

Water Shortage Contingency Plan

Public Hearing June 9, 2021



Overview

- 1. Plan Development & Public Engagement Process
- 2. Water Shortage Contingency Plan
 - Purpose of the Water Shortage Contingency Plan
 - Water Shortage Metrics and Methodology
 - Proposed Response Actions
- 3. Public Comments & Answers



SCV WATER PLANNING EFFORTS & PROJECTS

Water for Today & Tomorrow



Groundwater Sustainability Plan



Urban Water Management Plan



Water Shortage Contingency Plan



Recycled Water Planning



Rate Case Planning



To learn more visit: www.yourSCVwater.com/planning



Schedule





Technical Support & Consulting



A&N Technical Services Inc.

KEARNS Z WEST



Maddaus Water Management Inc.





Technical Resources & Research





WSCP Deliverable

- Water Shortage Contingency Plan
 - Evaluation, analysis, and response activities
- Demand Reduction Implementation Plan
 - Internal and external outputs
- Water Shortage Ordinance
 - Compliance, enforcement, and legal authorities
- Seismic Analysis







Purpose of the Water Shortage Contingency Plan



What is a Water Shortage Contingency Plan?

SCV's Water proposed Water Shortage Contingency Plan identifies the actions the agency will take to mitigate water shortages and describes agency activities during a water shortage to ensure clean and safe water for our customers.



About Water Shortage Contingency Planning

- Prepares water suppliers for actual water shortage events
- Recognizes risks including drought, climate change, population growth, and catastrophic events
- Informs water supply mitigation projects, policies and programs
- Incorporates local conditions, constraints, and opportunities



About the Water Shortage Contingency Plan (cont.)

- Mandated in State of California legislation "Making Water Conservation a California Way of Life" (2018)
- Required as a separate planning document approved by the SCV Water Board of Directors
- Submitted as an attachment to the 2020 Urban Water Management Plan
- Integrated for regional effectiveness and efficiency



About the Water Shortage Contingency Plan (cont.)

- Active and adaptive framework for conducting supply & demand analysis
- Processes to determine water shortage contingencies and/or demand reduction responses
- Strategies, activities, and tools for water shortage contingencies:
 - Water use efficiency program enhancement(s)
 - Supply augmentation
 - Communication and engagement
 - Water waste enforcement
- Performance Monitoring and Management



Water Shortage Contingency Plan Components



Adaptive Management (Evaluation and Improvement Processes)





Water Shortage Metrics and Methodology



Water Shortage Contingency Plan Evaluation, Impacts, and Response Actions

- What is a water shortage?
 - Not enough water for the community
 - When customer demand is greater than supply
- How do we monitor for water shortages?
- What can we do? (Response Actions)



Water Shortage Metrics

- Shortage = Demand is greater than supply
- Types of Metrics
 - Hot and dry weather affects demand and supply
 - Local Weather
 - Regional Drought
 - Emergency Shortages Earthquakes
- Real-time Water Resource Modeling of supply and demand to inform monitoring



Water Supply & Demand Indicators



Figure 3--Precipitation and ETo from CIMIS #204





Drought Early Warning Monitoring





California

Map released: Thurs. June 3, 2021 Data valid: June 1, 2021 at 8 a.m. EDT

Home > Califo



Authors

United States and Puerto Rico Author(s): Brian Fuchs, National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s): Ahira Sanchez-Lugo, NOAA/NCEI

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



Monitoring Framework









Proposed Response Actions



Water Conservation Goals

Customers understand the value of water & the unique conditions of the Santa Clarita Valley Many customers have implemented short and long-term water efficiency practices









Existing Programs

Lawn Replacement Rebates

Smart Irrigation Controller Rebates

Soil Moisture Sensor Rebates

Pool Cover Rebates

Drip Irrigation Rebates

HE Sprinkler Nozzle Rebates

Pressure Regulation Rebates

Home & Commercial Surveys

School Grants

Watersmart Workshops

Gardening Classes







Response Action Goals



Develop blueprint for actions to water shortages and droughts.



