497,400
Bills/Envelopes	\$281,400	\$281,400	\$281,400	\$281,400	\$281,400	\$281,400	\$281,400
Paving/Backfill	\$111,800	\$111,800	\$111,800	\$111,800	\$111,800	\$111,800	\$111,800
Postage	\$65,300	\$65,300	\$65,300	\$65,300	\$65,300	\$65,300	\$65,300
Gasoline	\$60,700	\$60,700	\$60,700	\$60,700	\$60,700	\$60,700	\$60,700
Hypochlorite ¹	\$33,600	\$31,920	\$28,560	\$25,200	\$21,840	\$16,800	\$13,440
Fleet Maintenance	\$32,700	\$32,700	\$32,700	\$32,700	\$32,700	\$32,700	\$32,700
Uncollectible accounts	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300	\$3,300
Annual audit	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000
Property taxes/sewer assessment	\$17,100	\$17,100	\$17,100	\$17,100	\$17,100	\$17,100	\$17,100
TOTAL EXPENDITURES	\$14,728,000	\$14,699,855	\$14,654,295	\$14,719,808	\$14,896,501	\$14,936,348	\$15,105,768
REVENUES > EXPENDITURES	\$9,733,200	\$9,033,045	\$7,602,905	\$5,786,892	\$4,153,599	\$1,928,952	\$302,932
LESS: CAPITAL IMPROVEMENTS²	\$13,419,400	\$12,841,000	\$11,394,000	\$9,585,000	\$7,840,000	\$5,566,000	\$3,940,000
SURPLUS (DEFICIT)	(\$3,686,200)	(\$3,807,955)	(\$3,791,095)	(\$3,798,108)	(\$3,686,401)	(\$3,637,048)	(\$3,637,068)
BEGINNING RESERVE	\$9,688,000						
ENDING RESERVE	\$6,001,800	\$5,880,045	\$5,896,905	\$5,889,892	\$6,001,599	\$6,050,952	\$6,050,932

¹Amount reduced by the percentage indicated in each stage level.

²Amount reduced to maintain minimum operating reserves.

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8.9 Monitoring and Reporting

The water savings from implementation of the WSCP will be determined based on measurements of consumption from water meters and well production meters. SqCWD may utilize its Advanced Metering Infrastructure (AMI) system that measures customer water use daily. At first, the cumulative consumption for the various sectors (e.g., residential, commercial, etc.) will be evaluated for reaching the target level. Then if needed, individual accounts will be monitored. Weather and other possible influences may be accounted for in the evaluation.

8.10 WSCP Refinement Procedures

The WSCP is best prepared and implemented as an adaptive management plan. SqCWD will use results obtained from their monitoring and reporting program to evaluate any need for revisions. Potential changes to the WSCP that may require an update include, but are not limited to, any changes to trigger conditions, changes to the shortage stage structure, and/or the addition of significant new customer reduction actions.

Any prospective changes to the WSCP would need to be presented at a public hearing and adopted by the Board. Notices for the public hearing date would be published in the local newspaper in compliance with California Water Code requirements.

8.11 Special Water Feature Distinction

Per Water Code Section 10632a(10), SqCWD must evaluate special water features separately (and more stringently) from pools and spas in regard to restricting their water use during supply shortages. SqCWD expects to reduce use to special water features starting in severe (Stage 4) water shortages by prohibiting the use of water for aesthetic purposes. Aesthetic purposes pertain to ornamental fountains, ponds, or other decorative features. If necessary, customers may use water for decorative features to sustain aquatic life.

8.12 Plan Adoption, Submittal, and Availability

A draft WSCP was presented to SQCWD's Board for input at the Board meeting on April 20, 2021 and was presented to the Board at the public hearing held during the May 18, 2021 Board meeting. On February 23, 2021, SqCWD sent out 60-day notification letters to local cities, the County of Santa Cruz, and other regional agencies that they were updating their WSCP alongside their UWMP and had planned a public hearing to receive any comments prior to adoption. As the public hearing approached, SqCWD published notices in the local newspaper two weeks in advance. Copies of the 60-day notices and public hearing newspaper notice are provided in **Appendix B**.

The WSCP was formally adopted as part of the 2020 UWMP on June 15, 2021 by SqCWD's Board by Resolution 21-11, included in **Appendix I**. The WSCP was made available to all staff, customers, and any affected cities, counties, or other members of the public within 30 days of the adoption date. The WSCP was also available in the Board packet for the May 18, 2021 meeting that is available for download at SqCWD's website.

The WSCP was submitted to DWR at the same time as the 2020 Urban Water Management Plan, no later than July 1st, 2021.