Priority dispatch supply augmentation to reduce customer shortage costs.



Build balance program of carrots and sticks, managing the right incentive structures.

Prioritize efficient water use and longterm market transformation.



Water Shortage Monitoring Framework





Water Shortage Response Actions





Each stage has different requirements and certain tools will work better.

- Programs
- Supply Augmentation
- Outreach & Engagement
- Restrictions

Customer Engagement Strategy





Focus on Inefficient & High-Water Uses

Expand Outreach to Target Customers



Achieve Higher Response Rates



Reach Higher Water Savings



Accomplish Agency Water Reduction Goals per Water Shortage Level

Prioritize Water Savings Opportunities



STAGE 1 Voluntary - up to 10% reduction.

STAGE 2 Voluntary - up to 20% decrease in water use.

Proposed Response Action Strategy **STAGE 3** Voluntary - up to 30% decrease in water use.

STAGE 4 Mandatory - up to 40% decrease in water use.

STAGE 5 Mandatory - 50% decrease in water use.

STAGE 6 Water for essential use only.



	Goal	Potential Programs	Outreach	Restrictions
No Shortage	Create Resilient Properties Prior to Shortage	 Current Programs Lawn Replacement Irrigation Rebates Support & Education Services 	<u>Educate</u> Importance of Efficiency as Preparedness for Shortages	Voluntary

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No Shortage	Create Resilient Properties Prior to Shortage	 Current Programs Lawn Replacement Irrigation Rebates Support & Education Services 	<u>Educate</u> Importance of Efficiency as Preparedness for Shortages	Voluntary
STAGE 1	10% Reduction	• Programs Remain the Same	<u>Increase</u> Outreach <u>Reinforce</u> Importance of Efficiency <u>Target</u> inefficient and high use	<u>Continue</u> with Voluntary

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STAGE 2	20% Reduction	• Consider Addition of Sprinkler System Tune-up and Leak Detection Programs	<u>Educate</u> about <i>Moderate Shortage</i> <u>Request</u> Everyone to do Their Part	<u>Consider</u> Escalation

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STAGE 2	20% Reduction	• Consider Addition of Sprinkler System Tune-up and Leak Detection Programs	<u>Educate</u> about <i>Moderate Shortage</i> <u>Request</u> Everyone to do Their Part	<u>Consider</u> Escalation
STAGE 3	30% Reduction	 Add Virtual Sprinkler Timer Adjustment Assistance Consider Direct Installation of Irrigation Devices 	<u>Educate</u> about <i>Significant Shortage</i> <u>Increase</u> Outreach <u>Add M</u> id-range Users at Target	 <u>Escalate</u> Mandatory Prohibitions & Enforcement Using water to wash sidewalks Washing cars Limiting watering times

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STAGE 4	40% Reduction	 Increase Incentive Amounts for Sprinkler Nozzles & Smart Timers 	<u>Educate</u> about Critical Shortage Increase Outreach	Expand Communication & Enforcement

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STAGE 2	• 20% Reduction	Consider Addition of Sprinkler System Tune-up and Leak Detection Programs	<u>Educate</u> about <i>Moderate Shortage</i> <u>Request</u> Everyone to do Their Part	Consider Escalation
STAGE 3	• 30% Reduction	Add Virtual Sprinkler Timer Adjustment Assistance Consider Direct Installation of Irrigation Devices	<u>Educate</u> about <i>Significant Shortage</i> <u>Increase</u> Outreach <u>Add M</u> id-range Users at Target	 <u>Escalate</u> Mandatory Prohibitions & Enforcement Using water to wash sidewalks Washing cars Limiting watering times
STAGE 4	40% Reduction	Increase Incentive Amounts for Sprinkler Nozzles & Smart Timers	<u>Educate</u> about <i>Critical Shortage</i> <u>Increase</u> Outreach	Expand Communication & Enforcement
STAGE 5	• 50% Reduction	Suspend Lawn Replacement Program Continue Installation & Support Programs	<u>Educate</u> about <i>Emergency Shortage</i> <u>Strengthen</u> Urgency Message <u>Send</u> Emergency Alerts	Increase Penalties & Enforcement

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STAGE 4	40% Reduction	 Increase Incentive Amounts for Sprinkler Nozzles & Smart Timers 	<u>Educate</u> about <i>Critical Shortage</i> <u>Increase</u> Outreach	Expand Communication & Enforcement
STAGE 5	50% Reduction	 Suspend Lawn Replacement Program Continue Installation & Support Programs 	Educate about Emergency Shortage Strengthen Urgency Message Send Emergency Alerts	Increase Penalties & Enforcement
STAGE 6	50+% Reduction	 Suspend All Programs Except Leak Detection & Repairs 	Educate about Catastrophic Shortage <u>Announce</u> Water for Essential Use Only	Conduct Strict Enforcement

Water Shortage Contingency Plan Response Action Process

Performance will be continually evaluated to achieve desired results.







Public Comments



Public Comment Summary

- Timeframe March 12, 2021 April 12, 2021
- Comment Submissions by: Mail, email, online comment form
 - 7 responses received (20 comments)
- SCV Water BOD Comments (5/27/2021 UWMP Public Hearing)
- Responses to Comments:
 - UWMP & Water Shortage Contingency Plan
 - Comments from 5/27/2021 UWMP Public Hearing
 - Salient Water Shortage Contingency Plan



Public Comment Received

- Comment categories
 - Water Supply & Reliability
 - Growth
 - Plan & Methodology
 - Water Quality
 - Costs & Rates
 - Climate Change





Related Comments Received Through Water Shortage Contingency Plan

- Comments
 - Plan relies on contaminated water supplies
 - Accuracy of State Water Project (SWP) supplies
 - Unclear ownership of Semitropic bank and arsenic treatment needs
 - Promote local groundwater recharge to supplement existing supplies
 - permeable pavement
 - preservation for recharge areas including streambeds
 - Basis for estimated quantities of new recycled water supply is unclear
 - Recycled water would appear to only be available to the Newhall Ranch project and Vista Canyon
 - Is the quality of recycled water from the Vista Canyon plant consistent with the requirements of the Salt and Nutrient Management Plan
 - Water demands do not include agriculture, grading, Honor Ranch, private wells.
 - Seismic Risk Assessment does not include interruption at the Edmonston Pumping Plant
 - Don't understand why there isn't enough water when we live near an ocean
 - Viability of Groundwater Operating Plan



<u>Comment</u> – Plan relies on contaminated water supplies

Response

- UWMP anticipates continued investment in treatment facilities to recover impacted groundwater supplies
 - Appendix I provides a detailed schedule and cost estimates for implementing proven treatment technology to recover impacted supplies
 - First PFAS treatment facility came online in 2020 (three N wells included)
 - Valley Center well under construction
 - V201 Perchlorate treatment facility completed, awaiting final permitting from DDW
 - Program included in Agency capital plan
 - Financial plan developed pending approval



<u>Comment</u> –Accuracy of State Water Project (SWP) supplies

- References for SWP reliability are from the updated 2019 Delivery Capability Report
 - Modeled reliability for normal years for existing and future conditions was reported at 58% of allocated supply shifting down to 52% by 2040 due to anticipated climate change impacts.
 - Modeled reliability for single-dry year with existing conditions was stated at 7% of allocated supply. SCV Water reduced this assumption to 5% to represent the "worst-case" scenario experienced in 2014 and 2021



<u>Comment</u> – Unclear ownership of Semitropic bank and arsenic treatment needs

- SCV Water is a participant in the Semitropic Water Storage Districts (Semitropic) water banking program
- Semitropic must comply with DWR water quality requirements to pump water into the State Water Project(SWP) aqueduct
- Semitropic has an on-site treatment facility to address water quality issues with their groundwater prior to delivery into the SWP aqueduct
- Additional water is assumed to be available from NLF Semitropic program



<u>Comment</u> – Promote local groundwater recharge to supplement existing supplies

- permeable pavement
- preservation for recharge areas including streambeds

- SCV Water's current groundwater recharge activities
 - Potential to spread imported water directly into Alluvial Aquifer at multiple sites (east and west side of Valley)
 - Coordination with City to utilize future stormwater detention facilities for recharge



<u>Comment</u> - Basis for estimated quantities of new recycled water supply is unclear

- Quantities of new recycled water are based on estimated indoor water use from new development.
- Quantitative analysis is included in the UWMP Appendix F



<u>Comment</u> - Recycled water would appear to only be available to the Newhall Ranch project and Vista Canyon

- At buildout, the Agency anticipates sufficient supplies to provide recycled water for Westside Communities, its Phase 2 projects, and Vista Canyon
 - Reference Figure 5-2 of the 2020 UWMP



<u>Comment</u> - Is the quality of recycled water from the Vista Canyon plant consistent with the requirements of the Salt and Nutrient Management Plan

Response

 Current data shows water quality produced by Vista Canyon WRP meets SNMP objectives in relative zone



<u>Comment</u> - Seismic Risk Assessment does not include interruption at the Edmonston Pumping Plant

- Section 9 in the 2020 UWMP reviewed several failure modes on the SWP and analyzed a disruption of a 12-month outage.
 - See table 9-1 in the 2020 UWMP



<u>Comment</u> –Water demands do not include agriculture, grading, Honor Ranch, private wells.

- Both Agency and non-Agency groundwater pumping are accounted for in the UWMP and are within the limits of the Groundwater Operating Plan and the draft SCV-GSA Water Budget Analysis as shown in Section 4 tables
 - Normal year Tables 4-10
 - Single-Dry Year Tables Table 4-11
 - Multiple-Dry Year Table 4-12



<u>Comment</u> - Don't understand why there isn't enough water when we live near an ocean

- Feasibility of ocean desalinization is dependent on several factors
 - Cost, permitting, conveyance, feasibility of conveying water
- Agency would have to rely upon a water exchange to implement program
- More cost-effective alternatives exist



<u>Comment</u> - Viability of Groundwater Operating Plan

<u>Response</u>

 Historical operating experience confirms viability of the modeled operating plan



Comment on Groundwater Operating Plan

"The Agency has stated that it has an alluvial supply of 30,000 to 40,000 AF of water based on its operating plan. However, that operating plan didn't work in the 2010–2015 drought."

"The drought year operating plan should be reduced in the face of this actual loss of well production."

Note: This comment cites a "2015 technical memorandum" report by GSI Water Solutions, Inc. (The actual date for the memorandum was December 15, 2014.) (This document was a draft and was never finalized.) Dry-Year Pumping in Alluvial Subareas

(Acre-Feet Per Year)

TotalModel:29,020 to 33,570Actual:30,690Plan:32,500



Key Points

- Actual pumping of the Alluvial Aquifer in 2015 was within the range predicted by the model
- Future pumping during dry years (32,500 AFY) will be within the range predicted by the model in 2015 (29,020 to 33,750 AFY)

Key Points

- These are basin-wide values (SCV Water and others)
 Future dry-year alluvial pumping by SCV Water: 26,100 AFY
 Future dry-year alluvial pumping by others: 6,400 AFY
 Future dry-year alluvial pumping total: 32,500 AFY
- The total dry-year value is within the range for alluvial pumping called for in the basin's current groundwater operating plan during dry years (30,000 to 35,000 AFY)

Response to UWMP Public Hearing Comment

<u>Comment</u> – Why are we continuing to develop new homes when asking current customers to use less water?

<u>Response -</u> It is sound public policy that water is used efficiently. California recognizes that water is a limited and vital resource which benefits ecosystems, human health, safety, urban and agricultural economies. As such, the California legislature continues to mandate increased water efficiency in support of "Making Conservation a California Way of Life". SCV Water provides a myriad of programs, incentives, rebates, services, and educational opportunities to support our customers' diverse water use efficiency goals.

Regarding development, LA County, like many counties across California, is experiencing a chronic housing shortage. SCV has been allocated a share of new homes and in response, the City and County developed the "One Valley One Vision" general plan. Development decisions are ultimately determined by the city and county respectively. SCV Water's mission includes reliable water supplies for existing and future customers (families, businesses, schools, and recreation). When assessing water supply reliability, one of the most cost-effective means to achieving success occurs through sustainable, community-wide water use efficiency practices.

(Note: Additional comments were received during the thirty-day public comment period and from agency social media posts).



Response to UWMP Public Hearing Comment

<u>Comment</u> – Recommendation to move components addressing limits on new development from Stage 5 to Stage 4 of the plan/ordinance?

<u>Response</u> – The Water Shortage Contingency Plan and Water Conservation and Water Shortage Ordinance is premised on existing and legacy approaches to critical demand reduction requirements. The current approach aligns available conservation potential to relevant demand reduction needs. The SCV Water Board of Directors can modify the draft plan and ordinance.



<u>Comment</u> – Water Code Sections 10632 and 10826 - The contingency plan must demonstrate the ability of an agency to meet demands under a supply shortage of up to 50 percent. Emphasis is placed on protection of public health, sanitation, fire protection, and the general public welfare.

<u>Response</u> – Updates to Water Code 10632(a)(3) establishes a requirement for Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50 percent shortages and greater than 50 percent shortage. The WSCP includes 6 Stages and emphasizes public health, sanitation, fire protection, and general public welfare by prioritizing demand reductions for less critical uses.



<u>Comment</u> – We believe that the Agency's proposed calculation of these shortages will be inaccurate due to its failure to accurately outline what the real water supply actually is and include the missing tables. In its current iteration the Plan fails to meet the goals above, as described in the water code.

<u>Response</u> – The tables have been updated and includes available water supplies. Additionally, the Draft WSCP active assessment processes enables the agency to determine and accurately account available water supplies and demands in real and near real-time increments. The Draft WSCP complies with relevant mandates.



<u>Comment</u> – Supply and demand calculation unclear.

<u>Response</u> – Supplies and demand are based on 2020 UWMP metrics. The demand forecast methodology is included in UWMP Appendix F -Population and Demand Technical Memorandum (Maddaus), detailed water supply tables can be found in UWMP Appendix E. Further, the WSCP outlines annual assessment procedures which enables SCV Water to update on a real and near real-time basis.



<u>Comment</u> – Prohibition against hydrant use except for firefighting and no new connections unless a reduction in existing sources (toilet replacement, etc...)

<u>Response</u> – The SCV Water Board of Directors can consider these and other alternatives in the event of a severe and multi-year water shortage. The WSCP process is designed to be updated on an as needed basis and does not restrict Board discretion.



<u>Comment</u> – Include updated (1)Water Supply Report, (2) Final State Water Project Delivery Capability Report, (3) Evaluation of Groundwater Pumping Targets for the Alluvial Aquifer in 2015, (4) Link SCVWA well records for public review.

<u>Response</u> – The Annual Water Supply Report is updated and available online (https://yourscvwater.com/wp-content/uploads/2020/08/2019-Santa-Clarita-Valley-Water-Report.pdf), the Delivery Capability Report is available online (https://yourscvwater.com/wp-content/uploads/2021/05/final-dcr-reporttechnical-addendum.pdf), Draft Evaluation of Groundwater Pumping Targets for Alluvial Aquifer in 2015 has been superseded by the Groundwater Sustainability Agency Water Budget Analysis Draft Technical Memorandum (https://yourscvwater.com/wp-content/uploads/2021/04/SCV-GSA-Draft-Tech-Memo-%E2%80%93-Water-Budget-Development.pdf), Well Levels updated monthly (https://yourscvwater.com/your-water/#wellproductionlevels).



Project Schedule



Planning, Analysis & Public Involvement (August 2020-July 2021)

